

# Owner's Operator and Maintenance Manual

# Venture™

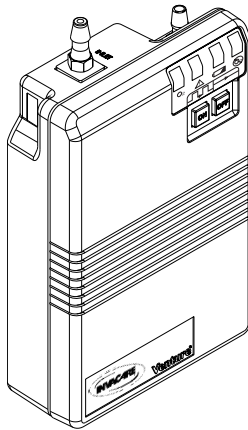
## DEMAND OXYGEN DELIVERY DEVICE AND SYSTEM

Venture 20EX, 20 PSIG Device

Venture 50EX, 50 PSIG Device

Venture Pack 211EX, 20 PSIG Shoulder Bag System  
w/M6 Cylinder

Venture Pack 212EX, 20 PSIG Shoulder Bag System  
w/M9 Cylinder



DEALER: THIS MANUAL MUST BE GIVEN TO THE USER OF THIS DEMAND OXYGEN DELIVERY DEVICE.

USER: BEFORE USING THIS DEMAND OXYGEN DELIVERY DEVICE, READ THIS MANUAL AND SAVE FOR FUTURE REFERENCE.



**Yes, you can.™**

## **WARNING**

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### **CAUTION**

“Caution: Federal law restricts this device to sale by or on order of a physician, or any other practitioner licensed by the law of the State in which he practices to use or order the use of this device.”

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### **WARNING**

**DO NOT** install, maintain or operate this equipment without first reading and understanding this manual. If you are unable to understand the **WARNINGS** and **INSTRUCTIONS**, contact your Home Health Care Dealer before attempting to use this equipment - otherwise injury or damage may result. This includes instructions that pertain to the:

- Oxygen Cylinder,
- Oxygen Regulator,
- Venture Demand Oxygen Delivery Device, and/or
- Liquid Oxygen System

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**WARNING/CAUTION** notices as used in this manual apply to hazards or unsafe practices which could result in personal injury or property damage.

### **NOTICE**

The information contained in this document is subject to change without notice.

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**SAVE THESE INSTRUCTIONS**

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### WARNING

This device should **ONLY** be used under the supervision of a physician. Verify your oxygen flowrate with your physician when you begin using your Demand Oxygen Delivery System.

If you have any questions about the oxygen delivery system or its use, call your Home Health Care Dealer or Service Representative.

If you suspect that an oxygen delivery system has been damaged, contact your Service Representative **IMMEDIATELY**. Your Service Representative **MUST** handle all maintenance.

Keep all oxygen delivery systems out of the reach of children.

Avoid creation of any spark near medical oxygen equipment. This includes sparks from static electricity created by any type of friction.

All electrical equipment near oxygen units **MUST** be properly grounded.

This system only delivers medical grade (U.S.P.) oxygen when used with oxygen cylinders marked as such. When using this system with Invacare Venture Homefill, oxygen delivery will be **USP 93%±3%**. Oxygen supplied by the system is supplemental and is **NOT** to be considered life-supporting.

Before using the Demand Oxygen Delivery Device, check the contents gauge of the oxygen supply equipment. The oxygen supply equipment **MUST** be filled only by an authorized Service Representative, unless being filled by the Invacare Venture Homefill system.

If at anytime the attendant or the end user concludes that an insufficient amount of oxygen is being received,

**WARNING (CONTINUED)**

the supplier and/or physician should be contacted **IMMEDIATELY**. No adjustments should be made to the flowrate unless prescribed by a physician.

**DO NOT** attempt to alter the switches in the battery compartment. These switches are preset by your Home Health Care Dealer and control the breath delivery prescription.

**RISK OF FIRE:**

Oxygen does not burn. However, it will accelerate burning of flammable materials.

**TO PREVENT FIRE:**

**DO NOT SMOKE** when operating the oxygen delivery system. No Smoking signs should be prominently displayed.

Keep oxygen delivery system at least 5-feet away from **ANY** electrical appliances; such as radios, TVs, air conditioners, fans, electric razors, etc.

Keep the oxygen delivery system away from open flames or heating sources such as furnaces or stoves.

Keep flammable materials away from the oxygen delivery system; such as oils, grease and aerosol sprays. These will ignite and burn quickly in the presence of concentrated oxygen.

**TO PREVENT HIGH CONCENTRATIONS OF OXYGEN:**

Keep the oxygen delivery system in a well ventilated area at all times.

When the oxygen delivery system is not in use, press the **OFF** button to place the Demand Oxygen Delivery Device in the Continuous Mode, turn the Cylinder **OFF**, bleed the remaining oxygen from the Regulator, turn the Regulator **OFF**.

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### **WARNING (CONTINUED)**

**DO NOT** wear the Demand Oxygen Delivery Device under any clothing.

**OTHER PRECAUTIONS:**

**Never** attempt to lubricate the oxygen delivery system.

**DO NOT** insert any object (except suitable AC/DC Adapter) in external power jack of Demand Oxygen Delivery Device. This may cause an electrical shock which could cause burns.

**DO NOT** subject the Demand Oxygen Delivery Device to temperatures below  $-40^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$ ) or above  $158^{\circ}\text{F}$  ( $70^{\circ}\text{C}$ ). To do so could damage the electronics and battery.

**NEVER** tamper with the oxygen delivery system. Doing so could create a hazardous condition and possibly cause the oxygen delivery system to malfunction. If you have any questions, call your Home Health Care Dealer or Service Representative.

**ALWAYS** connect the Demand Oxygen Delivery Device to a pressure regulated oxygen source. **ONLY** connect 20 psig Demand Oxygen Delivery Device to a 20 psig oxygen source and a 50 psig Demand Oxygen Delivery Device to a 50 psig oxygen source.

**DO NOT** use any additional lengths of tubing between the oxygen source and the Demand Oxygen Delivery Device. **ONLY** use Invacare tubing supplied with the Demand Oxygen Delivery Device, if any tubing is required.

**DO NOT** use a mask when using pulse mode delivery, **USE ONLY** a standard nasal cannula.

When using the continuous flow delivery, a mask or nasal cannula can be used.

**WARNING (CONTINUED)**

**DO NOT** use a humidifier with the Demand Oxygen Delivery Device.

**DO NOT** expose the Demand Oxygen Delivery Device or system to water or any other liquids.

**RADIO FREQUENCY INTERFERENCE**

Most electronic equipment is influenced by Radio Frequency Interference (RFI). **CAUTION** should be exercised with regard to the use of portable communications equipment in the area around such equipment.

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# UNPACKING / HANDLING

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## UNPACKING

1. Check for any obvious damage to the carton or its contents. (If damage is evident, notify your local Invacare Home Health Care Dealer/Carrier.)
2. Remove all the loose packing from the carton.
3. Carefully remove all the components from the carton.

The following is a listing of items included in the device and system packages:

<b>VENTURE 50EX, MODEL IDD50EX</b>	50 psig Demand Device with Threaded Fitting Battery Venture Operator's Manual.
<b>VENTURE 20EX, MODEL IDD20EX</b>	20 psig Demand Device with Barb Fitting and Connection Tubing Battery Venture Operator's Manual Optional Threaded Fitting.
<b>VENTURE PACK 211EX, MODEL IDD211EX AND VENTURE PACK 212EX, MODEL IDD212EX</b>	IDD20EX Demand Device With Connecting Tube 20 psig Piston Type Flow Control Regulator (0-6 L/min.) <b>Carrying Case:</b> Dual Size Hunter Green Shoulder Bag <b>Cylinder:</b> M6 Cylinder (IDD211EX) M9 Cylinder (IDD212EX) Nasal Cannula, Cylinder Wrench,



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## **HANDLING PROCEDURES**

*NOTE: Unless the Venture Demand Oxygen Delivery Device is to be used immediately, retain boxes, containers and packing materials for use in returning or storing the equipment until usage is required.*

### **INSPECTION**

1. Examine exterior of the equipment for nicks, dents, scratches or other damages. Inspect all components.

### **STORAGE**

1. Carefully repackage all components in the original packaging.
2. Store the repackaged equipment in a dry area.
3. **DO NOT** place other objects on top of the repackaged equipment.

# INVACARE VENTURE DEMAND OXYGEN DELIVERY DEVICE

Ordinary oxygen supply units deliver oxygen continuously. The normal breathing pattern is to inhale about one-third of the time, and exhale two-thirds of the time. This means that continuous flow units may be inefficient during user exhalation.

In contrast, the Venture Demand Oxygen Delivery Device (Venture DODD) senses your inhalation and instantly releases a programmed pulse of oxygen at a specified flowrate at the beginning of inhalation. The specified flowrate of oxygen is delivered within the first second of inhalation. Oxygen is not delivered during exhalation. This means that your oxygen use time is extended by the ratio of breath duration over the pulse duration. Venture DODD will extend user time an average of four (4) times in the Variable duration breath mode.

Comfort is another advantage of the Venture DODD. Nasal drying caused by continuous flow is eliminated, as oxygen is only delivered during inhalation. Therefore, additional humidification is not necessary. Since the oxygen is delivered at normal flowrates, there is not a high blast of oxygen to the end user, which makes the Venture DODD more comfortable than other pulse systems.



The Venture DODD can be used in the traditional continuous flow mode simply by turning the Venture DODD device OFF. Effective flow deliveries of 0.5 to 6 liters per minute (L/min.) can be instantly selected, in pulse or continuous mode, by each individual as prescribed by your physician. During pulse mode, the Venture DODD runs on a disposable D-cell battery which must be replaced after approximately 80 hours of normal use (Refer to the OPERATION section in this manual for information on the Low Battery Indicator LED). During continuous mode operation, the unit does not need the battery to operate.

*NOTE: Actual Battery use time depends on your breathing rate.*

The Venture DODD can be used with compressed gas or liquid oxygen systems. Both 20 and 50 psig units were designed for use on 20 and 50 psig oxygen delivery systems, respectively.

*NOTE: The 50 psig system should ONLY be used with the threaded (DISS) fitting, and NOT the 1/2-inch connecting tube, as the pressure may be too great for the tube to stay connected.*

## VENTURE DEMAND OXYGEN DELIVERY DEVICE COMPONENTS AND DEFINITION OF TERMS (FIGURE 1)

**ON/OFF Buttons** - Determines flow selection method. The ON button turns Power ON for normal pulse operation (  ) and the OFF button disengages the electronics for continuous flow operation (  ).


*NOTE: The OFF button does NOT stop flow delivery and is NOT recommended for unit shutdown. See SETUP AND NORMAL PULSE OPERATION in the OPERATION Section of this manual.*

**Oxygen OUTLET Fitting** - The delivery point of oxygen to the end user from the Venture DODD. The fitting is barbed to securely hold the cannula for oxygen delivery.

**Oxygen INLET Fitting** - The delivery point of oxygen from the oxygen system to the Venture DODD.

**External Power Input Jack** - AC/DC Power Adapter connection port.

### Status Indicators:

 - **GREEN LED** will illuminate with each breath indicating that the Venture DODD is operating.



- **Attention - YELLOW LED** illumination indicates the Venture DODD is NOT sensing end user's inhalation or that there is an internal malfunction.

Refer to **TROUBLESHOOTING Section**.

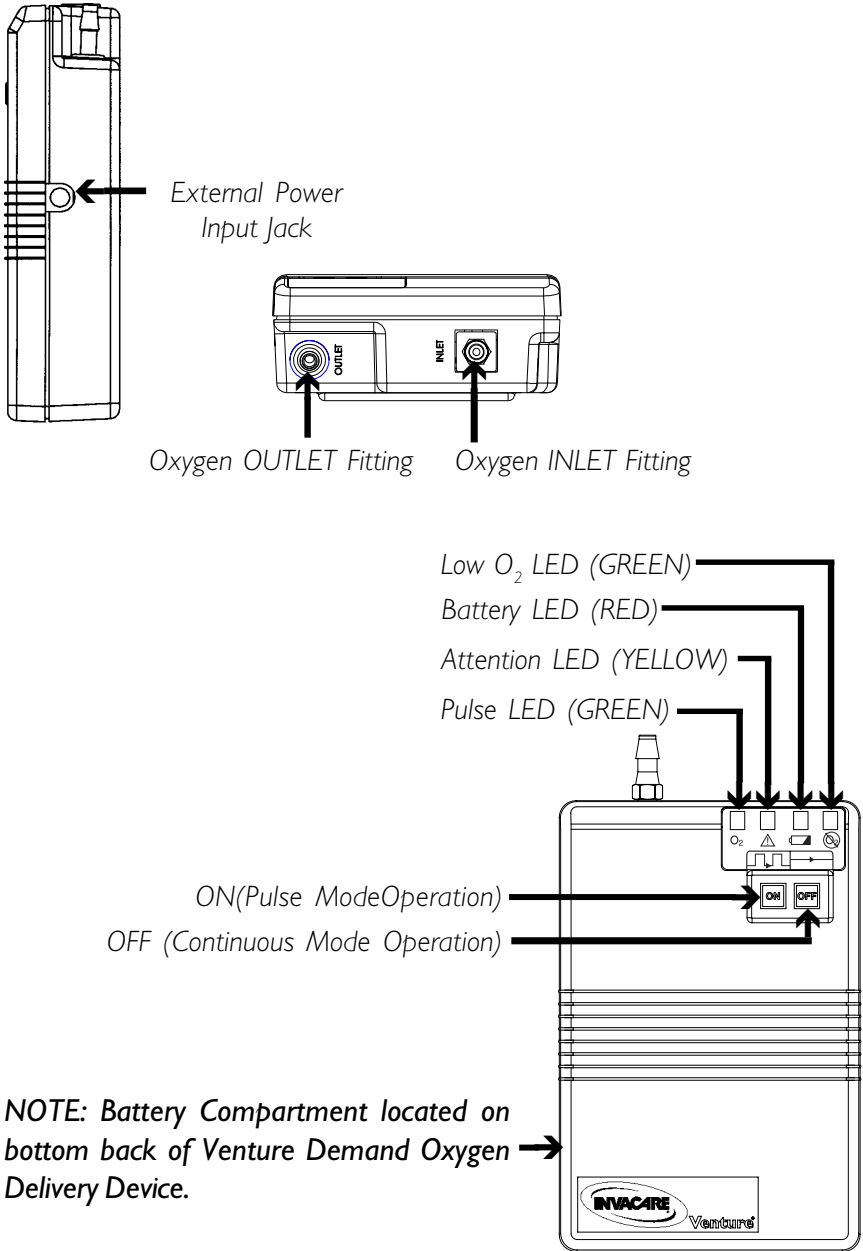


- **Low Battery - RED LED** indicates two (2) low battery levels.



- **Low/No Gas - GREEN LED** illumination indicates Venture DODD is NOT sensing O<sub>2</sub> presence in pulse delivery.

# FEATURES



**FIGURE I - VENTURE DODD FEATURES**

**VENTURE DODD SYSTEM COMPONENTS AND DEFINITION OF TERMS (FIGURE 2)**

**Cylinder** - Lightweight aluminum cylinder provided.

**Regulator** - Provides flowrate control of oxygen delivery with compressed gas cylinders.

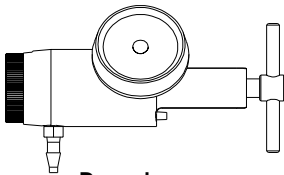
**DISS Fitting** - Connection point for direct connect to oxygen source.

**Barb Fitting** - Connection point for tubing used with compressed gas cylinders.

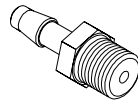
**Connection Tubing** - Provides oxygen path from regulator to the device inlet barb fitting for use with compressed gas cylinders.

**Carrying Case with Padded Strap** - Used for convenient transportation and is adjustable to ensure comfort.

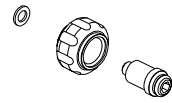
**Optional AC/DC Adapter** - Designed to provide AC current to device.



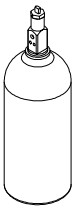
Regulator



Barb Fitting



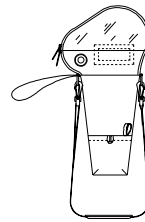
DISS Fitting



M9 Cylinder



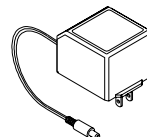
M6 Cylinder



Case



Tubing








Optional AC/DC Adapter

*(Cannula and Wrench not shown)*

**FIGURE 2 - VENTURE DODD SYSTEM FEATURES**

# SPECIFICATIONS

<p><b>OPERATING VOLTAGES</b></p> <p><b>EXTERNAL AC/DC POWER ADAPTER:</b></p>	<p>Output: <math>12 \pm 3</math> VDC, 100 mA  Connector: 5.5mm OD x 2.1mm ID x 12.0mm No. 2 Connector</p>
<p><b>ALARMS</b></p>	<p>Low Battery (Two [2] levels)  Cannula Disconnect (Breath not sensed)  Device Malfunction  Low / No Gas Indicator</p>
<p><b>INDICATORS/SYMBOLS:</b></p> <p> LED:</p> <p> LED:</p> <p> LED:</p> <p> LED:</p> <p> :</p>	<p>Pulse Delivery</p> <p>Cannula Disconnect/Missing Breath Indicator, Audible Alarm</p> <p>Battery Low Charge Indicator (1/2 to 2 hours of use time left), Audible Alarm</p> <p>Low or No Gas, Audible Alarm</p> <p>Class BF</p>
<p><b>BATTERY:</b>  Approx. Battery Usage Time:</p>	<p>Alkaline: (1) "D" size cell  80 Hours @ 20 bpm  (Variable Breath Mode)</p>
<p><b>OXYGEN DOSE DURATION:</b></p> <p>1-variable duration breathing:</p> <p>3-fixed duration breath mode:</p>	<p>Auto-adjusts between 0.5 and 1.0 seconds based on patient breathing rate.</p> <p>Fixed 1.0 seconds, 0.75 seconds, 0.50 seconds</p>
<p><b>FLOWRATE RANGE (L/Min.):</b></p>	<p>0 to 6 L/Min.</p>
<p><b>OXYGEN SOURCE PRESSURE:</b></p> <p>Venture 20:</p> <p>Venture 50:</p>	<p><math>20 \pm 3</math> psig (<math>138 \pm 20</math> kPa)  <math>50 \pm 5</math> psig (<math>345 \pm 35</math> kPa)</p>
<p><b>REGULATOR</b></p> <p>Flow Settings:</p> <p>Regulated Pressure:</p>	<p>0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 6.0 L/Min.  20 psig</p>

## SPECIFICATIONS

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<b>ENVIRONMENTAL</b> Operating Temperature: Storage Temperature:	40° to 104° F (5° to 40° C) - 40° to 158° F (-40° to 70° C)
<b>DEVICE DIMENSIONS</b> Length: Thickness: Width: Weight:	5.4-inches (13.7cm) 1.6-inches (4.0cm) 3.6-inches (9.1cm) 16.0 ozs. (454gm)

## OPERATION

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### THE USE OF OXYGEN

The type of oxygen administrating equipment to be used, as well as the flowrate and time of usage, must be prescribed by a physician. Your physician should verify your Venture DODD flowrate prescription.

#### WARNING

**If at anytime the attendant or the end user concludes that an insufficient amount of oxygen is being received, the supplier and/or physician should be contacted immediately. No adjustments should be made to the flowrate unless prescribed by a physician.**

*NOTE: ONLY a NASAL CANNULA can be used in the PULSE MODE to deliver oxygen. An oxygen mask or nasal cannula can be used with Continuous Flow to deliver oxygen. Low flow cannula should not be used.*

### SET-UP AND NORMAL PULSE OPERATION

1. Install the battery into the Venture DODD or plug AC/DC power adapter into external power jack.

#### A. To Install or Replace the Battery:

Open the battery cover on the back of the Venture DODD by applying light inward pressure with your thumb to the cover latch and then gently lift the cover open.

**If replacing a battery:** Remove the used battery from the battery compartment by grasping the top and bottom ends and pulling straight out.

**To install the battery:** Orient the new battery so that its polarity matches the polarity marked in the battery compartment.

#### WARNING

**DO NOT attempt to alter the switches in the battery compartment. These switches are preset by your home healthcare provider and control the breath delivery prescription.**

Press the new battery in place and close the battery cover.

2. Check **Oxygen Source** to verify adequate oxygen supply.



3. If using an oxygen cylinder, check that the regulator is properly attached before opening the cylinder valve.
4. Connect the Venture DODD to the regulator by performing one (1) of the following:
  - A. **If using an Oxygen Cylinder and Regulator:**

On a 20 psig regulator, connect the tubing (supplied with the Venture DODD) from the barb fitting of the regulator to the barb inlet fitting on the Venture DODD.

On a 50 psig regulator, connect the threaded (DISS) fitting (supplied with the Venture DODD) to the regulator DISS fitting.

*NOTE: The 50 psig system should ONLY be used with the threaded (DISS) fitting and not the 1/2-inch connecting tube, as the pressure may be too great for the tube to stay connected.*
  - B. **If using a Liquid Oxygen Reservoir:**

Directly connect the Venture DODD to the oxygen source using a DISS fitting.
5. Connect the nasal cannula tubing to the barbed oxygen outlet fitting on the Venture DODD and adjust cannula for comfort.

## **WARNING**

**When using nasal or masked type administering equipment, oxygen or air tubing MUST be routed and secured properly to ensure that the tubing does NOT become entangled, kinked or severed.**

*NOTE: Use ONLY a NASAL CANNULA with PULSE MODE delivery, NOT a mask. A mask may NOT fit your face well enough for the unit to sense your inhalation.*

*NOTE: A special nasal cannula is NOT required. Any standard flow crush-proof nasal cannula can be used.*

*NOTE: A MASK or a CANNULA may be used with CONTINUOUS FLOW.*

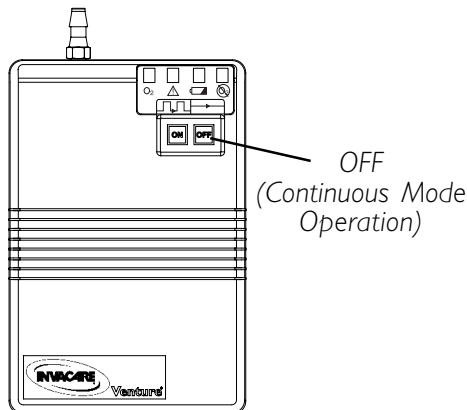
*NOTE: The cannula tubing can be up to 50 feet long to function properly in the pulse mode. The continuous flow mode is NOT affected by the length of the cannula tubing.*

## OPERATION

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6. Set the prescribed flow rate on the oxygen source by performing one (1) of the following:
  - A. **If using an Oxygen Cylinder and Regulator:**  
OPEN cylinder valve and adjust regulator to prescribed flow rate.
  - B. **If using a Liquid Oxygen Reservoir:**  
Set flow control knob on reservoir to prescribed flowrate.
7. Press the ON button to engage pulse mode. The unit will pulse each time the user inhales, the GREEN PULSE LED will blink with each oxygen pulse delivery.
8. As battery power depletes, the unit will alarm to inform the end user to replace the battery or switch to external power source.
  - A. **INITIAL BATT. LED** - The Red LED will FLASH and the audible alarm will BEEP three (3) times. This indicates that you have about two (2) hours of use time left on your battery.
  - B. **SECOND BATT. LED** - The Red LED will be SOLID and the audible alarm will BEEP six (6) times. This indicates that you have between 15 and 30 minutes of use time left on your battery.

*NOTE: Remaining battery use times are dependent on battery type being used. Alkaline battery type is recommended for longest life.*



**FIGURE 3 - SWITCHING TO CONTINUOUS FLOW**

*NOTE: Whenever the pulse mode is used, the battery is monitored. If the SECOND BATT. LED illuminates, either replace the battery or switch to continuous mode if oxygen supply is adequate. When in continuous mode, the battery is NOT used.*

*NOTE: When in the continuous flow mode, the oxygen supply will be used considerably faster than in the pulse mode. If using a portable oxygen supply, make plans for an alternative source of oxygen. Replace the battery as soon as possible.*

9. If it is necessary to switch to continuous flow at any time, press the OFF button (**FIGURE 3**).
10. If turning the system OFF for cylinder replacement or storage, press the Venture DODD OFF button. Turn OFF the cylinder post valve, bleed the oxygen from the regulator and turn OFF the regulator prior to any disassembly.

### PROLONGING THE LIFE OF YOUR BATTERY

The Venture DODD battery is powered by a single D-cell battery. The Alkaline battery type is recommended for longest life.

*NOTE: The Alkaline battery should last for approximately 80 hours with normal use, but will last even longer if you follow this procedure:*

1. Use the battery to its fullest capacity prior to replacing. This is accomplished by running the unit from the battery until it stops working (approximately 15 to 30 minutes after the SECOND BATT. indicator illuminates SOLID and the audible alarm sounds six [6] times).

#### **CAUTION**

**DO NOT** store Venture DODD with the battery installed.

#### **WARNING**

**DO NOT** recharge, dispose of in fire, mix with different battery type, connect improperly or disassemble Alkaline batteries. Doing so may cause battery to explode or leak resulting in injury.

2. Operate your unit from the AC/DC power adapter when at home.
3. Avoid exposure to extreme temperatures.

#### **WARNING**

**DO NOT** operate the unit in temperatures above 104°F (40°C) or below 40°F (4°C), or place near heat sources such as radiators or fires.

Electrical shock hazard. **DO NOT** remove outer case of this unit. All disassembly and maintenance of this unit **MUST BE** done by an Invacare Dealer. If outer case is removed by anyone **EXCEPT** an Invacare Dealer the warranty will be voided.

## **CARE OF YOUR VENTURE DEMAND OXYGEN DELIVERY DEVICE AND SYSTEM**

### **CLEANING THE OUTER CASE**

#### **WARNING**

**DO NOT** submerge in water to clean.

**DO NOT** open outer case. If outer case is removed by anyone **EXCEPT** an Invacare Dealer the warranty will be voided.

#### **CAUTION**

Use no oil. Never apply waxes, polishes, or other similar compounds to any surface of the Venture Demand Oxygen Delivery Device, as these compounds may be flammable.

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Clean outer case with damp cloth. If necessary, a mild dish detergent may be used. Dry outer case with lint free cloth.

### **CARRYING CASE**

The carrying case can be hand washed in warm water. Air dry **ONLY**. **NO** bleach. **DO NOT** dryclean.

## **ACCESSORIES AND SPARE PARTS**

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M6 Aluminum Cylinder, 164L Capacity

M9 Aluminum Cylinder, 248L Capacity

Piston Regulator, 0.5-6 L/Min., 20 psig, CGA 870

Shoulder Bag, Hunter Green

(Dual size for Cylinder diameters of 3 and 4-inches)

Venture Device Pouch

12-inch Connection Tubing

Barb Fitting, 1/4-28 UNF








7-Foot (2.1m) Nasal Cannula

AC/DC Adapter


Venture Operator's Manual

*NOTE: Rechargeable batteries can be used to power Venture DODD, however the batteries and charger are a user supply item not provided by Invacare.*

*NOTE: If you have any questions regarding accessories, please call Invacare or your Home Healthcare Dealer.*

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
 <b>O<sub>2</sub> LED - (GREEN)</b> Blinking.	Indicates Oxygen Pulse Flow in normal pulse delivery.	This is normal operation.
 <b>LED - (GREEN)</b>	Indicates Venture DODD not sensing presence of oxygen in pulse delivery.	Turn unit OFF, check cylinder pressure is above refill limit (500 psig) and post valve is open, check regulator is set to correct flowrate. If problem still exists, call your Home Health Care Dealer or Service Representative IMMEDIATELY and go to continuous mode if oxygen supply is adequate.
<b>O<sub>2</sub> and  LED - (GREEN and YELLOW)</b> Blinking	Indicates oxygen pulse delivery, but Venture DODD not sensing inhalation.	Breathe normally. Check cannula for kinking and check tubing connection.
 <b>LED - (YELLOW)</b> Blinking and Intermittent Beep	Indicates no pulse delivery, Venture DODD not sensing inhalation.	Breathe normally. Check cannula for kinking and check tubing connection.
 <b>LED - (YELLOW)</b> Solid and Continuous Beep	Possible internal problem. End user possibly not receiving oxygen.	Turn unit off then on again. If problem still exists, call your Home Health Care Dealer or Service Representative IMMEDIATELY and go to continuous mode if oxygen supply is adequate.
 <b>LED - (RED)</b> Blinking, Three (3) Beeps at Beginning.	Battery low. Approximately two (2) hours of battery use time left.	Replace battery as soon as possible.
 <b>LED - (RED) Solid,</b> Six (6) Beeps at Beginning.	Approximately 30 minutes of battery use time left.	Replace battery or turn unit OFF to enable continuous mode if oxygen supply is adequate.

# TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
 LED - (RED) Solid, Continuous Beep.	Possible internal sensor problem. End user possibly not receiving oxygen.	Turn unit off then on again. If problem still exists, call your Home Health Care Dealer or Service Representative IMMEDIATELY and go to continuous mode if oxygen supply is adequate.
No lights illuminate or RED and YELLOW LEDs on together.	Electronic failure.	Call your Home Health Care Dealer or Service Representative IMMEDIATELY and go to continuous mode if oxygen supply is adequate.
Oxygen NOT being delivered.	<p>Oxygen supply exhausted.</p> <p>Oxygen supply NOT turned ON.</p> <p>Cannula kinked or crushed.</p> <p>Regulator knob NOT turned ON.</p> <p>Internal Problem.</p>	<p>Check contents gauge on oxygen source. Call your Home Health Care Dealer or Service Representative IMMEDIATELY.</p> <p>Cylinders - OPEN valve. Liquid Oxygen Supply - Make sure coupling is FULLY engaged.</p> <p>Check all cannula connections.</p> <p>Turn regulator knob to prescribed flowrate.</p> <p>Call your Home Health Care Dealer or Service Representative IMMEDIATELY.</p>
External input will not power device.	<p>Connector jack not fully inserted into unit.</p> <p>Wall outlet bad or no power.</p>	<p>Push plug in all the way.</p> <p>Check that outlet power switch is on. Check outlet by plugging in another appliance or lamp.</p>



## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTIONS
External input will not power device (Cont.).	Incorrect power adapter.	Check that power adapter used within specification for operating voltage of external power supply. Call your Home Health Care Dealer or Service Representative IMMEDIATELY.
"Low" battery light comes on too soon after battery replacement.	Battery life expired.	Check battery manufacturer's expiration date. See Prolonging the Life of the Battery in the MAINTENANCE Section of this manual. Call your Home Health Care Dealer or Service Representative IMMEDIATELY.
External power adapter plug does not go into jack in unit.	Jack or plug damaged.  Non-compatible adapter plug.	Call your Home Health Care Dealer or Service Representative IMMEDIATELY.  Refer to SPECIFICATION Section for external power adapter connector size.
Unit pulses at times other than inhalation.	Unit may be in backup Pulse Mode.	Check if YELLOW and GREEN O <sub>2</sub> LEDS illuminate. If so, see indicator description in this section. Call your Home Health Care Dealer or Service Representative IMMEDIATELY.
Continuous flow out of cannula when in pulse mode.	Operating pressure of oxygen supply source too high.	Verify compatibility of model and pressure. Call your Home Health Care Dealer or Service Representative IMMEDIATELY.

*NOTE: If any of the above problems occur and the solutions do not work, please contact your Invacare Home Health Care Dealer for service.*

## OXYGEN CONSERVATION

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### OXYGEN CONSERVED AND BATTERY USE TIME BASED ON BREATH RATE

% OXYGEN CONSERVED	BREATH RATE (BPM)			
	10	20	30	40
Variable Breath Mode:	82	77	70	63
Fixed 1.0 sec. Breath Mode:	83	66	50	33
Fixed 0.75 sec. Breath Mode:	87	75	62	50
Fixed 0.50 sec. Breath Mode:	91	83	75	66

**i.e.** 77% Oxygen conservation over Continuous Flow achieved with Venture DODD in Variable Breath Mode @ 20 BPM Rate. Oxygen supply lasts 4.3-times longer. Venture DODD responds to individual breath rates. Therefore, use times stated are only approximates. Actual savings depends on individual breathing patterns.

### COMPATIBILITY

Venture DODD requires using a flowrate controlled oxygen source. **Gaseous or liquid oxygen systems that meet the following requirements are compatible to the Venture DODD:**

- Venture 20 requires a 20 +3 psig (138 + 20 kPa) flow source.
- Venture 50 requires a 50 +5 psig (345 + 35 kPa) flow source.
- Flowrate Range: 0-6 L/Min.

## LIMITED WARRANTY

**PLEASE NOTE: THE WARRANTY BELOW HAS BEEN DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED AFTER JULY 4, 1975.**

This warranty is extended only to the original purchaser/user of our products.

This warranty gives you specific legal rights and you may also have other legal rights which vary from state to state.

Invacare warrants the Demand Oxygen Delivery Device to be free from defects in materials and workmanship for a period of one (1) year from date of purchase. In addition, all internal electronic components and switches carry a three (3) year warranty from date of purchase. If within such warranty period any such product shall be proven to Invacare satisfaction to be defective, product shall be repaired or replaced, at Invacare option. This warranty does not include normal wear and tear or shipping charges incurred in replacement part installation or repair of such product. Invacare sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

For warranty service, please contact Invacare Service Department at the Toll Free Number listed below during normal hours.

Upon receiving notice of an alleged defect in a product, Invacare will issue a serialized return authorization. It shall be the responsibility of the purchaser to return, at the purchaser's cost, to either Invacare's plant or service center as specified by Invacare in advance. Defective components part(s) must be returned for warranty inspection using the serial number for identification within 30 days of the return authorization date. **DO NOT** return products to our factory without prior consent. C.O.D. shipments will be refused - please prepay shipping charges.

**LIMITATIONS AND EXCLUSIONS: THE FOREGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECTED TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, PRODUCTS MODIFIED WITHOUT INVACARE'S EXPRESS WRITTEN CONSENT (INCLUDING, BUT NOT LIMITED TO, MODIFICATION THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS; PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT THE SPECIFIC CONSENT OF INVACARE, OR TO A PRODUCT DAMAGED BY CIRCUMSTANCES BEYOND INVACARE RESPIRATORY -**

## LIMITED WARRANTY

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**CORPORATION'S CONTROL, AND SUCH EVALUATION WILL BE SOLELY DETERMINED BY INVACARE. THE WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.**

**THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE SOLE REMEDY FOR VIOLATIONS OF ANY WARRANTY WHATSOEVER, SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. THE APPLICATION OF ANY IMPLIED WARRANTY WHATSOEVER SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. INVACARE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.**

**SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGE, OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.**

**THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.**



***Yes, you can.™***

**Invacare Corporation**

[www.invacare.com](http://www.invacare.com)

**USA**

One Invacare Way  
Elyria, Ohio USA  
44036-2125  
800-333-6900

**Canada**

570 Matheson Blvd E Unit 8  
Mississauga Ontario  
L4Z 4G4 Canada  
800-668-5324

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