

# OXI-sok<sup>®</sup> 2

## OXYGEN RESUSCITATION KIT

### OPERATING MANUAL



Oxygen bottle not included

**DISCLAIMER:** This manual is intended as a guide only. Medical Developments International Limited accepts no responsibility for incorrect operation of the equipment or incorrect management of patients. It is essential that all individuals operating this equipment are fully trained in anaesthetic procedures.

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Revision R1.02

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## 1 Operation of the OXI-Sok<sup>®2</sup>

This manual provides the information required to fully utilize the OXI-sok<sup>®2</sup> and to promote safe and trouble free operation over the maximum period of time. The detailed description of functions should be read carefully by every user of the OXI-sok<sup>®2</sup>

It is mandatory for anyone who uses this equipment to have received adequate instruction and training. It is also helpful if the user practices regularly (every 2-3 months) on realistic training manikins such as a Resusci Anne, Resusci Junior or Little Anne.

OXI-sok<sup>®</sup> is the registered Trade Mark of Laerdal Pty Ltd (ABN 47 003 817 490)

## 2 Precautions

Oxygen readily supports combustion. Do not use near an open flame

Do not smoke while using the unit

Ensure the area is ventilated and nothing is burning in the immediate vicinity

Oil or grease must not be used on any part of the OXI-sok<sup>®2</sup>

## 3 KDK<sup>™</sup>815 OXI-flo Regulator/Flowmeter c/w Oxygen Flush

The KDK<sup>™</sup>815 OXI-flo Regulator/Flowmeter supplied with the OXI-sok<sup>®2</sup> provides oxygen flow rates of 8 litres per minute and 15 litres per minute. The OXYGEN FLUSH is used to rapidly refill the oxygen reservoir bag as required.

## 4 Installation

Fit the KDK<sup>™</sup>815 OXI-flo to a 'C' size medical oxygen cylinder and tighten the T-Screw

Use the oxygen keywheel supplied to SLOWLY turn the cylinder valve ON at least one full turn (anti-clockwise). Check the contents gauge

If there is a leak, check that the sealing washer ('Bodok' seal) is in place

Ensure the therapy hose is firmly attached to the flow outlet of the KDK815 OXI-flo<sup>®</sup>

Check that the Laerdal Pocket Mask and therapy mask are in the pockets

Secure the oxygen cylinder within the OXI-sok<sup>®</sup> Soft Bag using the Velcro strap and buckle

## 5 Resuscitation

### 1 Oxygen Therapy Mask

The adult and child oxygen therapy masks supplied with the OXI-sok<sup>®2</sup> are for use on spontaneously breathing persons. The adult mask incorporates a Reservoir Bag. The OXYGEN FLUSH is used to rapidly refill the oxygen reservoir bag as required.

Attach the oxygen hose from the therapy mask to the flow outlet of the KDK815 OXI-flo<sup>®</sup>. Select either 8L/min or 15L/min. The expected operating duration of oxygen supply from a full cylinder (400 litres) is shown in the table

Flow Rate (Litres/minute)	Duration	Approximate Inspired Oxygen Concentration
8	50 minutes	35-40%
15	25 minutes	65-80%

or a combination thereof.

### 2 Laerdal Pocket Mask

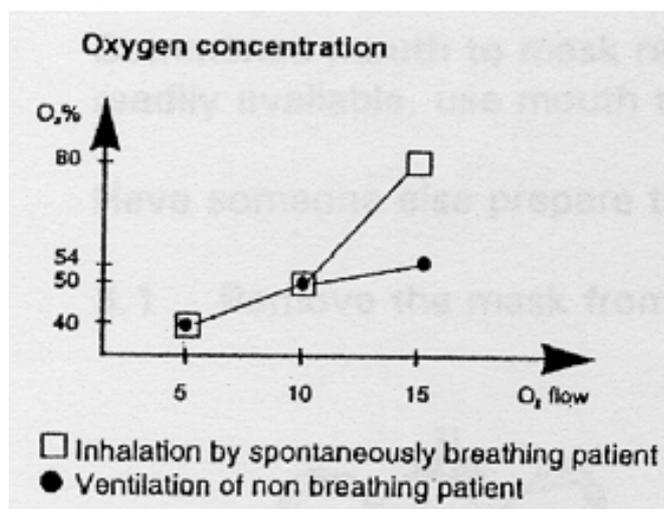
The Laerdal Pocket Mask is primarily designed for mouth to mask ventilation of a non-breathing adult, child or infant. It represents an often preferred alternative to mouth-to-mouth or mouth-to-nose breathing because its use:

- helps overcome rescuer hesitation prompted by fear
- provides a physical barrier between rescuer and victim
- allows ventilation through mouth and nose simultaneously
- promotes an airtight seal to the face even in most cases of severe facial trauma
- helps provide an open airway with only moderate backward head tilt, which may be important for trauma victims

### 3 Laerdal Pocket Mask with Oxygen

Attach the oxygen line from the Laerdal Pocket Mask to the flow outlet of the KDK<sup>TM</sup>815 OXI-flo. Select either 8L/Min or 15L/min.

#### Achievable Oxygen Concentrations with the Laerdal Pocket Mask



Oxygen Flow (Litres/minute)	Inhalation by spontaneously breathing person	Ventilation of non-breathing person
5	40%	40%
15	80%	54%

(tested without one way valve)

#### 4 Disposable Gloves

The gloves provided with the OXI-sok<sup>®2</sup> are for the user to avoid direct contact with the victim when clearing the airway or coming into contact with other "soiled" areas.

Gloves protect the user from cross infection and at the same time protect the victim from contamination by the rescuer.

## 6 Oxygen Supply

The OXI-sok<sup>®2</sup> is recommended for use with the Australian Oxygen Cylinder Size "C". The size "C" oxygen cylinder has an Australian Standard Oxygen Pin Index Valve. These cylinders, when full, should contain approximately 400 litres of compressed medical grade oxygen.

These cylinders can be identified by the following features:

1. Australian Standard Pin Index Valve for oxygen equipment.
2. Black cylinder with a white collar.
3. Appropriate labeling identifying it as a medical oxygen cylinder.

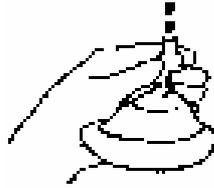
## 7 Practical Operation

### Ventilating a Non-Breathing Victim Using the OXI-sok<sup>®2</sup>

1. Position the victim on his/her back after clearing the airway.
2. Commence mouth to mask resuscitation immediately. If the mask is not readily available, use mouth to mouth resuscitation without delay.
3. Have someone else prepare the OXI-sok<sup>®2</sup> as follows:
  - 3.1 Remove the mask from the container. Push out the mask dome



- 3.2 If using a one way valve, mount it on the mask port. Direct the exhalation port away from you



- 3.3 Attach the oxygen tubing to the oxygen inlet on the mask and ensure that it is firmly in place.



- 3.4 Turn on the oxygen cylinder using key wheel provided. Check the contents gauge to determine how much oxygen is available.
- 3.5 Select the flow rate of 15 litres per minute

Notes:

- a The Australian Resuscitation Council recommends that it is acceptable to reduce the flow of oxygen from 15 litres per minute to 8 litres per minute after the first two minutes if conservation of oxygen is important
- b For use on an infant, reverse the mask and apply it over the face with the nose part of the mask under the chin of the infant



- 3.6 Turn on the regulator/flowmeter and check that oxygen is flowing into the mask

- 3.7 Apply the rim of the mask first between the victim's lower lip and chin thus retracting the lower lip to keep the mouth open under the mask (see note b) below). Clamp it with both thumbs on both sides of the mask. The index, middle and ring fingers grasp the lower jaw just in front of the ear lobes, above the angles of the jaw, and forcibly pull upward. Open the airway by tilting the head moderately backwards. (This relates to point 2 where the mask is first placed on victims face).



- 3.8 Blow into the mask every 4 seconds. Maintain an open airway at all times



- 3.9 For airway control and mouth-to-mask breathing alone, work from the top of the head.



## **Oxygen Administration to a Spontaneously Breathing Victim with the OXI-sok<sup>®2</sup> using the Laerdal Pocket Mask or the Therapy Oxygen Mask**

- 1 Ensure that the victim is breathing adequately.
- 2 If the victim is conscious, explain what you are doing and reassure. If unconscious, roll the victim onto one side.
- 3 Remove the pocket mask from the container and push out the mask dome. (DO NOT USE THE ONE WAY VALVE).
- 4 If using the therapy mask (ensure correct size adult/child), remove it from the packaging and pre-form it to mask shape.
- 5 Attach the oxygen tubing to the oxygen inlet on the mask and ensure it is firmly in place.
- 6 Turn on the oxygen cylinder using the key wheel. Check the contents gauge to determine how much oxygen is available.
- 7 Select the flow rates of either 15 litres per minute or 8 litres per minute (usually 8 litres per minute).
- 8 Turn on the KDK<sup>TM</sup>815 OXI-flo regulator/flowmeter and check that oxygen is flowing into the mask.
- 9 If victim is unconscious, gently place the mask over the victim's mouth and nose and secure either by positioning the elastic strap around the victim's head, or try continuing to hold the mask firmly over the victim's face.
- 10 If patient is conscious, ask the patient to place the mask firmly over mouth and nose and hold it in place or, if desired, secure it with the elastic strap.
- 11 Monitor the victim's condition by checking airway, breathing and circulation periodically.

### **Technique for Clearing Vomit or Regurgitation During Use**

Should the victim regurgitate or vomit into the pocket mask or therapy mask during the use of these items, it is very important that the rescuer immediately removes either the pocket mask or therapy mask from the victim's face.

The rescuer should then use the recommended technique from the Australian Resuscitation Council to clear the victim's airways and recheck for spontaneous breathing.

If either mask is to be used again immediately, the rescuer, or an assistant wearing disposable gloves, should shake and clear the vomit or regurgitation from the mask followed by finger sweeps. If particles remain lodged within the mask, the mask should be discarded and not used.

During attempts to clean the mask, the rescuer should maintain the resuscitation effort without undue delay.

## 8 Care, Cleaning, Maintenance and Storage of Equipment

### 1 Care

- 1.1 The OXI-sok<sup>®</sup> should be kept clean and free from sand, dirt and foreign materials
- 1.2 It must be checked:
  - after each training session.
  - before each use
- 1.3 Defects which may cause the machine to operate incorrectly, must result in the OXI-sok<sup>®</sup> being withdrawn from service immediately and repaired, where necessary, by the manufacturer.

### 2 Cleaning

After every use the OXI-sok<sup>®</sup> should be disassembled, cleaned, disinfected, reassembled and tested.

#### 2.1 Laerdal Pocket Mask

The Laerdal Pocket Mask is reusable and easy to clean. One way valves can be cleaned for repeated manikin training but should be discarded after single use on a person and replaced with a new one way valve.

2.1.1 Wash the Pocket Mask and scrub in warm soapy water

2.1.2 Rinse in clean water

2.1.3 Immerse for 2 minutes in an effective disinfecting solution. The Australian Resuscitation Council recommends 70% alcoholic chlorhexidine. 70% alcoholic chlorhexidine consists of 0.5% chlorhexidine in either 70% ethanol or 70% industrial (methylated) spirit. Note that isopropyl alcohol does not match ethanol and industrial (methylated) spirit until its strength reaches 95%

The Australian Resuscitation Council does not recommend the use of bleach because of its residual odour and taste

2.1.4 Rinse again and allow to dry

**Note:** Do not pasteurise, boil, gas or steam autoclave the mask

#### 2.2 Therapy Mask

Following use on a person, the therapy mask and tubing should be wrapped and discarded into a safe disposal container.

The OXI-sok<sup>®2</sup> should be restocked with an appropriate sized replacement therapy mask.

### 2.3 OXI-sok<sup>®</sup>2 Bag

The OXI-sok<sup>®</sup>2 carry bag is made from Cordura Nylon a tough, abrasive resistant and durable fabric designed for outstanding wear performance. It is padded with closed cell foam and lined with a water-resistant nylon.

Any marks or dirt should be removed by washing with a mild soap and warm water.

Ensure that the OXI-sok<sup>®</sup>2 bag is completely dried and aired before re-packing for future use.

### 2.4 KDK<sup>™</sup>815 OXI-flo Regulator/Flowmeter

The KDK<sup>™</sup>815 OXI-flo regulator/flowmeter should be serviced only by service personal approved by Medical Developments International Limited.

Annual servicing is recommended to ensure ongoing, trouble-free usage. This servicing should be more frequent if the OXI-sok<sup>®</sup>2 is used often.

### 2.5 Gloves

The disposable gloves should be disposed of by carefully wrapping after use. Similar quality disposable gloves should replace them.

### 2.6 Oxygen Cylinder

An oxygen cylinder that is less than half full should be replaced with an oxygen cylinder that is full.

The half-full oxygen cylinder can be used for training or returned for refilling.

## 3 Storage

- 3.1 Store in a cool but accessible place as heat causes some components to deteriorate.
- 3.2 Spare oxygen cylinders should also be stored in a cool but accessible place near the oxygen equipment.
- 3.3 Store away from busy traffic areas, and away from possible sand and dust contamination.
- 3.4 Do not store near oil or grease - oil or grease in contact with high-pressure oxygen can cause fire.
- 3.5 Do not store in an enclosed space - any leakage from the unit could cause oxygen to build up.
- 3.6 Do not cover the unit - any leakage can cause oxygen build up, which is dangerous in the event of fire.
- 3.7 Do not allow smoking or naked flames near the oxygen equipment at any time whether it is stored or in use. Any leakage of oxygen could assist fire.

- 3.8 Do not leave the unit with pressure in the system. Turn off the cylinder, and then drain oxygen by operating any of the delivery systems.
- 3.9 Empty cylinders should be returned for filling without delay.

## 9 Oxygen Cylinder Supplies

The oxygen cylinder size used with this product is size “C”.

For Oxygen cylinder supplies please contact:

BOC Gases	131262 and choose “Medical Enquiries” option
Air Liquide	1300 360 202

Alternatively, choose a supplier from the Yellow Pages in the following category:  
Gas – Industrial and/or Medical

## 10 Service

The OXI-sok<sup>®</sup>2 is carefully designed to be trouble free. However, careful inspection of all parts is recommended each month or after each use. Most items can be replaced by the operator, when necessary.

The Regulator/Flowmeter requires specialized service each (5) five year following purchase or when the operator is uncertain as to its performance. This service can be arranged by contacting Medical Developments International Limited

## 11 Guarantee

Medical Developments International Limited (MDI) warrants to the original purchaser that any part or parts, which on examination by MDI, prove to be defective within 24 months from the date of delivery to the original purchaser, will be replaced free of charge. This warranty does not include freight costs, consumables, plastic and perishable items. MDI will not be responsible for labour or transportation charges incidental to the replacement of any part or parts. This warranty is in lieu of all other warranties, obligations or liabilities expressed or implied. MDI neither assume nor authorize any other person to assume liability in connection with the sale. This warranty will not apply to any product that has been subject to accident, abuse or misuse. The warranty is not applicable when unauthorized repairs or modifications have been attempted, or when entire units or parts are damaged by accident, misuse or improper handling procedures

When returning the product under warranty, please include the following details:

Manufactured by:**MEDICAL DEVELOPMENTS INTERNATIONAL LIMITED**

ABN 14 106 340 667

**Factory 7, 56 Smith Road Springvale, Victoria 3171 Australia**

**Tel: +61 3 9547 1888 Fax: +61 3 9547 0262**

**Web: www.medicaldev.com Email: mdi@medicaldev.com**

Purchaser:.....

Address: .....

Post Code: ..... Country:.....

Model:..... Serial No:..... Date of Purchase: .....

Invoice No: ..... Supplier:.....

## 12 Packing List

<b>Part No.</b>	<b>Description</b>
RS-7565-815	OXI-sok <sup>®</sup> 2 Complete
BG-BAGS-00	OXI-sok <sup>®</sup> 2 Soft Bag
BR-C100600-815	KDK <sup>™</sup> 815 OXI-flo Regulator/Flowmeter (0, 8,15L/min settings) c/w OXYGEN FLUSH
LD-830011	Pocket Mask With Valve and Oxygen Inlet In Case
AC-ACC-06	Oxygen Therapy Tubing
AC-7595-10	Therapy Mask Child
AC-7595-16	Therapy Mask Adult C/W Reservoir Bag
AC-7590-18	Disposable Gloves (1 Pair)
CY-7580-35	Oxygen Key Wheel With Chain
ST-NDS/149	Bodok Seal (Spare)
	Manual