

RG3100 and RG3100Ice Regulator System

User Guide



Date of purchase: _____

www.diverite.com



www.DiveRite.com

RG1208-5 & RG1208-5Ice

First Stage Regulator

Product Description

The RG1208-5 and RG1208-5Ice first stage regulators employ a balanced diaphragm mechanism. This means that the breathing 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 five low-pressure ports. The high-pressure ports are on the body of the first stage opposite of each other. Four low-pressure ports are on a swiveling base and one low-pressure port is on the turret for ease of hose configuration. It comes standard with a 300-bar DIN connector and an additional yoke adapter. An optional environmental kit protects the regulator in cold weather and harsh environments.

Specifications

- Meets the European EN 250 - 2003 norms.
- Pneumatically balanced design
- Spinning turret
- Five low pressure ports (3/8-24 UN)
- Two high pressure ports (7/16-20 UNF/ISO263)
- Connector: 300 bar and Yoke adapter
- Intermediate pressure: 140 PSI
- Temperature rating: 50 to 95 F (10 to 19 C) (27 F/-2 C with Environmental Kit)
- O-rings: oxygen compatible o-rings and lubricant
- DIN connection with DIN dust cover
- Optional cold water anti-freeze system (RG3100ICE)

Attaching High- and Low-Pressure Hoses

There are two high-pressure and five low-pressure ports on the first stage. The high-pressure port is for attaching a pressure gauge. The low-pressure ports give divers ultimate flexibility in streamlining and routing for the inflator hose and second stage regulator configurations.

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.

NOTE: The turret-port base is slightly convex and slotted on each side to accommodate an 11/16 wrench for securing the turret while loosening the LP hose. This makes it easy to change the hose without concern of loosening the turret.

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 the 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 RG1208-5 and RG1208-5Ice 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.

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.

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 200 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.
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 200 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.



Product Description

The RG3000-2 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 28-inch (71 cm) low-pressure hose, and comes standard with Teflon coated parts, which makes it cold-water ready.



Specifications

- Pneumatically balanced design
- All internal moving parts are Teflon coated for cold-water use
- O-rings: oxygen compatible o-rings and lubricant
- Internal second stage valve: Balanced downstream
- Second stage adjustment knob: Fine-tunes inhalation effort
- RG1225 yoke adapter included

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.



External adjustment knob

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 (pushed forward), this valve decreases the likelihood of free-flow when not in use. The dive position (back, toward mouthpiece) 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.

Dive/Pre-dive switch



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.

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.