

A black scuba regulator with a corrugated breathing tube. The top part is a spherical first stage with a vented top. The tube is flexible and ribbed. The bottom part is a second stage with a mouthpiece and a pressure gauge. The word "AIR" is embossed on the second stage.

AQUA LUNG®

AIR SOURCE

**Owner's
Manual**

CONTENTS

INTRODUCTION	5
WHAT IS THE AIR SOURCE?	5
GUIDELINES & LIMITATIONS	6
DAMAGE.....	6
LUBRICATION.....	6
SAFETY PRECAUTIONS.....	7
INSTALLATION	8
INFLATION.....	10
OPERATION OF THE QUICK-DISCONNECT COUPLING.....	10
BC INFLATION	11
DEFLATION	13
DEFLATION BY THE DUAL VALVE.....	14
ORAL DEFLATION.....	15
AUTOMATIC DEFLATION BY OVER-PRESSURE VALVE.....	16
BACK UP SECOND STAGE REGULATOR.....	17
INFLATION.....	18
DEFLATION.....	18
PREDIVE INSPECTION PROCEDURES.....	19
CARE AND MAINTENANCE	20
SCHEDULED MAINTENANCE & SERVICE	22
WARRANTY INFORMATION	23
ANNUAL SERVICE & INSPECTION RECORD	26

If you have any questions regarding this Air Source™ or these instructions, contact your Aqua Lung retailer.



WARNING: Improper use of this Air Source could result in serious injury or death. **DO NOT** attempt to use this regulator until you have completely read, understood, and followed all instructions and safety precautions in this owner's manual. Be certain to understand the following guidelines and limitations.

Further, scuba diving requires specific techniques to avoid serious injury. **DO NOT** attempt to use this equipment, even in shallow water, until you have received certified scuba instruction from a recognized agency. This includes verification of your ability to master the proper procedures for dealing with an out-of-air emergency. If you are in doubt as to what this means, contact your local professional scuba retailer for clarification.

INTRODUCTION

Congratulations on selecting the AIR SOURCE. This unit is the combined product of many years of research, engineering and field experience. The very latest in materials and technologies have been used in the design and manufacturing of the AIR SOURCE. All materials and components are laboratory and field tested for reliability and long life.

What is the air source?

The Air Source combines the function of your inflation device with an easy breathing second stage regulator. The Air Source (**see figure 1**) thus replaces the need for a backup second stage regulator (Octopus). Combining the inflator and octopus into one integrated unit streamlines the diver and reduces bulk.

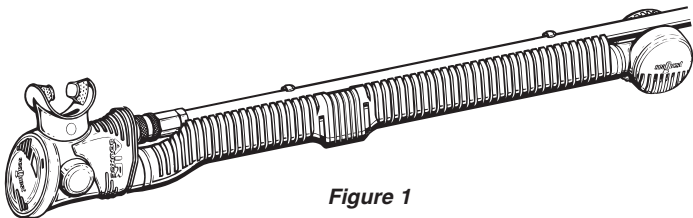


Figure 1

GUIDELINES & LIMITATIONS

The Air Source is intended as a back up second stage for recreational scuba diving only. Therefore, in order to protect you and your equipment, please abide by the following guidelines and limitations.

Damage

Do not use an Air Source that shows visual signs of damage to the second stage or its associated hose. If the second stage regulator presents an uncomfortable resistance to breathing, or floods after clearing underwater, do not continue to dive until the problem is resolved.

Lubrication

Do not use the Air Source if it has been lubricated with a hydrocarbon based lubricant such as motor oil, light machine oil, or grease. Lubrication should be performed only by qualified technicians and should only involve the use of lubricants approved by Aqua Lung.

SAFETY PRECAUTIONS

It is imperative to receive certified instruction in scuba diving and on buoyancy control before use of this equipment. Most scuba classes will teach the use of a conventional octopus and not the use of an Air Source-like product. **Consult your scuba instructor for emergency out-of-air procedures using the Air Source!**

Before using your equipment in open water, practice using it in a controlled environment such as a pool. Use all equipment that you will expect to use on an open water dive. Thoroughly familiarize yourself and be satisfied with the performance of the Air Source under all conditions of use.

Always perform a pre-dive inspection on your own equipment and have your dive partner perform a secondary cross check inspection of the Air Source (and all other gear) before entering the water.

INSTALLATION

Aqua Lung recommends that the Air Source be set up by your authorized retailer. The retailer can also answer any questions you may have pertaining to the information in this manual.

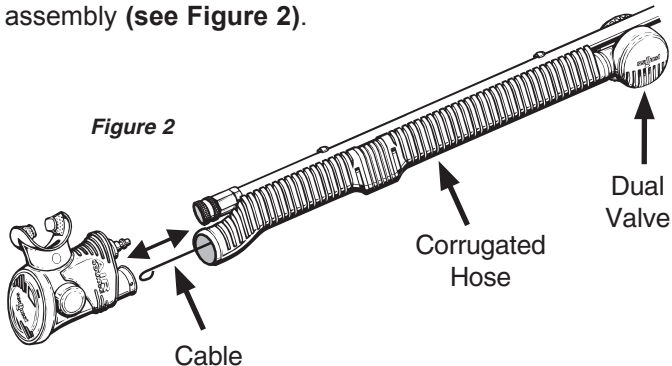
NOTE: *To achieve optimum performance, the Air Source should be adjusted to correspond with its respective first stage. This is due to the varying intermediate supply pressures of different first stages.*

It is also recommended that you consult your professional dive instructor regarding proper use during an emergency situation.

The Air Source can be used on many BCs currently available. These installation instructions, however, will explain how to install the Air Source on an Aqua Lung or Sea Quest BC. If you have purchased just the Air Source without the corrugated hose assembly, follow these instructions:

1. With a sharp knife or scissors cut the plastic clamp that attaches the corrugated hose to the inflator assembly of your BC. Then pull the corrugated hose away from the inflator.

2. Disconnect the wire coming through the corrugated hose from the inflator assembly by pulling/pushing the stainless steel pin out through the loop at the end of the cable.
3. Reconnect the same cable loop with the stainless steel pin inside the Air Source assembly. This cable is the mechanism by which the Dual Valve on the shoulder is activated.
4. Align the unit properly on the BC and then push the corrugated hose over the large opening on the Air Source assembly (**see Figure 2**).



5. You will have to replace the low pressure (LP) inflator hose, as the fitting on the Air Source is size-specific for safety reasons. The Air Source compatible LP hose is rated for breathing air.

INFLATION

If you have purchased the entire Air Source assembly including the corrugated hose and LP hose, just unscrew the old inflator assembly at the shoulder and replace it with the new Air Source assembly. Make sure the O-ring gasket is in place on the threaded portion on the BC.

Operation of the quick-disconnect coupling

1. To connect the LP hose to the BC inflator, grip the hose at the quick-disconnect end, and pull the collar back with the thumb and forefinger.
2. Push the coupling onto the plug of the BC inflator until it bottoms. Release the grooved sleeve and gently pull on the LP hose to ensure that it is attached securely.
3. To disconnect the coupling, grip the LP hose and push it toward the inflator while pulling the collar back. Pull the hose away from the plug.

Both the connection and disconnection can be accomplished with the air on or off. Due to the air pressure with the air on, the preceding procedure might be more difficult. A check valve inside the quick disconnect coupling will prevent air flow from the disconnected LP hose.

BC Inflation

Just as with a conventional inflator, POWER (LP) OR ORAL INFLATION can be utilized when using the Air Source. Both procedures need to be practiced and become familiar with.

Low Pressure (LP) Power Inflation

The power inflator is a **primary** means for adding air to the flotation cell. The power inflation system enables you to inflate the BC simply by pressing the blue inflation button. With practice you will soon be able to quickly make buoyancy adjustments without interrupting your diving activity.

Power Inflator Button

1. Refer to the SETUP section for instructions on installation of the LP inflator hose.
2. To inflate the BC, simply press the power inflator button (see figure 3).

Note: *Whenever inflating or deflating your BC, be sure to make small but frequent adjustments. Larger adjustments make the maintenance of neutral buoyancy difficult.*

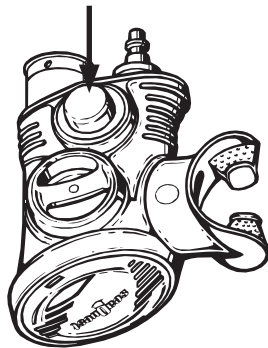


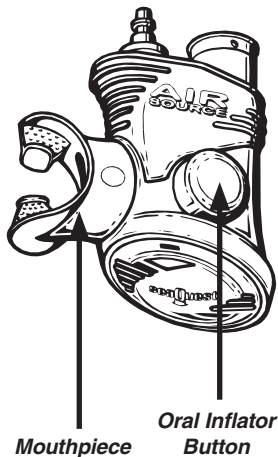
Figure 3

Oral Inflation

The oral inflator is a **secondary** means for adding air to the flotation cell. It may be used when you are unable to, or do not wish to add air with the power inflator.

1. Before depressing the oral inflation/deflation button (**see figure 4**), exhale a small amount of air into the mouth piece in order to purge any water that may be trapped. This will reduce the amount of water that may be introduced into the BC.
2. After the water is purged and without removing the mouth piece (**see figure 4**) from your mouth, immediately depress the black oral inflation/deflation button and, with the same breath, continue to exhale into the mouth piece. Release the oral inflation button immediately after exhalation in order not to allow the air to escape from the air cell.
3. Repeat this procedure until the proper buoyancy is achieved.

Figure 4



Note: *It is important to prevent sand and other debris from entering the mouthpiece. These objects can contaminate the valve mechanism and, under certain conditions, cause it not to close completely. If this should occur, operate the oral inflator several times while shaking it underwater. If this action is not successful, terminate the dive until the situation is remedied.*

DEFLATION

Normal deflation of the BC should be accomplished by utilizing the Trim Grip™ and Dual Valve. Air can also be vented manually through the mouthpiece by pressing the oral inflate/deflate button.



WARNING: If during your pre-dive check, or at any time during the dive you find that the Dual Valve will not fully close and seal or will not fully open and vent air, **DO NOT** continue the dive. Continuing the dive under these circumstances could result in serious injury or death.

Deflation by the Dual Valve

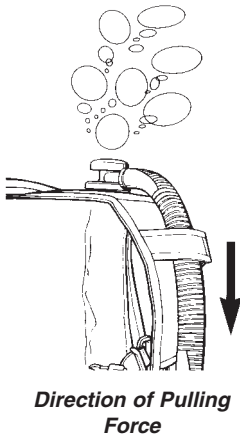
The Dual Valve provides the primary convenient means for exhausting air from the BC. The valve opening located at the top of the BC must be above the body when submerged for venting to occur. This is best achieved by moving toward an upright position when venting air.

1. To activate, simply pull downward on the end of the oral inflation hose (see figure 5). This action transmits force through an internal stainless steel cable and opens the valve at the shoulder to allow air to vent from the BC.

2. Releasing the hose closes the valve.

Note: *It is not necessary to exert an excessive downward pressure to activate the Dual Valve. When you pull on the hose, you will feel the hose stretch, allowing the exhaust valve to open. The travel of the valve is limited to less than 1/4". Pulling harder will not increase the air flow. Maintain downward pressure until the desired buoyancy is reached. It is not necessary to raise your arm overhead when using the Dual Valve exhaust system.*

Figure 5



The Dual Valve is also designed to reduce the amount of water that may enter a BC during normal use. It is advisable not to hold the Dual Valve open after air has stopped venting. Do not depress the oral inflation/deflation button when activating the Dual Valve as this may allow water to enter your BC.

Oral Deflation

The oral inflation/deflation valve is **secondary** means for venting air from the BC. Most users vent air through the Dual Valve. However, you may find it easier to expel the last portion of air remaining in a nearly empty BC by utilizing the oral inflation valve.

1. Move into an upright position so that you can hold the Air Source above the BC.
2. With the Air Source in the left hand, raise the assembly to a position nearest the surface of the water.
3. Depress the oral inflation/deflation button allowing air to exhaust in small increments until the desired buoyancy is achieved.
4. Allow the valve to close.

Note: *Do not hold the oral inflation/deflation button open after all the air has been exhausted. Doing so may allow water to enter the BC. Also, whenever inflating or deflating your BC, be sure to make small but frequent adjustments. This will minimize the amount of water entering the BC.*

Automatic Deflation by Over-Pressure Valve

The Dual Valve includes an over-pressure relief valve. This valve automatically vents air from the BC when the maximum operating pressure exceeds about 2.5 psi. The purpose of this valve is to prevent accidental over-pressure that may result in damage to the product.

To ensure that the over-pressure valve portion of the Dual Valve is functioning properly prior to the dive, inflate the BC fully until the Dual Valve opens. When the correct maximum internal pressure is reestablished, the valve will close automatically. If the valve does not open or close fully, consult your Aqua Lung Retailer for inspection of the valve.

BACK UP SECOND STAGE REGULATOR

The Air Source is a high performance second stage regulator and it operates the same as a standard second stage regulator. To breathe, put the mouthpiece in your mouth. Purge the water using a quick short exhalation or by pressing the purge button. You should test the breathing performance of the Air Source before each dive.



WARNING: The procedure to deal with an Emergency Out-of-Air situation should be reviewed before every dive. Make sure your dive buddy is familiar with the operation of the Air Source and what role it plays in an out-of-air situation.

In the event of an emergency air sharing situation, the assisting diver should offer their primary second stage to the diver requesting to share air. The Air Source then becomes the primary regulator for the assisting diver.

While using the Air Source as your second stage regulator, all inflation and deflation procedures as outlined in this manual are still applicable.

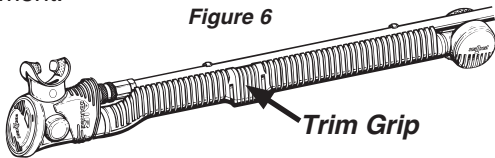
Inflation

While breathing normally from the Air Source, push the power inflator button to inflate the BC. For oral inflation, breathe in normally through the mouth piece, then depress the inflate/deflate button and breathe back out through the mouth piece. Instead of the air escaping through the exhaust valve the air will be diverted into the air bladder.

Deflation

The Trim Grip (**see Figure 6**) is exclusively designed to allow deflation of the BC through the Dual Valve while breathing from the Air Source. The Trim Grip incorporates dual activating cables for the Dual Valve. This allows you to pull downward on the Trim Grip hose without removing the Air Source from your mouth. The increased hose length allows for greater range of head movement.

Figure 6



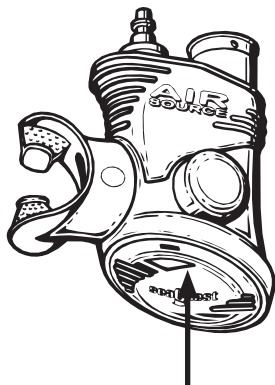
WARNING: Controlling your buoyancy while breathing from the Air Source is a procedure that you should practice and become familiar with in a controlled environment such as a swimming pool.

PREDIVE INSPECTION PROCEDURES

For your safety and to ensure the longest life of your equipment, we suggest the following checklist to be followed each time before you enter the water:

1. Visually inspect the Air Source and the attached hoses for signs of deterioration or damage. If such signs are present, do not dive with the equipment.
2. Slowly open the tank valve to allow air to bleed into the regulator gradually.
3. Press the second stage purge button (**see figure 7**) on the Air Source to verify sufficient air flow. The regulator should not continue to flow after the button is released.
4. Place the Air Source in your mouth and take several slow, deep breaths. The regulator must deliver an adequate volume of air without requiring excessive effort. If you are in doubt regarding this test, consult your scuba instructor or an Aqua Lung retailer for advice.

Figure 7



Purge Button

5. Close the tank valve and purge the remaining air in the regulator. Verify that the submersible pressure gauge returns to zero. Try to inhale normally from the second stage mouthpiece on the Air Source. This should create a vacuum in the second stage, and there should be no signs of air flowing into the regulator case. Air flow may indicate a leak at the mouthpiece, diaphragm, or exhaust valve. If a leak is detected, do not use the Air Source until it is repaired.
6. If the Air Source passes the above pre-dive check, slowly reopen the tank valve in preparation for the dive. Open the tank valve completely and then back 1/4 turn.
7. Once you have donned all your gear and are ready to enter the water, always have your dive partner perform a final inspection cross check of the Air Source and all other gear.

CARE AND MAINTENANCE

The Air Source is constructed from carefully selected materials, which are chosen to resist corrosion. However, the corrosive effects of the environment in which diving equipment is often used cannot be entirely eliminated. Further, the presence of sand and other minerals can interfere with the normal operation of the equipment, and repeated prolonged exposure to chlorine can accelerate deterioration of some components. Therefore, your equipment will perform better and last longer if it is rinsed with fresh water after each day's use.

The recommended procedure for cleaning your Air Source is as follows:

1. Ideally, you should soak the entire Air Source in warm tap water (less than 120°F/40°C) to loosen mineral deposits. A large plastic trash can filled with fresh water is useful for rinsing all of your diving equipment.
2. If warm water soaking is unavailable, rinse the Air Source in tap water. If no air pressure is supplied to the Air Source, **DO NOT DEPRESS THE PURGE BUTTON!** (see Figure 7)
3. Remove any remaining excess water from the Air Source by wiping it dry thoroughly with a soft towel. Then allow it to dry in air or by reconnecting it to a scuba cylinder and depressing the purge button. Do not store the Air Source with air pressure supplied to it.
4. Store the Air Source in a clean equipment box or sealed plastic bag in a cool, dry, dark place.

Note: *Do not use any cleaning solvents for soaking or rinsing. Do not attempt to lubricate or preserve any part of the regulator with aerosol cleaners or silicone spray. This is not necessary, and the propellant and other chemicals in these compounds can seriously damage the Air Source.*

Scheduled Maintenance & Service

For your records, please fill out the dealer information below. To validate your warranty, please return the separate warranty registration postcard within 15 days. Be sure to maintain records as proof of performance of maintenance. The information below is provided for your convenience.

The Air Source should be inspected by a qualified repair technician. Inspections should occur annually or more frequently (every three to six months) if used heavily, in dirty water, swimming pools, or it is not operating correctly. Heavy use is considered to be more than 100 operational hours within one year.

As described in the warranty statement, your annual regulator inspection and service must be performed by a qualified Aqua Lung repair facility. To ensure best service at all times, please fill out the following service registration log, and have your dealer sign and date it in the appropriate spaces each time the regulator is taken for inspection or repair.

WARRANTY INFORMATION

All warranty transactions must be accompanied by proof of original purchase from an authorized dealer. Be sure to save your sales receipt, and present it whenever returning your regulator for warranty service.

Limited Lifetime Warranty

Aqua Lung warrants to the original purchaser that the product will remain free from defects in material and workmanship throughout its useful life; provided that it receives normal use, proper care, and prescribed dealer service subject to those restrictions stated below.

This warranty does not apply to units subjected to misuse, abuse, neglect, modification, or unauthorized service. This limited warranty is extended only to the original purchaser for products purchased directly from an authorized dealer, and is not transferable.

This warranty is limited to repair or replacement only at the discretion of Aqua Lung America.



WARNING: It is dangerous for untrained and un-certified persons to use the equipment covered by this warranty. Therefore, use of this equipment by an untrained person renders any and all warranties null and void. Use of SCUBA equipment by anyone who is not a trained or certified diver, or receiving training under the supervision of an instructor, could lead to serious injury or death.

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

AQUA LUNG DISCLAIMS AND EXCLUDES ANY LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. 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.

Restrictions

The following restrictions apply to this warranty:

1. This warranty does not cover normal wear. Factory prescribed service by an authorized dealer is required at least once annually.

2. This warranty does not extend to damages caused by improper use, improper maintenance, neglect, unauthorized repairs, modifications, accidents, fire, or casualty.
4. Cosmetic damage, such as scratches, dents, and nicks are not covered by this warranty.
5. This warranty does not extend to equipment used for rental, commercial, or military purposes.
6. This warranty covers products purchased in the USA. For warranties that may apply elsewhere, please contact your local representative.

Returning Your Air Source For Service

Whenever your regulator requires annual service or warranty consideration, Aqua Lung requires that you bring it or send it to an authorized Aqua Lung dealer. For help finding a dealer in your area, click on the Dealer Locator at www.aqualung.com or call Aqua Lung at (760) 597-5000. It is important that you provide the dealer with a copy of your sales receipt and your Annual Service & Inspection Record located in the back of this booklet.

**Aqua Lung America, 2340 Cousteau Court,
Vista, CA 92081.**

A large, light gray, semi-transparent image of a scuba regulator and BCD (Buoyancy Control Device) is positioned in the background. The regulator is at the top, and the BCD is at the bottom. The text is overlaid on this image.

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Owner's Manual

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