

**OCEANIC®**

**REGULATOR**

**Equipment**

**Owner's Guide**

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### **Oceanic Regulator Owner's Guide**

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**San Leandro, CA USA 94577**

## **TRADEMARK NOTICE**

Oceanic, the Oceanic logo, DX4, DXi, PX2, SP4, CDX, Omega, Delta, Sub Zero, Alpha, Gamma, Zeta, SlimLine, Swivel 180 Octo, Explorers, Air XS, and DataLink are all registered and unregistered trademarks of Oceanic. All rights are reserved.

## **PATENT NOTICE**

U.S. Patents have been issued to protect the following design features: Orthodontic Mouthpiece (U.S. Patent No. 4,466,434) and Second Stage Regulator (Delta) Depth Compensating Adjustment Mechanism (U.S. Patent No. 5,660,502).

## **LIMITED TWO-YEAR WARRANTY**

For details, refer to the Product Registration Card provided by your Authorized Oceanic Dealer. For additional information, visit the Oceanic web site at -

<http://www.OceanicWorldwide.com>

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Pay special attention to items marked with this Warning Symbol.

### WARNINGS:

- This Regulator product is intended for use by recreational divers who have successfully completed a nationally recognized course in scuba diving.
- It must not be used by untrained persons who may not have knowledge of the potential risks and hazards of scuba diving.
- It is NOT intended for use by military and commercial divers.
- This Regulator must be used together with an Instrument that measures and indicates the user's air supply pressure.
- As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.
- Read and understand this Owner's Guide completely before diving with this Regulator.
- If you do not fully understand how to use this Regulator, or if you have any questions, you should seek instruction in its use from your Authorized Oceanic Dealer before you utilize this product.
- Prior to each dive inspect and test this regulator for proper operation. If any part does not function properly, DO NOT USE!

Oceanic promotes responsible diving practices and does not advocate diving beyond the limits recommended for recreational diving. Oceanic regulator equipment is designed to offer continued safe and reliable performance in the event the need arises and the recreational diving limits are exceeded.

Oceanic regulators are CE certified to a maximum operating depth of 50 M (165 FT).

## INTRODUCTION

### **THANK YOU for choosing a Regulator product from Oceanic !**

Features and operation of the various models of Oceanic regulator first and second stages currently available are described in this owner's guide, and/or any addendum or supplement provided with it. By following the instructions in this guide, you will understand how your regulator product works, how to make best use of its features, and how to maintain it for long term use. Some information presented may not be applicable to the specific model of regulator or accessory that you purchased. **DO NOT** dive with the regulator until you have read and understand all information provided with it.

### **STATEMENT FOR OCEANIC REGULATOR EQUIPMENT COMPATIBILITY AND USE WITH NITROX**

Unless specifically labeled otherwise, Oceanic Regulator equipment is classified as being suitable for use with nitrogen-oxygen (Nitrox) breathing gas mixtures containing up to 40% oxygen by volume without the need for special preparation, cleaning, or component parts.

If Oceanic Regulator equipment is subsequently used with equipment, or connected to an air supply system, that is not rated for Oxygen Service, it can subsequently be used with Nitrox (up to 40% O<sub>2</sub>) as long as it is maintained in accordance with the procedures and parts specified in the Oceanic Product Service Guide.

**WARNINGS:**

Oceanic Regulators are not intended to be used by untrained persons who may not know the inherent risks and hazards of SCUBA diving.

Prior to use of Oceanic Regulator equipment with nitrogen-oxygen (Nitrox) breathing gas mixtures that contain a higher fraction of oxygen than 21%, the user must have received, or must first obtain, certification in diving with Nitrox from a recognized training agency.

An Oceanic Regulator is not a medical device. It is not intended and must not be used to supply treatment oxygen in a medical emergency.

SCUBA complying with EN 250 is not intended for more than one user to breath from at a time.

If SCUBA is configured and used by more than one diver at the same time, then cold water and breathing performance may not fulfil the requirements of EN 250.

**NOTES:**

The term breathing gas used throughout this owner's guide applies to enriched nitrogen-oxygen (Nitrox) mixtures as well as compressed Air.

When using Air with this regulator equipment, the Air supply must meet the requirements of EN 12021.

## STATEMENT FOR OCEANIC REGULATOR EQUIPMENT COLD WATER DIVING

All Oceanic Regulator First Stages are classified as being suitable for use in waters having Temperatures of 50°F (10 °C) and higher.

Due to operational limits, use in waters having colder Temperatures requires Oceanic Diaphragm style First Stages to be properly fitted with an Environmental Protection Kit to prevent the possible buildup of ice crystals in the Spring Cavity.

Due to the inherent design of Oceanic Piston style First Stages, they cannot be specially prepared to accommodate the operational limits imposed by waters having Temperatures below of 50°F (10 °C). Oceanic therefore recommends the use of Diaphragm style First Stages fitted with Environmental Protection Kits when diving in lower Temperature water.



**WARNING: Installation of an Environmental Protection Kit must be performed by the Oceanic factory or an Authorized Oceanic Dealer. Improper installation may cause First Stage failure while underwater resulting in serious injury or death.**

Specialized training and skills required for cold water diving can reduce effects that cold water Temperatures can impose upon the operation of Oceanic Regulator Second Stage(s).



**WARNING: Failure to obtain proper training in the specialized techniques required for diving in cold water environments and failure to apply such techniques to handle situations that could result in Regulator freezing will place you in risk of serious injury or death.**

## REGULATOR FIRST STAGES



**WARNING:** Failure to prepare your First Stage properly for use in harsh environmental conditions, such as being subjected to sediment or the possible buildup of ice, or salt crystals, may result in serious injury or death.

Operation of your first stage is not visible when using a regulator. The first stage converts the tank's high pressure air to an intermediate pressure of approximately 140 psi that can be handled by the regulator second stage to deliver a smooth flow of breathing gas upon demand (i.e., when you inhale). Intermediate pressure gas is also available for inflation of a BC or dry suit.



**WARNING:** Under no circumstances should adjustment of an Oceanic first stage regulator be performed by anyone other than an Authorized Oceanic Dealer. Doing so may cause failure underwater, resulting in serious injury or death.

### ATTACHMENT OF HOSES

Low pressure (LP) and high pressure (HP) port thread sizes are different, making incorrect installation of hoses unlikely. However, to avoid damage or personal injury that may occur due to incorrect installation, Oceanic strongly recommends having installation performed professionally by an Authorized Oceanic Dealer. If this is not possible, proceed as follows.

## **Type of Hose Being Connected:**

- Determine whether the hose that you are installing requires connection to an HP port (for a pressure gauge or breathing gas integrated computer), or to an LP port (for an octopus second stage, or a BC or dry suit inflator).
- Be sure that you only place high pressure accessory hoses in ports specifically marked with the letters 'HP', or '4500 psi / 300 BAR'.

## **Orientation (positioning):**

Orientation is defined by the location of the LP ports when the first stage is mounted on the tank valve. Mounting the first stage so the LP ports are lower (closer to the tank) than the HP ports is referred to as the DOWN position. Mounting the first stage so the LP ports are higher (further away from the tank) than the HP ports is referred to as the UP position.

Using the DOWN position produces the lowest overall regulator/tank profile, reducing the possibility of your head coming in contact with the first stage during your dives. Also, in the DOWN position, the venturi assisted LP port will be positioned so that the primary second stage is on your right side.

By mounting a first stage, such as the PX2, that utilizes a swivel section for the LP connections in the UP position, you can obtain greater accessibility to your hoses due to the swivel being positioned approximately 4 inches higher than in the DOWN position. The convenience of two HP ports provides for consistent positioning of your instrument console regardless of the orientation of the first stage. Note that the SP4 and Explorers only have one HP port.

Experience and experimentation will be your best guide to choosing the orientation that is best to satisfy your needs and preference.

## Installing Hoses:

After having determined the type of hose and preferred orientation -

- Remove the port plugs from those ports to be used by turning them counter clockwise with a 5/32" hex key. Save the port plugs for possible future use.
- Lightly lubricate the hose-end threads and o-ring with Christo-Lube MCG111 lubricant (silicone grease is acceptable only if the regulator is not designated for use with nitrox).
- Thread the hose clockwise into the port until secure, then tighten it with an open end wrench of the appropriate size to a torque of 40 in-lbs.
  - • Second stage - 9/16" wrench
  - • LP inflator - 9/16" (or 1/2") wrench
  - • HP gauge or integrated computer - 5/8" wrench
- After all hoses are connected, test the complete regulator assembly by attaching it to an appropriate tank, pressurizing the system, and carefully listening for leakage of breathing gas.

## REMOVAL OF HOSES



**WARNING:** At least one second stage must be connected to the first stage to facilitate purging of breathing gas from the first stage.

### **To remove a hose from the first stage -**

- Loosen and remove the hose by turning it in the counter clockwise direction with an open end wrench of the appropriate size.
- Lightly lubricate the threads and o-ring of the port plug.
- Thread the port plug clockwise into the port and tighten to a torque of 40 in-lbs using a 5/32" hex key.
- Test the assembly by attaching it to an appropriate tank, pressurizing the system, and listening for leakage.

### **DATALINK™**

DataLink is a high pressure quick disconnect designed to offer additional protection for your instrument console. It allows you to quickly and easily remove the HP hose and instrument console from the regulator first stage without any tools. It should be oriented so it is best protected from collisions with objects while underwater. DataLink can be purchased from an Authorized Oceanic Dealer.



**WARNING: Proper installation of the DataLink is essential for it to function properly. It must be installed only by an Authorized Oceanic Dealer.**

### **Connecting Your Console with a DataLink:**

- Ensure that the regulator system is purged of all breathing gas.
- Push the hose portion of the disconnect firmly into the first stage portion.
- While holding the two portions together with one hand, turn the locking ring of the first stage portion clockwise (as viewed from the first stage) until it stops (hand tight). DO NOT overtighten or use tools.

## **Disconnecting Your Console with a DataLink:**

- Ensure that the regulator system is purged of all breathing gas.
- While holding the hose portion of the disconnect with one hand, turn the locking ring of the first stage portion counter clockwise (as viewed from the first stage).
- Using care not to bend the DataLink parts, pull the two portions of the quick disconnect straight apart to remove the HP hose and instrument console.



**NOTE:** Once the DataLink has been disconnected, the regulator system can again be pressurized.

## **REGULATOR ATTACHMENT TO A TANK**



**WARNING:** Maximum working pressure for an Oceanic Yoke style connector is 3500 PSI / 232 BAR and for a DIN style connector is 4500 PSI / 300 BAR

## **YOKE STYLE CONNECTOR**

### **Before attaching the Regulator to the tank:**

- Slowly open then close the tank valve for a second to allow a momentary flow of breathing gas to blow any moisture or contaminants from the breathing gas opening in the tank valve.
- Examine the sealing o-ring located on the tank valve to ensure that it is not cut, frayed, or deteriorated. Replace the o-ring if it is damaged.

## To attach the Regulator to the tank:

- Remove the dust protector from the yoke by turning the easy-grip knob in a counter clockwise direction.
- Place the yoke connector over the tank valve, positioned with the seating surface against the valve o-ring.
- Turn the easy-grip yoke knob clockwise until secure.
- Slowly open the tank valve (with the pressure gauge facing away from you).
- Momentarily purge the second stage, then listen to ensure that no breathing gas is leaking from the regulator/tank connection.
- If any leakage is observed, repeat the attachment procedure and inspect the sealing o-ring. If gas still leaks, **DO NOT USE!** Take the regulator and tank to an Authorized Oceanic Dealer for inspection and service.

If you wish to use your regulator on a DIN tank, have your Authorized Oceanic Dealer convert the first stage with an Oceanic DIN Conversion Kit following the procedures given for the specific regulator first stage in the current Oceanic Product Service Guide.

## To remove the Regulator from the tank:

- Close the tank valve and purge all breathing gas from the regulator system by depressing the purge button of the second stage regulator. Ensure that all pressure has been purged.
- Turn the easy-grip yoke knob counter clockwise to loosen and lift the first stage off the tank valve.
- Prevent water from entering the first stage. **DO NOT blow breathing gas near a first stage that does not have the dust protector in place.**
- Dry the dust protector, position it within the yoke, and secure it by tightening the yoke knob.

## DIN WHEEL STYLE CONNECTOR

### **Before attaching the Regulator to the tank:**

- Slowly open then close the tank's valve for a second to allow a momentary flow of breathing gas to blow any moisture or contaminants from the gas opening in the tank valve.
- Examine the threads in the valve to ensure they are clean and free of burrs or defects that could damage the threads of your regulator DIN fitting.

### **To attach the Regulator to the tank:**

- Remove the protector cap from the threads of the regulator DIN connector wheel, and examine the threads and sealing o-ring. Replace the o-ring if it is damaged.
- Using care not to cross the threads, thread the DIN connector wheel clockwise into the cavity of the tank valve until it is secure.
- Slowly open the tank valve (with the pressure instrument facing away from you) and listen to ensure that no breathing gas is leaking from the regulator/tank connection.
- If any leakage is observed, repeat the attachment procedure and inspect the sealing o-ring. If breathing gas still leaks, DO NOT USE! Take the regulator and tank to an Authorized Oceanic Dealer for inspection and service.

If you wish to use your regulator on a standard tank, have your Authorized Oceanic Dealer convert the first stage with an Oceanic USA Yoke Conversion Kit following the procedures given for the specific regulator first stage in the current Oceanic Product Service Guide; or install an Oceanic DIN to USA Converter Yoke.

### **To remove the Regulator from the tank:**

- Close the tank valve and purge all breathing gas from the regulator system by depressing the purge button of the second stage regulator.
- Turn the DIN connector wheel counter clockwise out of cavity in the tank valve.
- Prevent water from entering the first stage. **DO NOT blow air near a first stage that does not have the protector cap in place.**
- Place the protector cap on the threads of the regulator DIN connector wheel.

### **DIN TO USA CONVERTER YOKE**



**WARNING:** The DIN to USA Converter is specifically designed for use with Oceanic brand first stages. Although it may fit other brand first stages, it was not designed to do so or tested for use with other brands. Under no circumstances should the Oceanic DIN to USA Converter be used with any other first stage than an Oceanic model.

### **To install the DIN to USA Converter:**

- Remove the protector cap from the threads of the regulator DIN connector wheel, and examine the threads and sealing o-ring. Replace the o-ring if it is damaged.
- Using care not to cross the threads, thread the DIN to USA Converter clockwise onto the first stage DIN connector wheel until it is secure. DO NOT use tools to tighten.

### **Before attaching the Regulator to the tank:**

- Slowly open then close the tank's valve for a second to allow a momentary flow of breathing gas to blow any moisture or contaminants from the gas opening in the tank valve.
- Examine the threads in the valve to ensure they are clean and free of burrs or defects that could damage the threads of your regulator DIN fitting.

### **To attach the Regulator to the tank:**

- Remove the dust protector from the yoke by turning the easy-grip knob in a counter clockwise direction.
- Place the yoke connector over the tank valve, positioned with the seating surface against the valve o-ring.
- Turn the easy-grip yoke knob clockwise until secure.
- Slowly open the tank valve (with the pressure gauge facing away from you) and listen to ensure that no breathing gas is leaking from the regulator/tank connection.
- If any leakage is observed, repeat the attachment procedure and inspect the sealing o-ring. If breathing gas still leaks, DO NOT USE! Take the regulator and tank to an Authorized Oceanic Dealer for inspection and service.

### **To remove the DIN to USA Converter:**

- While holding the DIN connector wheel firmly, turn the DIN to USA Converter counter clockwise off the threads of the first stage DIN connector. DO NOT use tools to remove.
- Place the protector cap on the threads of the regulator DIN connector wheel.

## ENVIRONMENTAL PROTECTION KIT

By function of design, the inner components of Oceanic diaphragm type regulator first stages (i.e., CDx, DX4) are isolated from the ambient environment. However, the outer side of the diaphragm and the diaphragm spring, located inside the cavity at the hex opening end, will be subjected to environmental conditions.

Oceanic recommends installation of an Environmental Kit on diaphragm type First Stages (i.e., CDx) subjected to environmental conditions in which debris, or sediment, or ice, or salt crystals might form in the spring cavity. The kit is a unique dry seal system that uses no messy grease or chemicals.

Most DX4 first stages are shipped from the factory with the Environmental Kit installed. If your DX4 (or other model) is not configured with an Environmental Kit, one can easily be installed by your Authorized Oceanic Dealer.



**WARNING: Installation of an Environmental Kit must be performed by an Authorized Oceanic Dealer. Improper installation may cause first stage failure while underwater resulting in serious injury or death.**

## REGULATOR SECOND STAGES



**WARNING:** Even if your First Stage is properly prepared for use in harsh environmental conditions, only proper training will protect your Second Stage from the effects of the environment.

### FEATURES AND OPERATION

The Second Stage of the regulator assembly receives breathing gas at an intermediate pressure of approximately 140 psi from the first stage and delivers it to you at ambient pressure during inhalation. When you stop inhaling, it then shuts off the flow of breathing gas and provides a path for exhaled gas.

All Second Stage regulators have a level of sensitivity that can result in excess breathing gas being expelled when the Second Stage is not in your mouth while in the water. When this occurs, it is usually during entry or when on the surface.

This condition, referred to as free-flow, can usually be stopped by turning the Second Stage so the mouthpiece is pointing down and the purge button is pointing up. (See Omega II for an exception to this general feature.)

Recommended is to carry an Octopus with the mouthpiece facing down when not in use, or to use a mouthpiece plug or cover to prevent free-flow in the event that it is bumped.

During normal use underwater, a small amount of water collects inside the body of a standard regulator in a natural reservoir near the bottom. This is normal for most second stages, and the water is held away from your mouth naturally and will go unnoticed unless you become inverted or do subaquatic somersaults at which time you may experience temporary 'wet breathing'.

Water can be purged from the small internal air space of most second stages by exhaling a small puff of breathing gas into the mouthpiece, or by blocking the mouthpiece with your tongue and pressing the front mounted purge button to initiate a flow of breathing gas. (See Omega II for an exception to this general feature.)

### **Alpha 7, Gamma, Pony Bottle, and Explorers (Primary and Octopus)**

These models are downstream demand valve second stage regulators that are lighter and smaller than most other primary second stages. They provide breathing gas as you demand it with low inhalation resistance. Breathing effort is factory set to the average performance level required by most divers.

They are provided with front-mounted purge buttons and orthodontically designed mouthpieces. They can be used as primary second stages or as an octopus. The Explorers model, designed for children, has a smaller mouthpiece, and the Pony Bottle second stage has a standard mouthpiece.



**NOTE: If these second stages are shipped from the factory specifically as an Octopus, the inhalation effort is set slightly higher to reduce sensitivity.**

## Delta 3 and Gamma 2 (Primary and Octopus)

### **Pre-Dive/Dive Switch (on top):**

The Delta 3 and Gamma 2 feature a Pre-Dive / Dive switch located on top of the body.

- Placing the switch in the left ( - ) position (Pre-Dive) reduces, or eliminates, the possibility of high volume free-flow when the mouthpiece is not in your mouth.
- Placing the switch in the right ( + ) position (Dive) provides optimum performance during a dive.

### **Delta 3 Adjustment Knob (on side):**

The Delta 3 provides a breathing effort adjustment (knob on the side of the body) that enables you to adapt breathing performance to different diving conditions.

- By turning the adjustment knob 'clockwise' breathing resistance (effort) is increased. This is done to prevent undesirable loss of breathing gas (free flowing) that often occurs when a high performance regulator second stage is connected as an octopus second stage, or when the primary second stage is not in the diver's mouth, such as when surface snorkeling.
- Turning the adjustment knob 'counter clockwise' decreases breathing resistance and reduces work of breathing. Adjustment should be used to improve performance, it should not be used as a method to use less breathing gas. During periods of heavy exertion underwater, and to compensate for the effects of depth, it is advantageous to have a regulator that can provide minimal inhalation resistance and optimal performance when desired.

## Guidelines for Delta 3 adjustments (knob on side):



**NOTE: Rotation of the Delta 3 adjustment knob does not rotate the poppet seat against the sealing orifice.**

### Normal Pre Dive Setting -

- To set the Delta 3 to an average breathing resistance, 1 to 1½ column inches of water (common factory setting), attach the first stage to an appropriate cylinder and open the valve to pressurize the regulator.
- Rotate the adjustment knob 'counter clockwise' until leakage is heard, then rotate the knob clockwise ½ to 1 turn.

### High Flow Setting -

- When diving deep, facing a long swim up current, or during other periods of heavy exertion, it is desirable to make the Delta breathe as easy as possible. This setting should be used only when necessary to avoid loss of air that may occur due to the Delta's extra sensitivity at this setting.
- To adjust the Delta for minimum breathing resistance, rotate the adjustment knob 'counter clockwise' until a slight flow of air begins, then rotate the knob 'clockwise' until the flow stops.
- Frequently monitor your air supply when the Delta is adjusted for maximum flow.

### Preventing Air Loss -

- To prevent free-flow when the Delta is out of your mouth, or when connected as an octopus second stage, rotate the adjustment knob 'clockwise' several turns. At the surface, place the Delta 3's Pre-Dive / Dive switch in the left (-) position (Pre-Dive) to reduce, or eliminate, free-flow.
- Remember, increasing inhalation resistance can prevent undesirable air loss. It will not conserve air while you are breathing from the Delta.

### Storage Setting -

- At the conclusion of a diving day, or when storing the Delta for any length of time, rotate the adjustment knob 'counter clockwise' until it stops. This relieves excess spring pressure from the poppet seat increasing its service life.
- Immediately prior to the next dive, reset the adjustment to the normal pre dive setting by turning the adjustment knob 'clockwise'  $1/2$  to 1 turn.

### **Omega II and Omega II with Swivel**

The Omega II is a high performance servo-valve assisted second stage regulator with a side-exhaust. Inhalation ports surround the main valve, providing greater surface area, less resistance to breathing gas flow, and higher flow rates creating more natural, easier breathing than other types of second stages, regardless of depth.

Due to the Omega II's servo design, a hiss may be heard upon being pressurized. This is normal for the Omega II.

Due to its configuration, there is no natural reservoir to catch and hold any water that may enter the Omega II, therefore you may experience a mist of water that will be constantly expelled. There is no difference in breathing or relative wetness whether you are upside-down or right-side-up. This makes it ideal as an octopus.

The unique side-exhaust directs bubbles away from your field of view. Excess water is expelled by tilting your head to the left (lowering the exhaust valve) when exhaling. Upon entering the water, free-flow can occur if the exhaust valve section is placed in the water before water has a chance to enter the mouthpiece. The best way to enter the water with the Omega II is with it in your mouth.

If this is not convenient, point the exhaust valve end up and immerse the mouthpiece first to ensure that water fills the body before pressure is exerted on the diaphragm that may cause it to free-flow.

When planning to resurface, removing the Omega II from your mouth while still underwater floods the second stage with water, preventing free-flow.

Most Omega IIs are shipped from the factory with a 180 degree Swivel that reduces jaw fatigue and provide for the convenience of underarm operation and ambidextrous operation.

### **Second Stage Swivel**

The low pressure swivel shipped with the Omega II is also available as an accessory from your Authorized Oceanic Dealer who can install one on any of your Oceanic Second Stage regulators.

## **Zeta**

The Zeta is a pneumatically balanced Servo-Activated Breathing System. The highly responsive servo design provides high performance and maximum air flow at operating depths. The Zeta's purge is designed to control the volume of air delivered based on the travel of the purge cover.



**NOTE: Due to the Zeta's servo design, a hiss may be heard upon being pressurized. This is normal for the Zeta.**

## **SlimLine Octopus**

There are two SlimLine models, left-hand and right-hand. How you use the SlimLine depends upon the model you chose to suit your preferred arrangement of equipment and your style of diving (i.e., whether you plan to offer the SlimLine to a buddy as an alternate breathing gas source or use the SlimLine yourself, offering your buddy your primary second stage).

Although either model will function properly with the purge button facing up or down, Oceanic recommends an operational position with the purge button facing up, similar to other second stage positioning. The streamlined and flat 'sideways' design of the SlimLine together with the unique orientation of the mouthpiece and exhaust valve reduces drag.

Oceanic also offers the SlimLine second stage as an integrated component of the Air XS II and InLine SlimLine model alternate air source(s).

## **Swivel 180 Octopus**

The Swivel 180 Octo features two conveniently angled exhaust ports that direct the flow of exhausted breathing gas away from your field of vision. The smooth action 180 degree swivel reduces jaw fatigue and provides for the convenience of underarm operation and ambidextrous operation.

How you use the Swivel 180 Octo depends upon your preferred arrangement of equipment and your style of diving (i.e., whether you plan to offer it to a buddy as an alternate breathing gas source or use it yourself, offering your buddy your primary second stage).

## **CARE AND MAINTENANCE**

### **TRANSPORT and STORAGE**

If possible, transport your regulator assembly (preferably dry) in a padded carrying case or equipment bag separated from sharp items (i.e., dive knife, spear gun, etc.) that might damage or scratch the components. You should also protect the second stages from damage from heavy objects (i.e., dive light, first stage, etc.).

### **Prior to storing your regulator:**

- Ensure that the complete regulator is clean and dry.
- If you were unable to clean the regulator prior to transport, or if it became exposed to other equipment that was not thoroughly cleaned prior to transport (such as a BC or wet suit), clean it thoroughly and allow it to dry naturally as previously described.

## POST DIVE CARE

### As soon as possible at the end of each day of diving:

- Install the first stage protector cap and tighten the yoke knob (or install the DIN thread protector cap).
- If possible, immerse the entire regulator assembly in a warm fresh water bath and soak for one hour, preferably while pressurized. DO NOT depress the second stage purge button while the regulator is soaking. Doing so will allow water to flow into the sealed portion of the first stage.
- Remove from the bath and rinse all components of the assembly with slow running fresh water. DO NOT use full water pressure.
- Flush the ambient openings of the first stage and the exterior of all components thoroughly to remove dissolved salt and other contaminants.
- If the first stage is configured with a rubber-like boot, direct rinse water through the flow-through slots.
- Flush the second stage by running water into the mouthpiece and out the exhaust ports. DO NOT depress the purge button while rinsing., doing so will allow water to enter the first stage.
- If possible, lay the complete assembly flat in a cool, dry place (**out of direct sunlight**) and allow the components to dry naturally.
- DO NOT inject or spray lubricants into or onto the first and second stages. Doing so can attract contamination that may subsequently interfere with proper operation.

## REPAIRS and SERVICE



**WARNING: DO NOT attempt to disassemble or repair the first or second stages, or to adjust the first stage. Doing so could cause malfunction while underwater resulting in serious injury or death. It will also void the regulator's limited warranty.**

In the event that any component of your regulator assembly requires any form of repair or service, return it to your local Authorized Oceanic Dealer for professional service by a trained technician authorized to perform Oceanic factory authorized service.

Once each year your complete regulator assembly should be inspected and serviced by an Authorized Oceanic Dealer. More frequent service is recommended if you dive in severe conditions or more frequently than an average diver (see guidelines on page 18).

**Annual Service** consists of:

- Inspection
- Complete disassembly
- Thorough cleaning and evaluation of reusable parts
- Replacement of non-reusable parts
- Complete reassembly
- Final adjustment and testing

**Costs** for routine inspection and Annual Service are understood to be a normal part of operation, and are not covered by the regulator's limited warranty.

If **Warranty Service** is requested, or routine service parts are requested in accordance with a **Registered Service Agreement**, present the appropriate documents (i.e., card, receipts, and service records) to the Authorized Oceanic Dealer when the regulator is delivered for service.

### **ADDITIONAL SPECIFICATIONS FOR CONNECTING COMPONENTS TO OCEANIC REGULATOR FIRST STAGES**

#### **Second Stage (Primary or Octopus):**

- Nominal Source Pressure = 140 psi (9.5 BAR)  $\pm$  5 psi (.5 BAR)
- Maximum Source Pressure = 155 psi (11 BAR)
- Thread Size = 3/8 - 24 UNF
- Inhalation Effort = 1.1 to 1.3 ciw\* (cubic inches of water)
  - \* Delta 3 model = adjustable from 0.0 to 2.5 ciw
- Exhalation Effort = 1.1 ciw\*
  - \* Omega II and Zeta models = 1.1 to 1.3 ciw
- Flow Rate = 30+ scfm (standard cubic feet per minute)
- Work of Breathing is equal to or better than US Navy and CEN

#### **Pressure Gauge or Pressure Transmitter:**

- Maximum Source Pressure = 5000 psi (350 BAR)
- Thread Size = 7/16 - 20 UNF

## **GUIDELINE FOR OCEANIC REGULATOR EQUIPMENT MINIMUM SERVICE INTERVALS**

Due to variations of use and storage time that Oceanic Regulator equipment may be subjected to, the Guidelines and defined Intervals given herein are subject to the discretion of the owner of the specific product. Inspection and/or service indicated must be performed only by an Authorized Oceanic Dealer.

### Personally owned equipment used for recreational diving activity:

Equipment used 100 dives or less per year should be serviced at least once per year.

Equipment used more than 100 dives per year should be serviced after 100 dives prior to further use.

Equipment stored more than 6 months should be inspected/serviced as required, prior to use.

### Equipment used for dive training and/or consumer rental activities:

Equipment should be inspected prior to every use.

Equipment should be serviced at least once every 6 months regardless of use.

Equipment should be serviced after 100 dives prior to further use.

Equipment stored for more than 3 months should be inspected/serviced as required, prior to use.

### Regardless of ownership or intended use:

Equipment should be inspected/serviced if it displays any signs of leakage, malfunction, free flowing, any signs of deterioration, or improper performance or breathing effort.

Equipment should be inspected/serviced if the first stage inlet filter shows any sign of residue or discoloration.

## RECORDS

First Stage Model

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First Stage Serial#

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Second Stage Model

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Second Stage Serial#

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Octopus Model

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Octopus Serial#

---

Date of Purchase

---

Oceanic Dealer

---

Dealer Phone No.

---

**EC Type examination conducted by:  
SGS United Kingdom Ltd  
Weston - super - Mare  
BS22 6WA, UK  
Notified Body No. 0120**



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