ROMI
ENTERPRISES

SBA/CU2

USER
MANUAL

Distributed Exclusively By:

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CONTENTS

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San Leandro, CA USA 94577

TRADEMARK NOTICE

WARNINGS, CAUTIONS, AND NOTES

Pay attention to the following symbols when they appear throughout this document. They denote important information and tips.

WARNINGS: are indicators of important information that if ignored may lead to injury or death.

CAUTIONS: indicate information that will help you avoid product damage, faulty assembly, or unsafe conditions.

NOTES: indicate tips and advice.

WARNING: It is essential that the user read this guide to familiarize themselves with the proper setup, care, and use of this product. If the instructions given in this guide are not understood and followed, possible injury or death may result.

WARNING: Proper training is essential for safety. One must be trained in breathing compressed gases, in-water survival, and emergency egress.

WARNING: Before each dive inspect and test this regulator for proper operation. If any part does not function properly, DO NOT USE!

WARNING: This device has a limited gas supply. It is ONLY intended for emergency exit from shallow water depths of 45 ft/13.5 m. It is not intended for evacuations from greater depth, prolonged use, or as standard SCUBA equipment.

WARNING: Air Supplies used with the regulators must meet requirements for breathable air Grade E in the U.S.A. or EN 12021 Annex A standards in Europe.

WARNING: As with all underwater life support equipment, improper use or misuse of this product can cause serious injury or death.

WARNING: Never overfill the SBA/CU2 unit.

WARNING: The unit should always be pressurized during in water training to prevent corrosion and contamination of internal components. If the unit has been exposed to water ingress or contamination it must be serviced and cleaned by a qualified technician.

WARNING: Discontinue use of any SBA/CU2 unit post exposure to extreme heat in excess of 250 °F/121 °C.

WARNING: Units shall be serviced and maintained on a regular basis by trained and authorized technicians. The cylinder must be inspected and serviced in accordance with all local governing agencies. The regulator components must be serviced annually. Equipment that is not routinely serviced in a correct manner creates an usafe condition that could lead to serious injury or even death.

WARNING: Failure to obtain proper training in the specialized techniques and to properly equip for diving in cold water environments such as under ice could result in regulator freezing. This would place the user in risk of serious injury or death.

INTRODUCTION

The SBA/CU2 was designed for simplicity, reliability, and compact size. By combining the function of a valve and regulator first stage, the SBA/CU2 reduces weight, bulk, and a failure point. The SBA/CU2 utillizes a robust piston style first stage that greatly reduces moving parts while still providing good breathing characteristics. Fewer parts also make it easy to service and maintain. A unique reverse valve lever design reduces second stage bulk. Variable mouthpiece positions, a swivel hose, and extra porting allow for improved configuration options to meet your needs.

THE CYLINDER

The SBA/CU2 comes standard with a 2.0 cuft (56.6 L) capacity cylinder. This cylinder has an overall height of 9.25" (23.5 cm) and is full at 3000 psi (207 bar). This provides on average 20 breathes at depths ≤ 20 ft (6 m), dependant on the user's lung capacity and workload. To accommodate other breathing requirements three optional cylinder sizes are available for shipment: 1.5, 2.5, and 6 cuft.

All cylinders shipped with a SBA/CU2 have DOT (Department Of Transportation) approved cylinders. Important information is stamped along the neck of the cylinder. You will find the following "DOT-3AL3000" on all cylinders supplied with the SBA/CU2.

DOT = Department OF Transportation
3AL = Aluminum
3000 = the working pressure in psi units

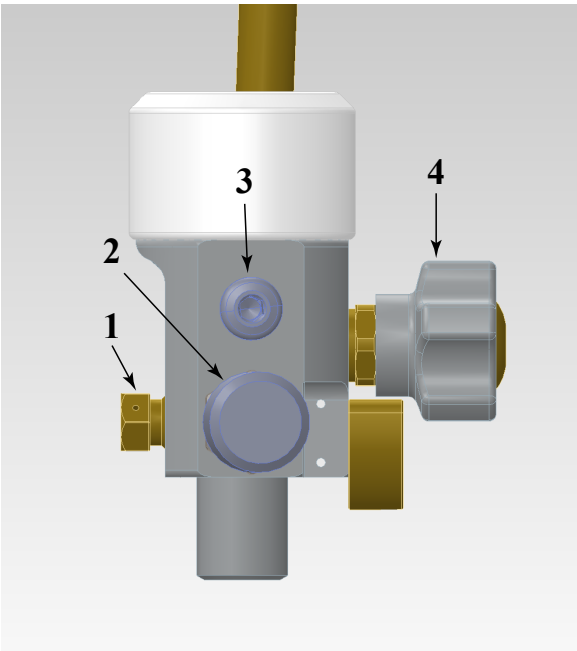
Another relevant stamp to the user is the date of manufacture code. It is represented in a "month * year" format. This is important because the DOT requires a cylinder of this type to have hydrostatic retesting five years after the date of manufacture or the last hydrostatic testing date (stamped on the cylinder by the inspector). It may be more practical to simply replace the tank at this date. Contact the distributor for available options and pricing. A visual inspection should be performed annually or sooner if contamination is suspect.

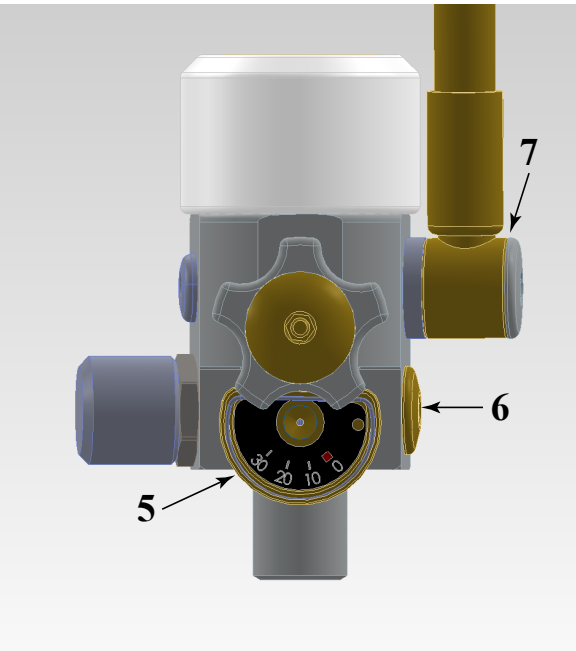
HYDRO DATE:
month - inspecter mark - year

THE SBA FIRST STAGE

The first stage is threaded directly into the cylinder to create a more compact package. The first stage delivers workable gas pressure to the second stage for breathing. Additionally, the first stage utilizes a compact onboard pressure gauge, low pressure hose with swivel, on/off knob, fill port, extra low pressure port, and extra high pressure port. The additional ports allow for different configuration options.

The operation of the first stage is simple. The high pressure ports are always active. This means it is not necessary to operate the on/off knob to fill the cylinder or check the internal pressure. Opening the valve is only used to control the supply of gas to the second stage. The on/off knob is open when turned fully counterclockwise and closed when turned fully clockwise. To prevent accidental activation of the second stage, gas loss, and unnecessary wear on the second stage valve seat, the on/off knob should be closed and the second stage purged when the unit is not in use.





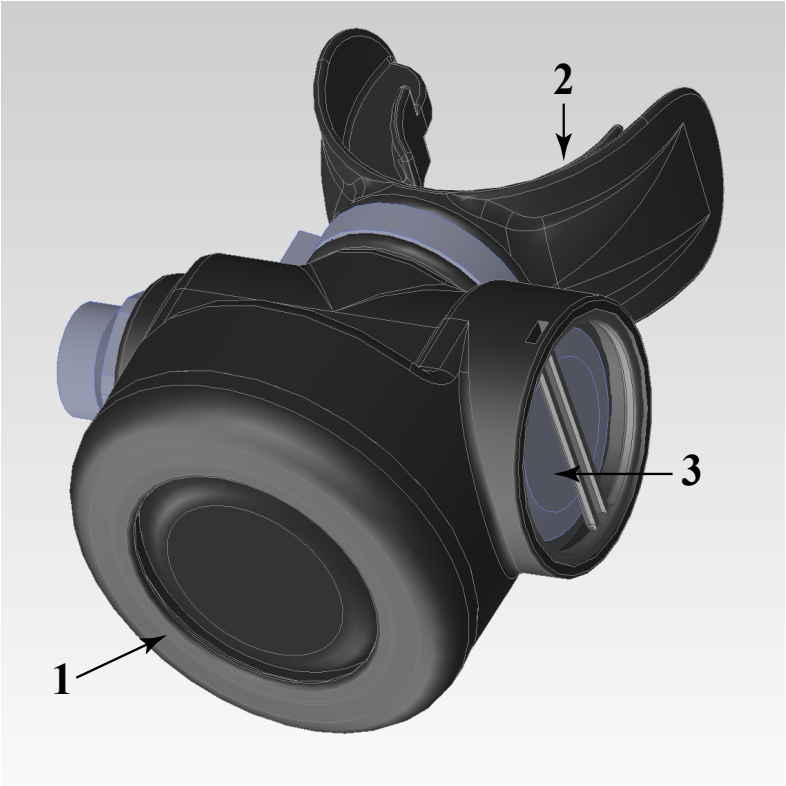
ITEM #	DESCRIPTION
1	BURST PLUG
2	FILL CAP
3	LP PORT
4	ON/OFF KNOB
5	PRESSURE GAUGE
6	HP PORT
7	LP HOSE W/SWIVEL

THE CU2 SECOND STAGE

When the on/off knob is turned on the second stage of the regulator assembly receives breathing gas at an intermediate pressure of approximately 140 psi (9.7 bar) 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. Airflow may also be initiated at any time for testing by pressing the purge button to activate gas flow.

Water can be purged from the small internal air space 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.

The mouthpiece is indexed to allow for ideal orientation and hose routing when using different mounting configurations. A service technician may adjust this simply by removing the tie wrap, repositioning the mouthpiece, and then reinstalling a new tie wrap.



ITEM #	DESCRIPTION
1	PURGE COVER
2	MOUTHPIECE
3	EXHAUST VALVE

FILLING THE CYLINDER

1. Turning counterclockwise, remove the port cap from the fill port.

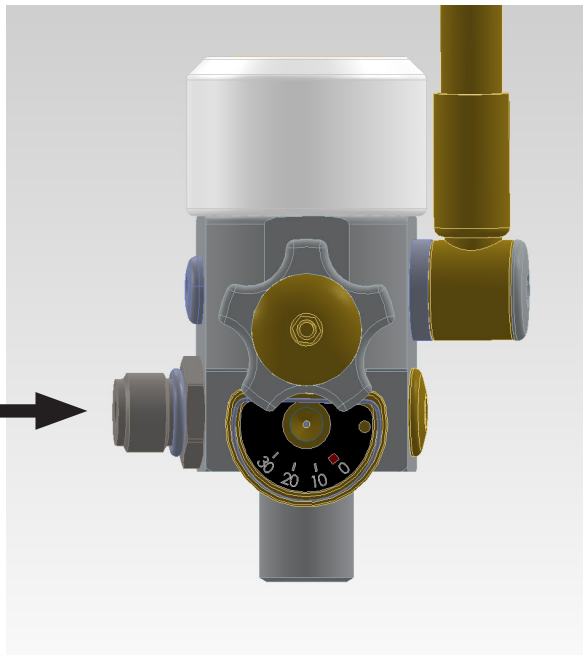
2. Ensure that the fill port and fill adapter are free of moisture, corrosion, and debris. Clean as needed.

CAUTION: When filling the unit, use the fill station pressure gauge to ensure a complete fill. It has greater accuracy than the onboard gauge which is intended as a .

3. Turning clockwise, thread the fill adapter onto the fill port until it is hand tight.

NOTE: It is not necessary to open the valve with the hand wheel to fill the unit with air or to check the pressure with the onboard gauge.

FILL ADAPTER



4. Attach the fill whip to the fill adapter.

5. **DO NOT** overfill the cylinder. The cylinder should be slowly filled, reaching 3000 psi (207 bar) with the cylinder at a temperature of 75 °F (24 °C).

NOTE: Rapid filling will result in incomplete cylinder fills.

WARNING: DO NOT attempt to fill the cylinder in excess of 3000 psi / 207 bar. Doing so could damage the cylinder, burst disk, or other components.

6. Close the supply valve (compressor side) and bleed the excess pressure from the fill whip.

7. Remove the fill whip from the fill adapter.

8. Turning counterclockwise, remove the fill adapter from the fill port on the SBA/CU2.

9. Threading clockwise, replace the port cap onto the fill port. Tighten until hand tight.

CARE AND MAINTENANCE

Transport and Storage:
If possible, transport the SBA/CU2 assembly (preferably dry) in a padded carrying case or equipment bag separated from sharp items that might damage or scratch the components. You should also protect the second stages from damage from heavy objects.

As soon as possible at the end of each day of use:
• If possible, immerse the entire assembly in a warm fresh water bath and soak for one hour, preferably while pressurized.
• 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 and the exterior of all components thoroughly to remove dissolved salt and other contaminants.
• Flush the second stage by running water into the mouthpiece and out the exhaust ports. **DO NOT** depress the purge button (if not pressurized) 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 sun-light) 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.

WARNING: DO NOT remove the Purge Cover yourself. Improper replacement of the Cover could result in an unexpected undesirable shut off of air delivery while underwater.

Prior to storing the SBA/CU2:
• Ensure that the complete assembly is clean and dry.
• If you were unable to clean the regulator prior to transport, or if it became exposed to other contaminated or wet equipment that was not thoroughly cleaned prior to transport, clean it thoroughly and allow it to dry naturally as previously described.

REPAIRS AND SERVICE

WARNING: DO NOT attempt to disassemble the SBA/CU2 assembly, or to adjust the first stage without proper training and authorization from the distributor. Doing so could cause malfunction while underwater resulting in serious injury or death. It will also void any applicable warranty.

Once each year your complete SBA/CU2 assembly should be inspected and serviced by an authorized technician. Additionally the cylinder should be inspected in accordance with the local governing authorities. More frequent service is required when being heavily used or used in contaminated water. If there are any questions on service and technician qualification, contact the distributor.

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