

RG2500 and RG2500Ice Regulator System

User Guide



Date of purchase: _____

www.diverite.com

**DEVELOPED
BY**

Dive Rite
175 NW Washington Street
Lake City, FL 32055
Phone: 386.752.1087
Fax: 386.755.0613
Web: www.DiveRite.com

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NOTICE**

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**WARRANTY
INFORMATION**

Dive Rite warrants this regulator against any and all defects in materials and workmanship throughout its useful life. This warranty does not apply to normal wear and tear, mouthpieces, hoses, o-rings, diaphragms, filters, valve seats, or any cosmetic damage and is extended only to its original owner.

Although this warranty is not contingent upon any annual service, it is highly recommended that any and all regulators receive an annual safety inspection performed by factory-authorized personnel. Factory or authorized dealer servicing is required every 100 hours of dive time or every 2 years whichever occurs first.

This warranty applies only to regulators purchased from authorized Dive Rite Dealers.

Misuse, neglect, unauthorized service, as well as any modifications voids this warranty.

Dive Rite shall not be liable for incidental or consequential damages incurred through the use of this regulator. Some states in the U.S. and certain foreign countries do not allow exclusions or limitations of liability for incidental or consequential damages so this may not apply to you.

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

To make a claim under this warranty, the owner must have registered his/her warranty using Dive Rite's website (www.diverite.com). All warranty repairs (international or domestic) *must* be accompanied by a copy of the purchase receipt. For warranty repairs (international or domestic) the product must be returned to the *store* where the item was purchased or directly to Dive Rite. A Return Authorization must be obtained by calling Dive Rite corporate offices (386-752-1087) to send items to Dive Rite. No warranty service will be performed for other than registered owners. Note: Local dealers and distributors are not responsible for service of items purchased from unauthorized dealers, internet dealers, or dealers from other territories.

Activating and Utilizing Your Warranty.

1. To activate your warranty, you must register your regulator within 30 days of purchase through our online product warranty registration. This is located within our website at www.diverite.com/warranty.
 2. Proof of original ownership is provided by your purchase receipt and should be retained for your records.
 3. To maintain your original-owner lifetime warranty, you must have your regulator serviced within the prescribed 100 hours of usage or two year time frame as outlined above. This service can be done at your local authorized Dive Rite Dealer or directly by Dive Rite.
 4. If you intend to receive your service directly from Dive Rite, you must first obtain a Return Merchandise Authorization (RMA) number by calling Dive Rite at 386-752-1087. Your RMA number is to be printed on the address label of your package.
 5. Your owner's manual has a service log for you to record all your service history. This log is used to verify your adherence to the required service schedule to maintain your warranty.
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**IMPORTANT
NOTICE**

Before using your regulator system components, there are several things you must do. These include:

- Obtain a minimum of entry-level open-water scuba diver training and certification from a recognized diver-training organization.
- As part of this training, you must master all the basic skills of regulator use, including proper assembly and disassembly of complete scuba units, including regulator, cylinder and harness, regulator second stage recovery and clearing, continuous breathing while on scuba, and post dive regulator cleaning and storage.
- You must read and understand this owner's manual and all other warnings that accompany the product. If you do not understand some part of this manual, contact Dive Rite or your local authorized Dive Rite dealer.

In providing this manual, we make certain common sense assumptions about your knowledge, skills, experience, and abilities. These assumptions include:

- That you are a certified scuba diver, whose training met prevailing standards of practice and included the proper assembly, use, and care of scuba regulators.
- That you further understand that the assembly and disassembly of regulator system components, and any repairs to or internal maintenance of such components, should only be performed by a qualified technician who is working under the supervision of an authorized dealer. In other words, anything requiring the use of wrenches, screwdrivers, or other tools is something an authorized dealer should be doing, not you.

Additionally, before using your regulator system components in open water, you should:

- Read and understand this manual in its entirety. There is very little, if any, information here that does not pertain to you. Don't risk missing vital information by picking and choosing the information you think applies to you.
- Practice using your regulator in calm, shallow or confined water before using it in more challenging conditions.

If you have questions regarding any of the information you find in this manual or have questions pertaining to information about your regulator system that you cannot find in this manual, contact your local authorized Dive Rite dealer. If there is no authorized Dive Rite dealer in your area, contact Dive Rite directly, using the contact information appearing in this manual.

WARNING: Failure to follow the instructions given in this manual or to heed the warnings it provides can cause equipment loss or damage, serious personal injury, or death.



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RG1208 and RG1208Ice First Stage Regulators

Product description

The RG1208 and RG1208Ice first stage regulators employ a balanced diaphragm mechanism. This means that the effort to open and close the first stage valve is unaffected by changes in tank pressure. The balanced design allows for a larger first stage orifice, which improves regulator performance.

The design of the diaphragm does not allow water to enter the first stage, which means no salt, sand, or other contaminants will build up on the internal surfaces of the regulator.

There are two high-pressure ports and four low-pressure ports. The high-pressure ports are on the body of the first stage opposite of each other. The low-pressure ports are on a swiveling base for ease of hose configuration. A 300-bar DIN connector is standard on the RG1208 and RG1208Ice first stages. The RG1225Black is provided as part of the RG2500 regulator package.



Specifications

European EN250 norms: Regulator meets the European EN250:2003 norms
Ports

Low pressure: 4 (3/8-24 UN)

High pressure: 2 (7/16-20 UNF/ISO263)

Connectors: 300-bar DIN and yoke adapter

Intermediate pressure: 140 PSI

O-rings: Viton® o-rings with oxygen-compatible lubricant

Cold water rating: 50 °F (10 °C) (for lower temperatures use the cold water environmental kit P/N RG1226)

Nitrox ready: To 40%

Attaching high- and low-pressure hoses

There are two high-pressure and four low-pressure ports on the first stage. The high-pressure port is for attaching a pressure gauge. The low-pressure ports are for attaching an inflator hose and a primary and backup second stage regulator.

WARNINGS: Do not try to connect a low-pressure hose to a high-pressure port or vice versa. Do not open a cylinder valve unless you are certain that *all* hoses are correctly attached.

To attach high- and low-pressure hoses:

1. Check that the hose o-ring is in place.
2. Line up the hose connector with a port.
3. Hand tighten the hose to the regulator. Tighten further using an appropriate sized wrench. Do not over tighten.

Yoke and DIN connector use

The RG1225BLK yoke adapter can be used with a standard cylinder yoke valve. The RG1208 and RG1208Ice both come standard with a DIN connector, which can only be used with a DIN valve or manifold on your cylinder.

To attach the regulator to a yoke valve:

1. Screw the yoke adapter on to the first stage DIN connector.
2. Screw the yoke adapter to the cylinder yoke valve making sure the o-ring seats correctly. Do not over tighten.

To attach the regulator to a DIN valve:

1. Make certain that both the DIN connector and valve are free from dirt, sand, or other contaminants.
2. Make sure the regulator o-ring is in place and in good condition. Note: There is no o-ring on the DIN tank valve.
3. Screw the connector into the DIN valve until the o-ring seats to the back of the valve. Only hand tighten the connector. Do not forcibly tighten the connector.

Note: Do not rotate the first stage once the connector is tightened. Doing so may cause the DIN connector to separate from the valve.

Care and maintenance

Your regulator will provide you years of service with proper care and maintenance. This involves post-dive care and regular professional service.

Note: Stainless steel can develop rust even when properly cared for.

Post-dive care: After use, replace the dust cover. Thoroughly rinse the regulator in fresh water and allow it to thoroughly dry before storing it in a closed container. Do not hang or store the regulator in a manner that puts strain on the hoses. Dive Rite recommends Salt-X for salt removal (www.salt-x.com).

Professional service: Over time, mineral deposits and salt build-up will accumulate on your regulator, which can adversely affect its performance. Professional cleaning and service is the only way to remove these deposits and return the regulator to its proper working order. Other regulator breakdowns can also occur whether the regulator is used or not, such as spring tension and o-ring breakdown. These too will affect the performance of the regulator.

To keep your regulator working at its best performance, you should have your regulator serviced at least once every two years or 100 dives by a professionally trained technician.

Note: Avoid excessive pool use. Excessive use in chlorinated water can lead to premature discoloration and shorten the products life.



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RG2010 Balanced Second Stage Regulator

Product description

The RG2010 second stage regulator uses a balanced downstream valve, which provides better performance at depth. The second stage has an external adjustment valve to fine tune inhalation effort, a dive/pre-dive switch that helps to prevent regulator free-flow, a replaceable cover that is available in yellow, blue, or green from your Dive Rite dealer, a 28-inch (71 cm) low-pressure hose, and comes standard with Teflon coated parts, which makes it cold water ready.



Specifications

European EN250 norms: Regulator meets the European EN250:2003 norms
Internal valve: Balanced downstream
Dive/Pre-dive switch: Reduces regulator free flow
Adjustment knob: Fine-tunes inhalation effort
Hose: 28-inch (71 cm) low-pressure
O-rings: Viton® o-rings with oxygen-compatible lubricant
Nitrox ready: To 40%

Using the external adjustment knob

Turning the adjustment knob clockwise increases spring tension, making it more difficult for the valve to open. This helps to reduce the tendency to free-flow in strong currents.

Turning the knob counter-clockwise decreases spring tension, making the valve easier to open. This reduces breathing resistance, but can increase the tendency to free-flow.

You will want to try various settings of this knob during your first few dives to find the right position for you. The best practice is to set the regulator so that it breathes easily, short of free flowing.

Caution: Adjusting the knob for the maximum breathing resistance does not reduce the amount of air you breathe from your cylinder. It may actually cause you to use more air because your diaphragm has to work harder to compensate for the resistance.

Using the dive/pre-dive switch

The dive/pre-dive switch controls a venturi flow valve located within the second stage of the regulator. When in the pre-dive position this valve decreases the likelihood of free-flow when not in use. The dive position decreases breathing effort and improves regulator performance.

- Set the switch to the dive position before each dive.
- Set the switch to the pre-dive position when the regulator is not in use in or out of the water.

Replacing the cover

A yellow, blue, or green cover can replace the standard black cover. This must be ordered separately from your Dive Rite dealer.

To replace the cover:

1. Unscrew the metal ring from the outside of the regulator.
2. Remove the plastic cover.
3. Insert the new plastic cover. Make sure "Dive Rite" is oriented properly.
4. Screw the metal ring into place. Hand tighten only. Do not over tighten.

Care and maintenance

Your regulator will provide you years of service with proper care and maintenance. This involves post-dive care and regular professional service.

Note: Stainless steel can develop rust even when properly cared for.

Post-dive care: After use, replace the dust cover. Thoroughly rinse the regulator in fresh water and allow it to thoroughly dry before storing it in a closed container. Do not hang or store the regulator in a manner that puts strain on the hoses. Dive Rite recommends Salt-X for salt removal (www.salt-x.com).

Professional service: Over time, mineral deposits and salt build-up will accumulate on your regulator, which can adversely affect its performance. Professional cleaning and service is the only way to remove these deposits and return the regulator to its proper working order. Other regulator breakdowns can also occur whether the regulator is used or not, such as spring tension and o-ring breakdown. These too will affect the performance of the regulator.

To keep your regulator working at its best performance, you should have your regulator serviced at least once every two years or 100 dives by a professionally trained technician.

Note: Avoid excessive pool use. Excessive use in chlorinated water can lead to premature discoloration and shorten the products life.



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RG1215 Octopus Unbalanced Second Stage Regulator

Product description

The RG1215 octopus second stage regulator uses a conventional unbalanced downstream valve. It is intended for use as an alternate-air-source. The second stage incorporates a dive/pre-dive switch that helps to prevent regulator free-flow, a replaceable cover that is available in black, blue, or green from your Dive Rite dealer, a 40-inch (102 cm) low-pressure hose, and comes standard with Teflon coated parts, which makes it cold water ready.



Specifications

Internal valve: Unbalanced downstream
Dive/Pre-dive switch: Reduces regulator free flow
Hose: 40-inch (102 cm) low-pressure
O-rings: Viton® o-rings with oxygen-compatible lubricant
Nitrox ready: To 40%

Using the dive/pre-dive switch

The dive/pre-dive switch controls a venturi flow valve located within the second stage of the regulator. When in the pre-dive position this valve decreases the likelihood of free-flow when not in use. The dive position decreases breathing effort and improves regulator performance.

- Set the switch to the dive position before each dive.
- Set the switch to the pre-dive position when the regulator is not in use in or out of the water.

Replacing the cover

A black, blue, or green cover can replace the standard yellow cover. This must be ordered separately from your Dive Rite dealer.

To replace the cover:

1. Unscrew the metal ring from the outside of the regulator.
2. Remove the plastic cover.
3. Insert the new plastic cover. Make sure "Dive Rite" is oriented properly.
4. Screw the metal ring into place. Hand tighten only. Do not over tighten.

Maintenance

Your regulator will provide you years of service with proper care and maintenance. This involves post-dive care and regular professional service.

Post-dive care: After use, replace the dust cover. Thoroughly rinse the regulator in fresh water and allow it to thoroughly dry before storing it in a closed container. Do not hang or store the regulator in a manner that puts strain on the hoses.

Professional service: Over time, mineral deposits and salt build-up will accumulate on your regulator, which can adversely affect its performance. Professional cleaning and service is the only way to remove these deposits and return the regulator to its proper working order. Other regulator breakdowns can also occur whether the regulator is used or not, such as spring tension and o-ring breakdown. These too will affect the performance of the regulator.

To keep your regulator working at its best performance, you should have your regulator serviced at least once every two years or 100 dives by a professionally trained technician.

