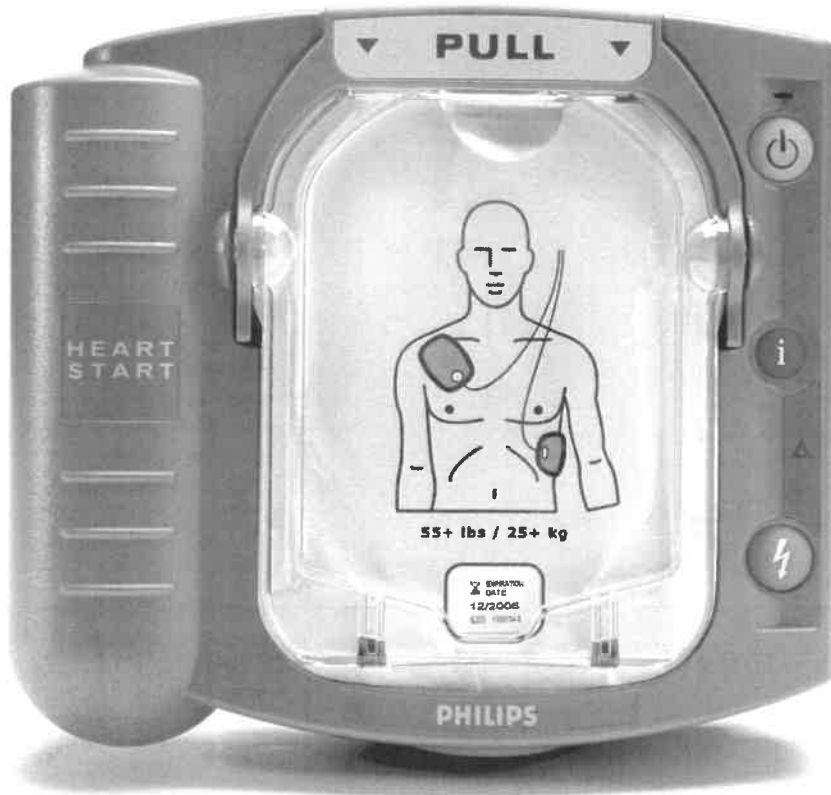


HeartStart OnSite Defibrillator

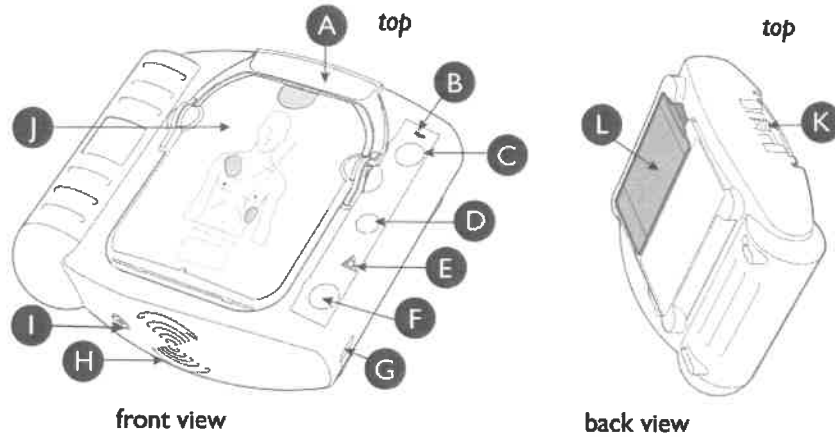
OWNER'S MANUAL

Guide to Set Up, Operation, Maintenance, and Accessories



M5066A
Edition 14

PHILIPS



The HeartStart OnSite Defibrillator M5066A


A Pads Cartridge Handle. Pull the handle to turn on the HeartStart and remove the cartridge's hard cover.


B Ready Light. This green light tells you the readiness of the HeartStart.


Blinking: standby mode (ready for use)


Solid: in use

Off: needs attention (HeartStart "chirps" and i-button flashes)

C On/Off Button. Press this green button  to turn on the HeartStart. To turn off the HeartStart, press the green button again and hold it down for one (1) second.

D Information Button. This "i-button"  flashes blue when it has information you can access by pressing it. It also flashes at the beginning of a patient care pause when CPR coaching is enabled.

E Caution Light. This triangular light  flashes during rhythm analysis and is on when a shock is advised, as a reminder that no one should be touching the patient.

F Shock Button. When instructed by the HeartStart to deliver a shock, press this flashing orange button .

G Infrared (IR) Communications Port. This special lens, or "eye," is used to transfer HeartStart data directly to or from a computer.

H Speaker. When the device is being used, its voice instructions come from this speaker.

I Beeper. The HeartStart "chirps" through this beeper to alert you when it needs attention.

J SMART Pads Cartridge. This disposable cartridge contains self-adhesive pads with attached cable. Shown with adult pads cartridge.

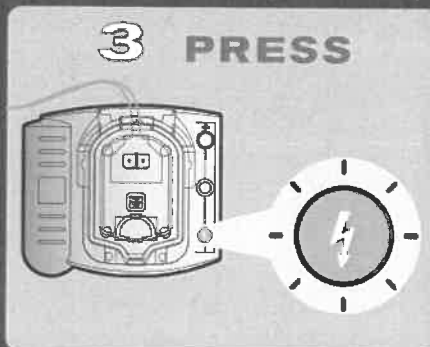
K SMART Pads Cartridge Latch. Slide the latch to the right to release the pads cartridge for replacement.

L Battery. The non-rechargeable battery is inserted in a recess on the back of the HeartStart.

HeartStart OnSite Defibrillator

QUICK REFERENCE

Check for signs of Sudden Cardiac Arrest: Unresponsive
 Not Breathing Normally



HeartStart OnSite M5066A Automated External Defibrillator

OWNER'S MANUAL
Edition 14

IMPORTANT NOTE:

It is important to understand that survival rates for sudden cardiac arrest are directly related to how soon victims receive treatment. For every minute of delay, the chance of survival declines by 7% to 10%.

Treatment cannot assure survival. In some victims, the underlying problem causing the cardiac arrest is simply not survivable despite any available care.

3 USING THE HEARTSTART ONSITE


IMPORTANT NOTE: Be sure to read the Reminders section at the end of this chapter as well as the warnings and precautions in Appendix D.

OVERVIEW

If you think someone is in SCA, act quickly and calmly. *If someone else is available,* ask him or her to call for emergency medical assistance while you get the OnSite. *If you are alone,* follow these steps:

- Call your emergency services provider.
- Quickly get the OnSite and bring it to the victim's side. If there is any delay in getting the defibrillator, check the patient and perform cardiopulmonary resuscitation (CPR) if needed until the OnSite is available.
- If the patient is an infant or child, first perform CPR, then call for emergency medical services (EMS) before you apply the OnSite. See special section on treating infants and children on page 3-5.
- Check the immediate environment for flammable gases. Do not use the OnSite in the presence of flammable gases, such as an oxygen tent. However, it is safe to use the OnSite on someone wearing an oxygen mask.

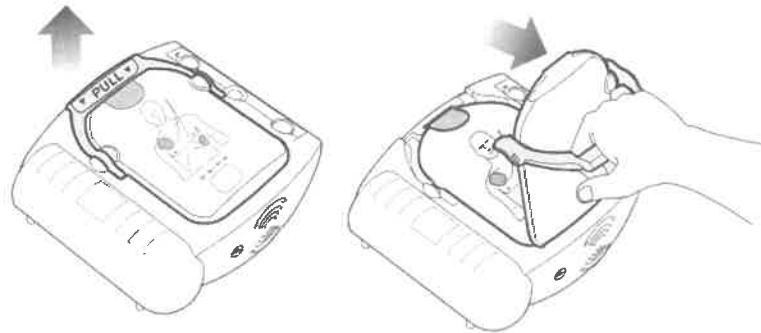
There are three basic steps to using the OnSite to treat someone who may be in sudden cardiac arrest:

1. PULL up the handle on the SMART Pads Cartridge.
2. PLACE the pads on the patient's bare skin.
3. PRESS the flashing Shock button  if instructed.

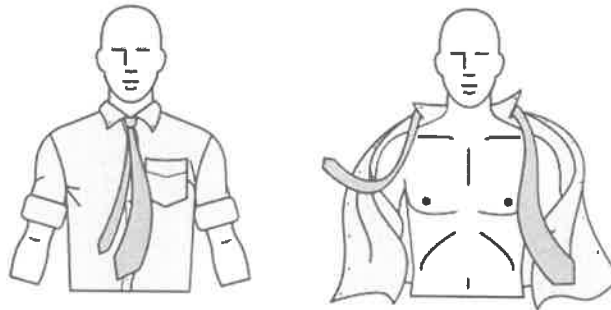
The following pages provide details about each step.

STEP 1: PULL THE GREEN HANDLE

Turn on the OnSite by pulling the SMART Pads Cartridge's green handle.*
Remove the hard cover from the pads cartridge and set it aside. Remain calm and follow the OnSite's instructions.



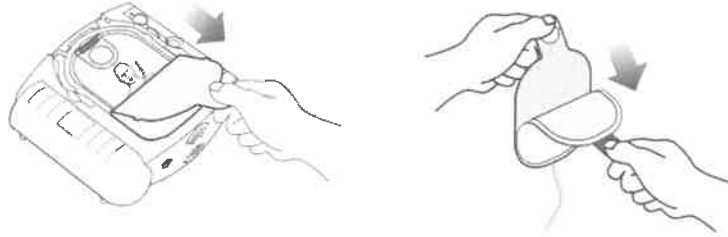
The OnSite starts by directing you to remove all clothes from the patient's chest. If necessary, rip or cut off the clothing to bare the person's chest



* You can also turn on the OnSite by pressing the green On/Off button.

STEP 2: PLACE THE PADS

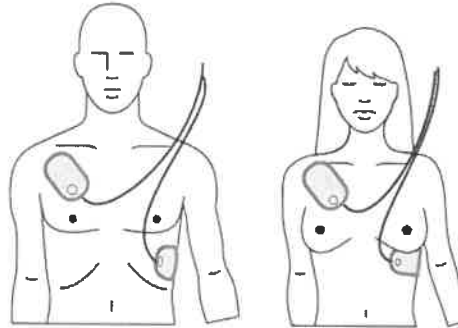
Pull the tab at the top of the pads cartridge to peel off the film seal. Inside are two adhesive pads on a plastic liner. Remove the pads from the cartridge.



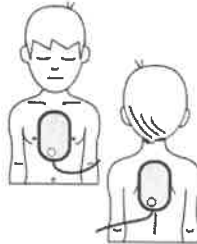
3

Peel one pad off the liner. Place the pad on the patient's bare skin, *exactly as shown in the picture on the pad*. Press the pad down firmly. Then repeat this with the other pad. Be sure the pads have been removed from the liner before placing them.


Where to place pads on adults and children over 25 kg/55 pounds or 8 years old (anterior-anterior).






Where to place pads on infants or children under 25 kg/55 pounds or 8 years old (anterior-posterior).




STEP 3: PRESS THE SHOCK BUTTON

As soon as the OnSite detects that the pads are attached to the patient, it begins analyzing the patient's heart rhythm. It tells you that no one should be touching the patient, and the Caution light  begins flashing as a reminder.


If a shock is needed:

The Caution light  goes from flashing to solid, the orange Shock button  starts flashing, and the OnSite tells you to press the flashing orange button. Before you press the button, make sure no one is touching the patient. When you press the Shock button, the OnSite tells you that the shock has been delivered. Then the OnSite tells you it is safe to touch the patient, instructs you to begin CPR, and invites you to press the flashing blue I-button  for CPR Coaching if desired.

If a shock is not needed:

The OnSite tells you it is safe to touch the patient and instructs you to perform CPR if needed. (If CPR is not needed – for example, if the patient is moving or regaining consciousness – follow your local protocol until emergency medical personnel arrive.) Then the OnSite invites you to press the flashing blue I-button  for CPR Coaching, if desired.

For CPR Coaching:

Press the flashing blue I-button  during the first 30 seconds of the patient care pause to activate CPR Coaching.* (If the Infant/Child SMART Pads Cartridge is inserted, CPR Coaching will provide coaching for infant/child CPR.) When the pause is over, the OnSite tells you to stop CPR, so it can analyze the patient's heart rhythm. The motion caused by CPR can interfere with analysis, so be sure to stop all motion when instructed.

* The default configuration for the OnSite provides CPR Coaching when you press the I-button in this situation; however, the default setting can be revised by your Medical Director using Philips software available separately. See Appendix F for more information.

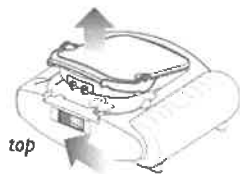
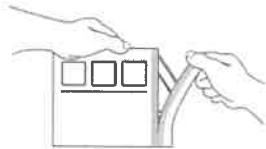
TREATING INFANTS AND CHILDREN

WARNING: Most cardiac arrests in children are not caused by heart problems. When responding to cardiac arrest in an infant or child:

- Provide infant/child CPR while a bystander calls EMS and brings the OnSite.
- If no bystander is available, provide 1-2 minutes of CPR before calling EMS and retrieving the OnSite.
- If you witnessed the child's collapse, call EMS *immediately* and then get the OnSite.

Alternatively, follow your local protocol.

If the patient is under 25 kg (55 pounds) or 8 years old, and you have an infant/child SMART Pads Cartridge:



- Remove the Infant/Child Pads Cartridge from its package.*
- Locate the latch at the top edge of the defibrillator, and slide it to the side. The pads cartridge will be released. Remove the old cartridge.
- Install the new cartridge: slide the bottom end of the cartridge into the recess, then press in the cartridge until the latch clicks into place. Be sure the green handle is pressed down firmly. The OnSite will tell you that infant/child pads have been inserted, then it will turn off to be ready for use.
- Pull the green handle to start the rescue.
- Remove all clothing from the upper body, to bare both the chest and the back. Place one pad in the center of the chest between the nipples, and the other in the center of the back (anterior-posterior).

With the infant/child SMART Pads Cartridge inserted, the OnSite automatically reduces the defibrillation energy from the adult dose of 150 joules[†] and provides optional infant/child CPR Coaching. Place the pads exactly as shown on the illustration on the pads.

* Philips recommends that the OnSite be stored with an adult pads cartridge installed, as pediatric cardiac arrest is not common.

† This lower energy level may not be effective for treating an adult.

If the patient is under 25 kg (55 pounds) or 8 years old, but you do NOT have an infant/child SMART Pads Cartridge:

- DO NOT DELAY TREATMENT.
- Remove all clothing from the torso, to bare both the chest and the back.
- Apply the OnSite using the adult pads cartridge, but place one pad in the center of the chest between the nipples, and the other in the center of the back (anterior-posterior).

If the patient is over 25 kg (55 pounds) or 8 years old, or if you are not sure of the exact weight or age:

- DO NOT DELAY TREATMENT.
- Remove all clothing from the chest.
- Apply the OnSite using the adult pads cartridge, and place the pads as illustrated on the pads (anterior-anterior). Make sure the pads do not overlap or touch each other.

WHEN EMERGENCY MEDICAL SERVICES ARRIVE

When Emergency Medical Services (EMS) personnel arrive to care for the patient, they may decide to apply another defibrillator to allow monitoring of the patient. The SMART Pads should be removed from the patient prior to using another defibrillator. EMS personnel may want a summary of the last-use data* stored in the OnSite. To hear the summary data, hold down the i-button until the OnSite beeps.

NOTE: After the EMS team removes the SMART Pads from the patient, remove the used pads cartridge, and insert a new pads cartridge before returning the OnSite to service, to be sure it is ready for use.

* See Chapter 4, "After Using the HeartStart OnSite" for details about data storage.

REMINDERS

- Remove any medicine patches and residual adhesive from the patient's chest before applying the pads.
- Do not allow the pads to contact other electrodes or metal parts that are in contact with the patient.
- Avoid placing the pads directly over an implanted pacemaker or defibrillator. A noticeable lump with a surgical scar should indicate the position of an implanted device.
- If the pads do not stick well, check that the pads adhesive has not dried out. Each pad has a layer of adhesive gel. If the gel is not sticky to the touch, replace the pads with a new set.
- Keep the patient still and keep any movement around the patient to a minimum during rhythm analysis. Do not touch the patient or the pads while the Caution light is on solid or flashing. If the OnSite is unable to analyze due to electrical "noise" (artifact), it will tell you to stop all movement and remind you not to touch the patient. If the artifact continues for more than 30 seconds, the OnSite will pause briefly to allow you to deal with the source of the noise, then resume analysis.
- The OnSite will not deliver a shock unless you press the flashing orange Shock button. If you do not press the Shock button within 30 seconds after the OnSite tells you to, it will disarm itself, and (for the first CPR Interval) give a reminder to make sure emergency medical services have been called, then begin a CPR interval. This is designed to minimize interruption of CPR and help ensure ongoing patient support.
- While waiting for you to press the Shock button, the OnSite will continue to analyze the heart rhythm. If the patient's rhythm changes before you press the Shock button, and a shock is no longer needed, the defibrillator will disarm and tell you a shock is not advised.
- If for any reason you want to turn off the defibrillator during a use, you can press the On/Off button – holding it down for at least one second – to return the device to standby mode.