

PRODUCT INFORMATION AND INSTRUCTIONS

Bonsai[®]
Velocity

INT-812M6
INT-812ML6
INT-812M9
INT-812D



drive[™]

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GENERAL INFORMATION



This manual provides information necessary to operate the BONSAI® VELOCITY integrated pneumatic conserver with built-in regulator.

Statements in this manual preceded by the following words are of special significance:



WARNING!

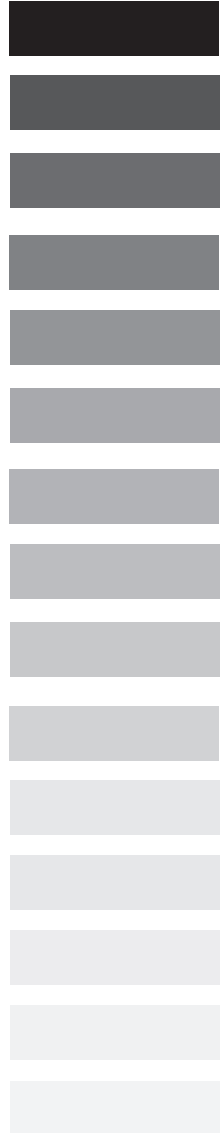
Indicates there is a possibility of injury to you or others.

CAUTION

Indicates there is a possibility of damage to the device or to other property.

NOTE

Indicates points of particular interest or emphasis that allow for more efficient and convenient operation of the equipment.





WARNING!

- Read and understand this manual before operating your BONSAI® VELOCITY integrated pneumatic oxygen conserver.
- This device is not intended for use during sleep or by patients who:
 - Breathe more than 40 breaths per minute,
 - Consistently fail to trigger equipment (e.g., mouth breathers).

There is a risk of fire associated with oxygen equipment and therapy. Do not use near sparks or open flames



Smoking near oxygen equipment is strictly prohibited. Keep cigarettes, matches, burning tobacco and open flames, such as lighted candles, away from the area where the system is being stored or operated. Smoking during oxygen therapy is dangerous and is likely to result in serious injury or death of a patient and others from fire.

- Avoid creation of any spark, such as static electricity caused by any type of friction, near oxygen equipment.

NOTE: Oxygen will not burn; however, it does vigorously accelerate the burning of any flammable material.

- **Never** use oil, grease, or petroleum-based products on or near the system. Please wash and dry your hands properly prior to operating your oxygen equipment. Use Only water based lotions or salves that are oxygen compatible during setup or use during oxygen therapy.
- The proper placement of the nasal cannula in the nose is critical to the consistent operation of this equipment.

IMPORTANT SAFETY RULES & PRECAUTIONS

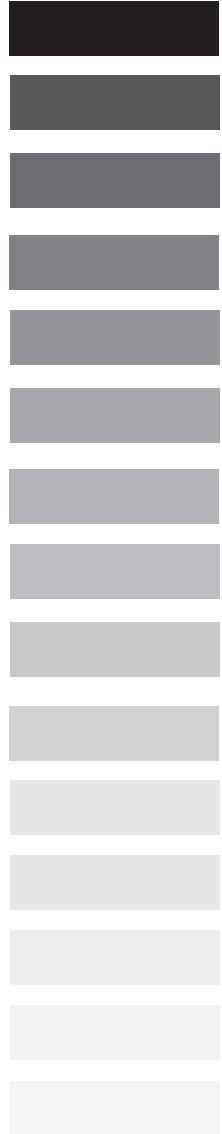


- This equipment is not intended for use with a tracheotomised patients.
- This equipment is not suitable for an MRI environment.
- **Never** use aerosol sprays near the equipment.
- Do not use in the presence of flammable anesthetic mixture.
- Be sure to turn off the oxygen supply by setting the flow control knob to zero when not in use.
 - To ensure that the therapeutic amount of oxygen delivery according to your medical condition the Bonsai Velocity INT-812 Integrated.
- Conserver must
 - be used only after one or more settings have been individually determined or prescribed for you at your specific actively levels.
 - be used with a specific combination of parts and accessories that are in line with the specification of the oxygen conserver manufacturer and that were used while your setting were determined.



WARNING: Oxygen flow is only present when flow indicator is clicked into place. No oxygen will flow if knob is set between liter flow settings.

- The settings of other models or brands of oxygen therapy equipment do not correspond with the settings of the INT-812 Integrated conserver.
- Do not use cannula tubing that is longer than 7 feet (2.13 m).



IMPORTANT SAFETY RULES & PRECAUTIONS

- Do not use mask, pediatric, or other low-flow cannula tubing when operating the unit.
- Do not lubricate replaceable fittings, connections, tubing, or other accessories of the oxygen conserver to avoid the risk of fire and burns.
- Use only spare parts recommended by the manufacturer to ensure proper function and to avoid the risk of fire and burns.
- Wind or strong draughts can adversely affect accurate delivery of oxygen therapy
- Use of this device at an altitude above 10,000 ft or outside temperature of 104° F is expected to adversely affect accurate delivery of oxygen therapy
- Oxygen makes it easier for a fire to start and spread. Do not leave the nasal cannula or bed coverings or chair cushions, if the oxygen conserver is turned on, but not in use; the oxygen will make the materials flammable. Turn the oxygen conserver off when not in use.
- If you feel discomfort or are experiencing a medical emergency, seek medical assistance immediately to avoid harm.
- Geriatric, paediatric or any other patient unable to communicate discomfort can require additional monitoring to avoid harm.
- Smoking during oxygen therapy is dangerous and is likely to result in facial burns or death. Do not allow smoking or open flames within the same room of the oxygen conserver or any oxygen carrying accessories. If you smoke, you must

IMPORTANT SAFETY RULES & PRECAUTIONS



always turn the oxygen conserver off, remove the cannula and leave the room where either the cannula or oxygen conserver is located. If unable to leave the room, you must wait 10 minutes after the flow of oxygen has been stopped.

CAUTION:

- Federal (USA) law restricts this device to sale by or on the order of a physician.
- Prevent water or any other liquid substances from entering the unit.
- Prevent dust or any small particles from entering the unit.
- Do not expose the unit to extreme temperatures.
- Always maintain a backup supply of oxygen.
- Do not use humidifier bottles.
- Do not use if leaking or damaged.
- Refer repairs to authorized service personnel.

NOTE: Oxygen supplied by this equipment is supplemental only and is not intended for life support applications. The BONSAI® VELOCITY integrated conserver should not be used to supply anything other than medical oxygen.

Please contact your Home Care Provider if you have any questions.

The BONSAI® VELOCITY integrated pneumatic oxygen conserver includes a combination of a low-pressure regulator and an oxygen conserver. It is designed for use with a cylinder as an ambulatory oxygen system and is capable of delivering a precise amount of supplemental oxygen at the optimal point in the breathing cycle. The BONSAI® VELOCITY integrated conserver greatly increases the efficiency in the delivery of oxygen, maximizing the beneficial effects and eliminating unnecessary oxygen waste.

When we breathe, approximately one-third of the time is spent inhaling and two-thirds exhaling. As a result, oxygen delivered by continuous flow is wasted during exhalation. By eliminating oxygen flow during exhalation, a two-thirds savings is possible. Additionally, the oxygen available during the very first part of inhalation contributes most to meeting oxygen needs. The BONSAI® VELOCITY integrated conserver takes advantage of these facts to provide maximum efficiency in the delivery of oxygen. This device is designed to be an integral component of a lightweight, long-lasting ambulatory oxygen system.

DESCRIPTION OF PARTS & CONTROLS

- **Cylinder Fill Valve:** Connects to PureFill™ Oxygen Compressor.
- **Oxygen Pressure Gauge :** Enables the user to monitor the contents of the compressed oxygen cylinder and is protected by a rubber guard. The BONSAI® VELOCITY integrated conserver is equipped with a gauge that reads up to 3,000 PSI.
- **Selector Switch:** Enables the user to select the desired setting, as well as “OFF” and “cf 2” or “cf 4” (continuous flow). When not in use, the switch should be turned to the “OFF” position.



FIGURE B

BONSAI® VELOCITY Integrated Conserver

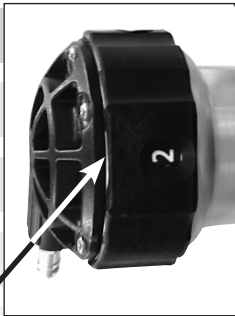
DESCRIPTION OF PARTS & CONTROLS

- **CF Setting:** Enables the user to switch from pulse mode (oxygen delivery on demand) to continuous flow mode in the unlikely event of unit malfunction. The CF setting is designed for emergency use only [see Fig C].

[There are two CF Settings; 2 LPM and 4 LPM]

NOTE: Remember that in continuous flow mode, the oxygen will be consumed at a much faster rate. Return to another source before depleting the oxygen cylinder. The continuous flow functions on the BONSAI® VELOCITY integrated conserver is factory preset at 2 lpm and 4 lpm.

- **Oxygen Supply Outlet:** Use this fitting to attach a standard cannula [see Fig D].
- **Vent Hole:** Maintains proper internal pressure. Do not obstruct with any object, such as a label or tight-fitting carrying bag [see Fig D].



CF Setting

FIGURE C

View of Selector Knob on BONSAI® VELOCITY Integrated Conserver



FIGURE D

Back View of the BONSAI® VELOCITY Integrated Conserver

ASSEMBLY AND USE

- Make certain that your hands are free of oil, grease, and other contaminants.
- Secure the cylinder in an upright position.

NON-PORTABLE USE:

The BONSAI® integrated conserver is designed to extend the life of portable oxygen supplies when away from the primary source. The unit should be used only while awake and reasonably attentive. The BONSAI® integrated conserver is not intended for use while asleep because, in the unlikely event of operational malfunction or dislodging of the cannula, the user could be unaware and not make the necessary corrections.

CYLINDER PREFILL INSPECTION:



WARNING!

All cylinders **MUST** be inspected before attempting to fill. Otherwise, injury or damage may occur.

<p>driveTM</p> <p>CONVENTIONAL SUPPLEMENTAL OXYGEN</p> <p> </p> <p> <ul style="list-style-type: none"> • For personal use only. • Not for commercial use. • Keep out of reach of children. • High pressure assembly per original, accredited certification. • Review all instructions for use and emergency procedures prior to operation. </p> <p> WARNING: NO SMOKING NO OIL OR GREASE KEEP AWAY FROM OPEN FLAME KEEP WELL VENTILATED </p>	<p>WARNING: Inspect the cylinder for dents, rusts, discoloration due to thermal damage, oil or grease, and any other factors which may obstruct proper and safe use. Do not stop cylinder. Be sure to open the valve slowly, and close after each use. When empty, keep the cylinder valve closed.</p> <p>WARNING: For medical purposes only. Use only as directed by a licensed healthcare professional. Limit the rate of flow, concentrations of oxygen over a long duration, without monitoring its effect on oxygen content of arterial blood, may be harmful.</p> <p>WARNING: Cylinders that have been refilled and/or exposed to elevated temperatures must be hydrostatically tested before filling. Cylinder temperature should not exceed 120°F (50°C). Maximum cylinder weight to the surface of fill or tested to temperature in excess of 300°F (177°C) must be withdrawn from service and condemned by trained personnel.</p> <p>WARNING: DO NOT use oxygen-giant droppers. Valve and safety relief devices must be removed and replaced by trained personnel. DO NOT alter or change a valve assembly.</p> <p> </p> <p> Manufactured by Invo, Inc. A Drive Medical Company 201 Lonsdale Blvd. FL Leigh Acres, FL 32071 Toll Free 877-234-0444 </p> <p> Parent Company: Drive Medical 20 Deane Boulevard Fort Washington, NY 11901 Toll Free 877-234-0444 </p> <p>AL-0040675C</p> <p>DO NOT REMOVE THIS LABEL</p>
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HYDROSTATIC TESTING DATE

Aluminum cylinders must undergo testing every 5 years.



WARNING!

Do not fill cylinders that have not been tested in the past 5 years. Otherwise serious personal injury may result. Contact your Home Healthcare Provider.

Filling your INT-812 Integrated Conserver with your PF1100 Oxygen Compressor



WARNING!

Never use tools of any kind to connect/disconnect the cylinder and the compressor. Otherwise severe injury and/or damage may occur.



WARNING!

Do not drop oxygen cylinders.

Connecting the INT-812 Integrated Conserver to the Purefill Compressor

1. Set the flow selector to the “OFF” position
2. Remove any covers (if present) from the fill valve
3. Place cylinder onto the cradle of the Purefill Compressor with the Fillvalve facing down in-line with the Quick Disconnect Vent Coupler on the compressor
4. With two (2) fingers push down on the outer ring of the Vent Coupler and insert the fill valve.
5. With the fill valve inserted release the outer ring and it will lock in place.

Make sure the fillvalve is locked into the vent coupler before turning the compressor on.

6. Turn compressor on

Disconnect INT-812 Integrated Conserver from Purefill Compressor

1. Turn the powered switch on the compressor to the “OFF” position
2. Grab the cylinder by the fillvalve.
3. Push down on the outer ring of the Quick Disconnect Vent Coupler.
4. Remove cylinder from the cradle

ASSEMBLY AND USE

OPERATING INSTRUCTIONS:

- STEP 1:** Make sure that the BONSAI® VELOCITY integrated converter is set to the “OFF” position.
- STEP 2:** Listen for leaks. If leak persists, **DO NOT USE THE EQUIPMENT**
- STEP 3:** Check the oxygen pressure gauge to verify that the cylinder pressure is within the operating range.
- STEP 4:** Select the setting on the BONSAI® VELOCITY integrated converter to the appropriate delivery setting [See Fig. G].
- STEP 5:** As with any nasal cannula, place the nasal cannula into position with the prongs in the nostrils and begin breathing.



FIGURE G
View of the BONSAI®
VELOCITY integrated
selector switch

The BONSAI® VELOCITY integrated converter will now start to deliver oxygen. The amount of oxygen delivered per pulse is determined by the setting. A sound may be heard each time the unit delivers a pulse of oxygen. Adequate saturation will be achieved because of the precise time in the breathing cycle in which the pulse of oxygen is delivered.

NOTE: To help prevent possible damage to the unit and to maintain its cleanliness, keep the BONSAI® VELOCITY converter in a carrying bag. Several bags are available for use with different cylinder sizes and configurations.

- STEP 6:** When finished using the system, turn the selector switch to the “OFF” position.
- STEP 9:** When not in use, store in a clean, dry location.

OXYGEN CYLINDER DURATION

Because the total delivery of oxygen via the BONSAI® VELOCITY integrated conserver is related to breathing rates, it is user adaptive in that the total oxygen delivered per minute will automatically adjust with user need, as expressed by increased or decreased breathing rates. For example, at all settings, twice as much oxygen per minute will be delivered if one breathes twenty (20) times per minute as compared with ten (10) times per minute. Please refer to the table below as a guide.

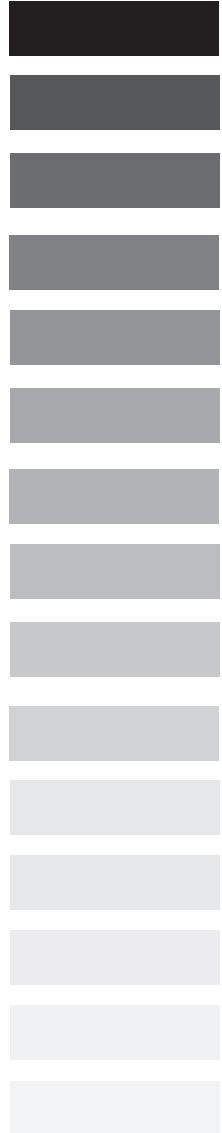
BONSAI® VELOCITY	SETTING	1	2	3	4	5	6	CF 2 lpm	CF 4 lpm
Cylinder Type	Cylinder Volume (Liters)	Estimated Cylinder Duration in Hours (Based on 20 breaths per minute)							
M6(B)	164	10.5	6.2	4.3	3.5	3.0	2.6	1.4	0.7
ML6	171	11.0	6.5	4.5	3.7	3.1	2.7	1.4	0.7
M9(C)	246	15.8	9.3	6.4	5.3	4.5	3.9	2.1	1.1
D	425	27.2	16.1	11.1	9.1	7.7	6.8	3.5	1.8

CARE AND MAINTENANCE



The BONSAI® VELOCITY integrated converter is designed for a long and accurate life; however, as with any pneumatic device, normal prudent care is required. The unit should be kept clean and free from moisture and dust, as well as extreme temperature. Do not expose the unit to water, such as when bathing or swimming. It is advisable to keep the system in its carrying bag to afford a degree of protection. Clean the outside of the unit periodically with a clean, lint-free cloth. Pay special attention to the oxygen outlet to make sure it remains free of dust, etc.

Cannula tubing is a disposable accessory that should be replaced periodically following normal usage. Disposable tubing should be disposed of in accordance with local ordinances and/or regulations for disposal. Replacements are available through your Home Care Provider (OC-401S, case of (50) 4 ft. [1.52 m] cannulas or equivalent).



STANDARD PRODUCT


ACCESSORIES	
ORDER NUMBER	DESCRIPTION
OP-150-800	Slimline 3-in-1 carry bag, fits M6, M7 and M9 cylinders
OP-150T	Horizontal carrying tote, fits M4, M6, M7 and M9 cylinders
OC-401S	Adult, single-lumen cannula, 4 ft., case of 50

CYLINDER SPECIFICATIONS:

ITEM NUMBER	DESCRIPTION	DIAMETER (IN)	LENGTH (IN)	WEIGHT (LBS)
INT-812M6	M6 Cylinder with Integrated Bonsai® Velocity OM-812	3.2	15.3	2.8
INT-812ML6	ML6 Cylinder with Integrated Bonsai® Velocity OM-812	4.4	11.4	3.2
INT-812-M9	M9 Cylinder with Integrated Bonsai® Velocity OM-812	4.4	14.0	4.4
INY-812D	D Cylinder with Integrated Bonsai® Velocity OM-812	4.4	19.6	6.0

PROBLEM	PROBABLE CAUSE	SOLUTION
Unit does not pulse.	Cylinder valve is closed.	Turn the cylinder valve to the "ON" position.
	Cylinder is empty.	Check the oxygen gauge. Replace the cylinder, if empty.
	Oxygen cannula is blocked or kinked.	Remove kinks. Clean or replace, if necessary.
	Selector switch is set to the "OFF" position.	Make sure the selector switch is set to the appropriate delivery setting.
Unit pulses or flows continuously.	Unit is set to the "CF" position. 2 LPM or 4 LPM	Turn the selector switch to the appropriate delivery setting.
	Unit was not set to "OFF" prior to opening the cylinder valve.	Turn the selector switch to "OFF," wait a few moments, then set at proper delivery setting.
	Vent hole is obstructed.	Remove obstructions, such as labels or a tight-fitting carrying bag, and resume use as usual.
No oxygen delivery.	Fault in the unit.	Continue the therapy by setting the selector switch to "CF" (continuous flow). This setting increases the oxygen consumption, so you should regularly check how much oxygen you have left.

Non-functioning units are subject to warranty provisions and the manufacturer repair/return policy. If necessary, call your Home Care Provider.

 **NOTE: Do not attempt to open the unit. If the unit is opened or tampered with, the warranty is void.**

CLASSIFICATIONS

The BONSAI® VELOCITY conserver is classified as:

- Class II, per FDA 21 CFR Part 868.5905
- Not suitable for use in the presence of flammable anesthetic mixture with air, oxygen, or nitrous oxide.

OXYGEN DELIVERY:

SWITCH POSITION LITER FLOW EQUIVALENCY

OFF	OFF
1	1 lpm
2	2 lpm
3	3 lpm
4	4 lpm
5	5 lpm
6	6 lpm
cf 2	2.0 lpm
cf 4	4.0 lpm

Continuous Flow

Emergency Bypass Setting:

Two settings, factory preset at 2 LPM and 4 LPM

Regulator:

Brass high-pressure with aluminum low-pressure materials
Approximately 5.3" L (13.5 cm) x 2.2" D (5.6 cm) conserver only

Dimensions:

Weight:

Approximately 10 ounces (283 grams), conserver only

Operating Temperature:

14°F to 104°F (-10°C to 40°C)

Operating Relative Humidity:

15% to 95%

Operating Altitude:

-1000 to 10,000 feet (-305 to 3,048 meters)

Storage/Transportation:

Maximum -40°F (-40°C),
Maximum 158°F (70°C),
RH up to 95% non-condensing

Shock:

Not to exceed IEC 60068-2-27 requirements

Vibration:

Not to exceed IEC 60068-2-6, IEC 60068-2-34

SPECIFICATIONS

SYMBOLS KEY:



Follow instructions



Warning! Consult accompanying documents.



Prescription only



No smoking



Use no oil or grease



Keep away from open flame



Keep well ventilated



Manufacturer

LIMITED WARRANTY

The BONSAI® VELOCITY integrated oxygen conserver has been carefully manufactured and inspected and is warranted to be free from defects in workmanship and materials. Under this warranty, CHAD Therapeutics' obligation shall be limited to the replacement or repair of any such units or parts that prove, by CHAD's inspection, to be defective within two years from the date of purchase. Any abuse, operation other than the intended use of the product, negligence, accident or repair by other than authorized service professionals shall immediately void this warranty. This warranty does not extend to spare parts or accessories.

CHAD Therapeutics will not accept damages or charges for labor, parts or expenses incurred in making field repairs, except upon written authorization prior to such action.

The foregoing warranty is exclusive and in lieu of all other express warranties. Implied warranties, if any, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, shall not extend beyond the duration of the express warranty provided herein. In no event shall CHAD Therapeutics be liable for loss of use or profit or other collateral, special or consequential damages.

The expected service life of this device is 5 years.

IMPORTANT INFORMATION TO RECORD



Your Name:

Date You Received Your Unit:

Prescribed Oxygen Flow Setting:

- At Rest: _____
- During Exercise: _____

Home Care Provider's Name:

Home Care Provider's Phone Number:

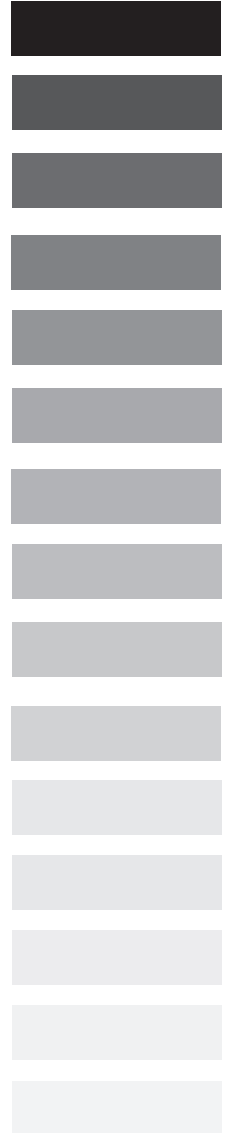
(_____) _____

Physician's Name:

Physician's Phone Number:

(_____) _____

Notes: _____



drive[™]

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