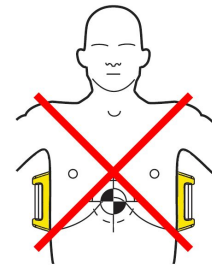
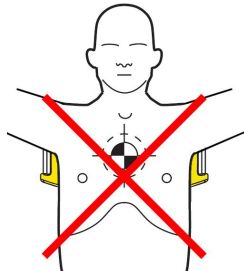
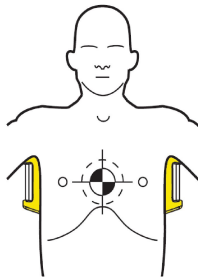


LUCAS CPR DEVICE

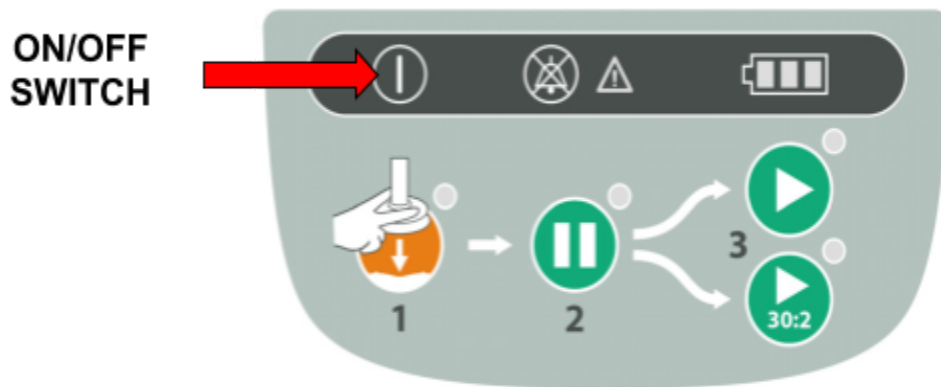
1. Level: EMT, AEMT, Paramedic, RN
2. Purpose: This procedure describes the appropriate methods to apply, operate, and discontinue the LUCAS device in the event that the device has been initiated by members of a first responder organization. In these cases, the trained personnel will be responsible for the application and operation of the LUCAS device while working as part of the cardiac arrest management team. Trained personnel should accompany LaSalle Ambulance personnel to the hospital if the patient is transported with the device on the patient.
3. Indications: The LUCAS may be used in patients 12 years of age and older who have suffered non-traumatic cardiac arrest, where manual CPR would otherwise be used.
4. Contraindications:
 - 4.1. Patients < 12 years of age.
 - 4.2. Patients suffering traumatic cardiac arrest or patients with obvious signs of traumatic injury.
 - 4.3. Patients who do not fit within the device.
 - 4.3.1. Patients who are too large and with whom you cannot press the pressure pad down 2 inches.
 - 4.3.2. Patients who are too small and with whom you cannot pull the pressure pad down to touch the sternum
5. Procedure:
 - 5.1. Manual chest compressions should be initiated *immediately* while the LUCAS device is being prepared for placement. Do not delay manual CPR for the LUCAS. Continue manual CPR until the device can be placed.
 - 5.2. Limit interruptions in chest compressions to 10 seconds or less.
 - 5.3. Place the LUCAS Backplate.
 - 5.3.1. The backplate should be centered on the nipple line and the top of the backplate should be located just below the patient's armpits.
 - 5.3.2. In cases for which the patient is already on the stretcher, place the backplate underneath the thorax. This can be accomplished by log-rolling the patient or raising the torso.
 - 5.3.3. Placement should occur during a scheduled discontinuation of compressions, such as two minutes of uninterrupted compressions. If the patient pulseless after two minutes of uninterrupted chest compressions and defibrillation is not indicated, place the LUCAS back plate at this time. If defibrillation is indicated, placement should occur following defibrillation.



- 5.4. Position the Compressor.
 - 5.4.1. Turn the LUCAS Device on (the device will perform a 3 second self-test).

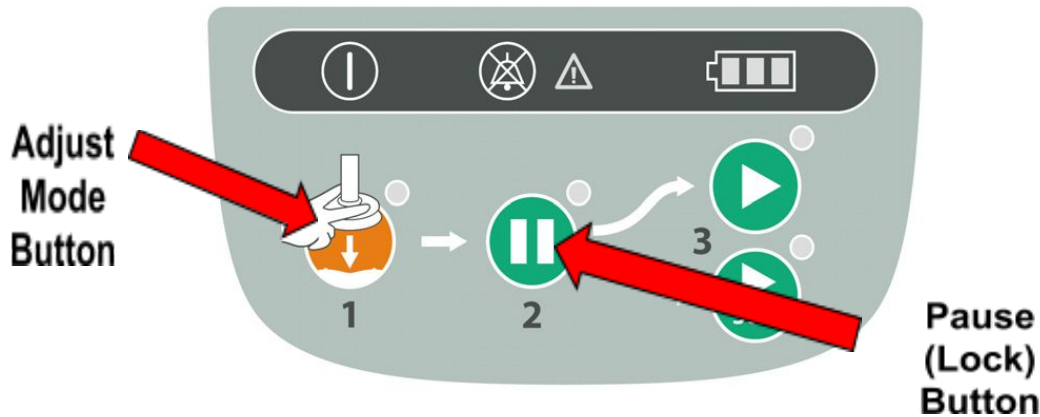
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- 5.4.2. Remove the LUCAS device from its carrying case using the handles provided on each side.
- 5.4.3. With the index finger of each hand, pull the trigger to ensure the device is set to engage the backplate. Once this is complete, you may remove your index finger from the trigger loop.
- 5.4.4. Approach the patient from the side opposite the person performing manual chest compressions.
- 5.4.5. Attach the claw hook to the backplate on the side of the patient opposite that where compressions are being provided.
- 5.4.6. Place the LUCAS device across the patient, between the staff member's arms who is performing manual CPR.
- 5.4.7. At this point the staff member performing manual CPR stops and assists attaching the claw hook to the backplate on their side.
- 5.4.8. Pull up once to make sure that the parts are securely attached.



- 5.5. Adjust the Height of the Compression Arm.
 - 5.5.1. Use two fingers (V pattern) to make sure that the lower edge of the Suction Cup is immediately above the end of the sternum. If necessary, move the device by pulling the support legs to adjust the position.
 - 5.5.2. Press the ADJUST MODE button on the control pad labeled #1. This will allow you to easily adjust the height of the compression arm. To adjust the start position of the compression arm, manually push down the suction cup with two fingers onto the chest (without compressing the patient's chest).
 - 5.5.3. Once the position of the compression arm is satisfactory, push the green PAUSE button labeled #2. This will lock the arm in this position. Then remove your fingers from the suction cup.
 - 5.5.4. If the position is incorrect, press the ADJUST MODE button and repeat the steps.

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- 5.6. Start Compressions.
 - 5.6.1. To provide continuous compressions push ACTIVE (continuous) button. Continuous chest compressions, without pausing for ventilations, are indicated for patients with or without advanced airway placement.
 - 5.6.2. Do not use the ACTIVE (30:2) button. This will pause mechanical compressions.
- 5.7. Place Patient Adjuncts.
 - 5.7.1. Place the neck roll behind the patient's head and attach the straps to the LUCAS device. This will prevent the LUCAS from migrating toward the patient's feet.
 - 5.7.2. Place the patient's arms in the straps provided.
6. Special Considerations:
 - 6.1. All therapies related to the management of cardiopulmonary arrest should be continued as outlined in each specific treatment protocol.
 - 6.2. In cases of cardiac arrest where the LUCAS is in use and the patient is not a candidate for Termination of Efforts on scene, transport of the patient may be initiated prior to the 30th minute.
 - 6.3. Defibrillation can and should be performed with the LUCAS device in place and in operation.
 - 6.3.1. One may apply the defibrillation electrodes either before or after the LUCAS device has been put in position.
 - 6.3.1.1. The defibrillation pads and wires should not be underneath the suction cup.
 - 6.3.1.2. If the electrodes are already in an incorrect position when the LUCAS is placed, you must apply new electrodes.
 - 6.3.2. The rhythm strip should not be assessed during compressions. Stop the compressions for analysis by pushing the PAUSE button. The duration of interruption of compressions should be kept as short as possible and should not be > 10 seconds. There should be no need to interrupt chest compressions other than to analyze the rhythm or check for a pulse (see 6.3).
 - 6.3.3. If the rhythm is determined to require defibrillation, the appropriate ACTIVE button should be pushed to resume compressions immediately following defibrillation.

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- 6.4. Checking for a Pulse
 - 6.4.1. If a change in patient condition or cardiac rhythm occurs, the PAUSE button should be pressed.
 - 6.4.2. Assess for a carotid pulse. If not pulse is noted, press the ACTIVE button to resume chest compressions.
- 6.5. If disruption or malfunction of the LUCAS device occurs, immediately revert to manual chest compressions.
 - 6.5.1. Report the malfunction to the operations supervisor on duty and local QIC.