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Your Representative is:



O-TWO MEDICAL TECHNOLOGIES INC.
“Innovation in Resuscitation”



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**DEMAND VALVE
01DV3000
DEMAND VALVE RESUSCITATOR
01DV2000**



USER MANUAL

Made in Canada by
O-Two Medical Technologies Inc.
Part Number: 17MP3136 Rev 6 Sept. 2008

O-TWO MEDICAL TECHNOLOGIES INC.

DEMAND VALVE DEMAND VALVE RESUSCITATOR REPLACEMENT PARTS & ACCESSORIES

17MP9039	Non-Rebreathing Valve Cap
17MP1528	Silicone Diaphragm
02FM4999	Universal Oronasal Resuscitation Mask
01FV4302	6' Replacement Hose with Fittings
01CC8016	Softpack Clamshell Carrying Case
01FG6520	Head Harness System

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CHAPTER 1

1.1 O-TWO MEDICAL DEMAND VALVE RESUSCITATOR

O-Two Medical Technologies oxygen powered Demand Valves and Demand Valve Resuscitators provide trained individuals with a safe and effective means of maintaining artificial ventilation during respiratory arrest, or providing a 100% oxygen concentration during periods of respiratory distress.

O-Two Medical Demand Valves and Demand Valve Resuscitators are lightweight, portable, and extremely durable. Designed for the demands of the pre-hospital environment, they can be operated anywhere an oxygen cylinder or piped wall outlet is present.

Note: Demand Valves and Demand Valve Resuscitators are considered a critical device, and their components considered critical components. Only those individuals trained in Cardio-Pulmonary Resuscitation and operation of oxygen-powered resuscitators should use this equipment. Thoroughly review the instruction manual before use.

1.2 WARRANTY

WARRANTY

O-Two equipment is manufactured from the finest quality materials. Each individual part is subject to strict quality control tests to ensure exceptionally high standards. The manufacturer warrants to the purchaser of DEMAND VALVE (RESUSCITATOR) that its component parts are free from defects in material and workmanship for a period of two years from the date of purchase. The manufacturer will replace and /or repair all parts of the resuscitator at its option for two years from the date of purchase at no cost to the purchaser, upon the notification of the defects, in writing by the purchaser. All shipping costs shall be borne by the purchaser. The manufacturer shall be liable under this warranty only if the resuscitator and its parts have not been used and serviced in the normal manner described in the instruction manual. There are no other expressed or implied warranties. This warranty gives no specific legal rights. You may also have other rights which may vary according to local regulations.

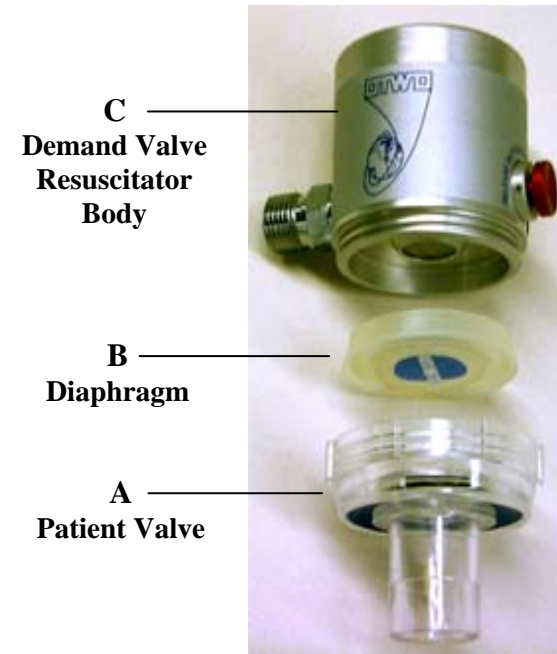


Fig. 1.

4. **Remove the facemask from the unit, and then disconnect the unit from the regulator. This is accomplished by counter-clockwise turning of the connection nut at the regulator end of the hose. A wrench may be required.**
5. **Unscrew patient valve (a) from the unit body being careful to ensure that the diaphragm (b) is retained. (fig. 1)**
6. **Wash all components thoroughly in a mild soap solution and disinfect as required.**
7. **The unit (c) can be wiped over with a soft cloth and mild soap solution.**
8. **Dry all components thoroughly.**
9. **Re-assemble and check performance.**

1.3 SAFETY PRECAUTIONS

The O-Two Medical Demand Valve (Resuscitator) is designed to provide emergency ventilatory support to victims of respiratory and/or cardiac arrest and demand breathing capability or those in respiratory distress.

The O-Two Medical Demand Valve (Resuscitator) is intended for use by suitably trained and qualified personnel.

The following precautions should always be observed:

1. **CAUTION: FEDERAL LAW RESTRICTS THIS DEVICE TO SALE BY OR ON THE ORDER OF A PHYSICIAN.**
2. **WHEN THE UNIT IS IN USE, DO NOT SMOKE OR USE NEAR OPEN FLAME EITHER DURING RESUSCITATION OR WHEN CHANGING THE CYLINDER.**
3. **WHEN NOT IN USE, ALWAYS TURN OFF THE CYLINDER.**
4. **NEVER ALLOW OIL OR GREASE TO COME INTO CONTACT WITH ANY PART OF THE CYLINDER, REGULATOR OR RESUSCITATOR.**
5. **DO NOT DISASSEMBLE ANY PART OF THE UNIT EXCEPT WHERE DESCRIBED IN THIS MANUAL AS ANY UNAUTHORIZED DISASSEMBLY WILL INVALIDATE THE WARRANTY.**

6. AFTER USE, ALWAYS ENSURE THAT ALL COMPONENTS ARE CLEANED IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED IN THIS MANUAL.
7. ALWAYS USE THE CHECK LIST TO ENSURE THAT ALL COMPONENTS ARE REASSEMBLED CORRECTLY AND THAT ALL ITEMS ARE REPLACED IN THE CARRYING CASE.
8. AFTER USE, ALWAYS ENSURE THAT A FULL GAS CYLINDER IS ATTACHED BEFORE RETURNING THE UNIT TO ITS NORMAL STORAGE POSITION.

4.2 CLEANING THE O-TWO MEDICAL DEMAND VALVE (RESUSCITATOR)

Routine cleaning of the O-Two Medical Demand Valve (Resuscitator) should be undertaken to maintain the equipment in a clean condition.

Face masks, patient valve and diaphragm can all be cleaned using a mild soap solution and disinfected using a legally marketed commercially available disinfectant.

All other components should be cleaned with a mild soap solution.

WARNING:

Do not attempt to clean and sterilize any components that are designated as disposable as immersion of these items into a sterilizing solution can cause degeneration of the materials.

CLEANING PROCEDURE

The unit must be thoroughly cleaned after each patient use.

- 1. Operate the manual button to blow out any contaminant from the patient valve (01DV2000 only).**
- 2. Ensure that the cylinder is turned off (completely clockwise).**
- 3. Bleed the remaining pressure out of the system by depressing the manual ventilation button (01DV2000 only).**

CHAPTER 4 SERVICING

4.1 ROUTINE MAINTENANCE

WARNING:

The O-Two Medical Demand Valve Resuscitator is designed to provide respiratory support in all emergency situations. Failure to follow the maintenance and inspection routine could result in incorrect operation of the resuscitator.

To ensure proper operation of the resuscitator regular inspection and checking of the resuscitator and accessories for correct function should be undertaken by a responsible member of staff on a regular basis, and it is recommended that a service record be maintained for each unit.

This check is to ensure that all of the accessories and resuscitator components are present, the oxygen cylinder is full and that the resuscitator is in working order.

MAINTENANCE

Resuscitation parameters should be checked at least every six months, and more frequently in high use applications. Units with test pressures outside of the ranges listed in the product specifications should not be used. O-Two Medical products are not designed for field disassembly or service outside that indicated in this manual. Any malfunctioning units should be returned to the manufacturer or an Authorized O-Two Medical Technologies Dealer. Unauthorized repairs will nullify the product warranty.

1.4 PERFORMANCE SPECIFICATIONS

Manual Flowrate (01DV2000 only).....	40 LPM
(Minimum) Peak Flow rate.....	110 LPM @ -8 cm H ₂ O
Exhalation Resistance	0 to 6 cmH ₂ O @ 60 LPM
Inhalation Resistance	0 to -6 cmH ₂ O @ 60 LPM
Input Pressure.....	50 PSI
Max Pressure Relief Valve (01DV2000 only).....	60 cmH ₂ O
Initiation Pressure.....	less than -2 cmH ₂ O
Audible Over Pressure Alarm(01DV2000 only).....	YES
Operating Temp.....	0 ⁰ F to 122 ⁰ F -18 ⁰ C to 50 ⁰ C
Storage Temp.....	-40 ⁰ F to 140 ⁰ F -40 ⁰ C to 60 ⁰ C
Input Connection.....	9/16" DISS
Patient Connector.....	15/22 mm
Weight.....	8.2 oz 230 grams
Patient Valve Dead Space.....	8 ml
Dimensions (inches).....	Dia. 2.0 x 3.5 (Approx)
(mm).....	Dia. 52 x 90 (Approx)

CHAPTER 2

GAS SUPPLY

2.1 GAS SUPPLY CONNECTIONS

The O-Two Medical Demand Valve Resuscitator is designed to operate on either compressed air or medical oxygen from either a cylinder or piped-in system.

The inlet fitting on the O-Two Medical Demand Valve Resuscitator is a standard 9/16" DISS female fitting.

The O-Two Medical Demand Valve Resuscitator is designed to operate on an input pressure of 50 psi.

CHAPTER 3

OPERATING PROCEDURE

MANUAL VENTILATION

The O-Two Medical Demand Valve Resuscitator has been fitted with a Manual Button to allow manual ventilation of the non breathing or respiratory distressed patient.

By using the manual button, the operation of the resuscitator can be easily timed with chest compressions during CPR. This will avoid the potential problem of the aspiration of stomach contents due to gastric distension which may occur if overlap of chest compression and ventilation occurs. (In patients that are intubated this overlap of compression and ventilation may increase cardiac output without the danger of gastric distension.)

WARNING:

At all times during resuscitation the rise and fall of the patients' chest should be monitored to ensure adequate ventilation.

DEMAND BREATHING

The O-Two Medical Demand Valve Resuscitator is equipped with a Demand System enabling spontaneously breathing patients to demand oxygen.

An inspiratory effort by the patient will open the demand valve and oxygen will flow to the patient at a rate in line with their inspiratory effort.