

USER MANUAL

ATOMIC
AQUATICS



Regulators

TABLE OF CONTENTS

General Warnings and Precautions	4
Introduction	10
T3 Regulator	11
ST1, M1, B2x/B2, Z3/Z2 Regulator Overview	13
Comparison Chart - Atomic Aquatics Regulator Systems	16
Nitrox Use - All Models	18
Nitrox Use - Inside EEC Countries	19
Nitrox Use - Outside EEC Countries	20
Cold Water Use / Threaded Connection	21
Innovative Product Features.....	22
First Stages	22
Second Stages	23
Special Features - M1	25
System Set-Up.....	26
Operation.....	28
Rapid Adjustment Knob	29
Flexible Purge Cover	29
Automatic Flow Control.....	30
Seat Saver Orifice	31
Post Dive Care.....	32
Required Service	33
Limited Lifetime Warranty.....	34
Annex A - All Models and Part Numbers Covered By This Manual	36

CE CERTIFICATION

MANUFACTURER

Huish Outdoors 1540 N 2200 W
Salt Lake City, UT 84116 – USA

HUISH OUTDOORS AUTHORIZED EUROPEAN MARKET REPRESENTATIVE:

Huish Outdoors LLC (BARE Sports)
Factory BLB019C, Bulebel Ind Estate
Zejtun, ZTN 3000 Malta

MODULE D CERTIFICATE MAINTAINED BY:

SGS Fimko Oy (Notified Body 0598)
Takomotie 8
FI-00380 Helsinki
Finland

EU TYPE EXAMINATION CONDUCTED BY:

SGS Fimko Oy (Notified Body 0598)
Takomotie 8
FI-00380 Helsinki
Finland

Declaration of Conformity – www.huishoutdoors.com/eu-declarations/

Document Control Number: AT.01.05.0010



GENERAL WARNINGS AND PRECAUTIONS

For more information please refer to document SH.01.12.0004 Regulator Manual Insert.

This product is designed to protect against the risk of drowning. Read and understand the User's Guide completely before diving with any SCUBA diving regulator.

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

WARNING: This regulator product is intended for use only by divers who have received certification from a nationally recognized course in basic open water SCUBA or higher.

SCUBA diving regulators should NOT be used or handled until properly trained and fully understanding the risks and hazards of SCUBA diving.

WARNING: Inspect the cylinder valve for contamination or damage. High pressure cylinders present a risk of injury or death. Care must be taken to avoid impact to the cylinder or valve. Always open cylinder valves very slowly. Always point the valve outlet away from yourself or others when opening.

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, possibly resulting in serious injury or death. It will also void the regulator's warranty.

WARNING: Regulators certified for use as Auxiliary Emergency Breathing Systems are marked with "A", i.e. EN250A. SCUBA devices configured for and used by more than one diver at the same time are not recommended to be used at depths greater than 30 m (98 ft) and in water temperatures less than 10°C / 50°F.

WARNING: SCUBA diving in water colder than 10°C / 50°F requires special equipment, training, and preparation to prevent injury or death. Training for cold water is available from a recognized and accredited SCUBA training organization. When regulators get cold and wet, freezing can occur. Regulator freezing can result in rapid loss of air that may lead to injury or death.

WARNING: Improper installation of accessories may result in injury or death. We strongly recommend that the installation of accessories be done by Huish Outdoors trained personnel in an authorized service facility. 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 injury or death. Under no circumstances should adjustment of a first stage regulator be performed by anyone other than an Authorized Huish Outdoors Dealer. Doing so may cause failure underwater, resulting in injury or death. If you intend to dive in conditions

other than those in which you received basic open water training, such as in cold water or other more severe environments, consult a professional dive instructor who is familiar with local conditions for supplemental training and best practices for that specific area. This training should include any special preparation of or handling of the equipment you intend to use. If you have not prepared for diving in an unfamiliar environment do not dive. The Authorized Huish Outdoors Dealer in the area in which you want to dive should be able to provide guidance.

WARNING: This regulator must be used together with an instrument that measures and indicates the user's air supply pressure. Air supplies used with the regulator must meet requirements for breathable air: Grade E in the U.S.A. or EN12021 Breathing Air requirements of Europe.

WARNING: Oxygen exposure can be toxic and can cause injury or death. The maximum operating depth and exposure times are dependent on the oxygen content of the gas you are using. A gas with more than 22% oxygen is considered to have a high percentage of oxygen and is called Enriched Air Nitrox (EAN). Diving with Nitrox requires specialized advanced training and you must not dive with Nitrox unless certified for this specialty by a nationally-recognized training agency. Use of Nitrox or oxygen introduces a risk of a catastrophic fire; the risk increases with the percentage of oxygen in the gas. Special care must be taken to reduce this risk. For more information see Enriched Air Nitrox Use – All Models on pages 18-20.

THE SIGNIFICANCE OF MARKINGS:

Products carrying the mark CE 0598 have been subjected to EU type examination in accordance with harmonized standard EN250:2014 to a maximum depth of 50 metres (164ft) and conforms to all applicable essential health and safety requirements of Regulation (EU) 2016/425 Personal Protective Equipment (PPE).

Annual Module D surveillance audits are conducted by: SGS Fimko Oy, Takomotie 8, Helsinki, 00380, Finland, Notified Body No. 0598. All products sold by Huish Outdoors in the EU (European Union) meet the following requirements where applicable. Compliance with the following where applicable.

EN 250:2014: This standard describes certain minimum performance requirements for SCUBA regulators sold in the EU (European Union). Testing identifies regulators that should not be used in water colder than 10°C / 50°F, these regulators are marked >10 °C. All other regulators are suitable for use in cold-water temperatures below 10°C / 50°F, in accordance with EN250 requirements.

EN ISO 12209:2013+A1:2016: All Huish Outdoors regulator's thread and yoke connection conforms to ISO 12209. Maximum working pressure; Threaded (DIN):300 bar (4351 psi), Yoke: 232 bar (3365 psi).

EN13949:2003: This standard describes special qualification testing for regulators that are to be used with gases whose oxygen content is greater than 22%.

Regulators that have passed testing are marked NITROX.

EN12021:2014: This standard specifies the allowable contaminants and component gases that make up with compressed breathing air. This standard is the equivalent of the USA Compressed Gas Association's Grade E air. Both standards allow very small amounts of contaminants that are not harmful to breathe, but can cause a problem if present in systems using gases with a high percentage of oxygen.

POST DIVE CARE:

After use, the regulator must be cleaned and dried before storage. Before cleaning the regulator, ensure that the inlet protector cap is in place. If equipped with a breathing effort adjustment knob, the knob should be turned clockwise until it stops. The best way to clean the regulator is to place the regulator on a cylinder, pressurize the regulator, then immerse the regulator and the cylinder in a container of warm fresh water and soak for 30 minutes or more. If a cylinder is not available, ensure that the inlet protector cap is securely in place and immerse in a shallow container of warm water and soak for 30 minutes or more. After cleaning, wipe the regulator with a towel and hang to air dry. Do not store the regulator with hoses tightly coiled.

MAINTENANCE AND REPAIR

Due to variations of use and storage time that Equipment may be subjected to, the Guidelines and defined intervals are subject to the discretion of the owner of

the specific product. Inspection and/or service indicated in this user manual must be performed only by an Authorized Hush Outdoors Dealer. Service intervals can be found in this manual. Exceeding recommended service intervals will void manufacturer's warranty. 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. Equipment must be inspected and or serviced on an annual basis or as directed in this user manual.

Thank You...

for choosing Atomic Aquatics. You now own one of the finest regulators available. Since we introduced the world's first line of Titanium diving regulators in 1997, we have continued our dedication to designing and manufacturing only the finest diving products crafted from the most durable, high-performance materials.

This manual covers these Atomic Aquatics regulator systems:

T3 • ST1 • M1 • B2x/B2 • Z3/Z2

See Annex A for all regulator models and part numbers.

Register Your Reg

Your regulator has a limited LIFETIME WARRANTY. Registration enables you to obtain warranty service and helps us contact you with safety notices, service updates, or changes regarding your regulator. For your convenience, you can register online at www.atomicaquatics.com.

Let's Go Diving

Before you dive, please read this manual. It shows you the features and controls you need to know for a great dive. Keep it for future reference about maintenance, service and warranty.



ATOMIC AQUATICS **T3**



You now own the absolute finest regulator available...regardless of price.

The T3 forges a new Titanium standard as our signature regulator, providing you unprecedented reliability and performance.

The Titanium Advantage.

Your new regulator is designed to perform flawlessly for many years. Titanium is incredibly lightweight, strong as steel, and immune to seawater corrosion. It is the perfect material for use in the ocean environment. Your regulator will give you a lifetime of reliable, easy breathing and trouble-free performance with minimal care.

Pack it. Go exotic places. Don't worry.

Amazing light weight and dependable, corrosion-resistant materials makes your new T3 the perfect travel companion. You'll dive confidently in exotic locations, where service is hard to find.

Lifetime Warranty – Dive More. Wait Longer to Service.

Your T3 Titanium regulator has the most courageous warranty ever developed for any regulator. Here are some important points to remember about your warranty...

NOT CONTINGENT on Proof of Service: other manufacturers require you to show proof of annual service, or void the warranty. Not Atomic Aquatics.

Annual Inspection: you are encouraged to have an authorized Atomic Aquatics dealer check your regulator annually to ensure safety and performance.

3 Year / 300 Dive Service Interval: we are so confident about the materials and craftsmanship of your T3, you can confidently dive a lot more before servicing.

ST1

The only first stage machined from type 316 stainless steel able to withstand the severest conditions for a lifetime. Matched with lightweight titanium second stage and stainless steel comfort swivel.



M1

Whether recreational or technical, this regulator does it all. Extended features and performance for cave, deep, cold or enriched air diving.



B2x

The B2x includes all the same features as found on the B2, with the first stage featuring a sleek black Diamond-Like Carbon (DLC) coating over chrome plating. This ensures supreme durability and corrosion resistance without compromise.



B2

The world's most comfortable regulator. Features a brass first stage, titanium second stage, and stainless steel comfort swivel hose.



Z3/Z2

More features for the price than any other regulator. The Z2 may be the least expensive of the Atomic line, but its combination of performance, ergonomics and materials are unmatched by our competitors at any price.

The Z3 adds the comfort swivel hose feature as found on the T3, ST1 and B2x/B2.



Comparison Chart — Atomic

FIRST STAGES	T3	ST1	M1	B2(x)	Z2	Z3
Compact size	✓	✓	✓	✓	✓	✓
Balanced piston design	✓	✓	✓	✓	✓	✓
First stage materials	titanium/ monel	stainless/ stainless	brass/ monel	brass/ stainless	brass/ stainless	brass/ stainless
High pressure piston seal system	✓	✓	✓	✓	✓	✓
Optional freeze protection	standard	standard	standard	option	option	option
Nitrox (EAN) ready**	40%	40%	50/80%	40%	40%	40%
# HP ports	2	2	2	2	2	2
# LP ports	5	5	5	5	7	7
LP swivel	✓	✓	✓	✓	—	—

Intermediate pressure (all): 125-145 psi (8.6-10 bar)

Max pressure rating: 3365 psi (232 bar) with yoke connection / 4351 psi (300 bar) with Threaded connection

**For European Economic Community countries, the use of special Nitrox and Oxygen connections are used in accordance with EN 144-3 Outlet Connections for Nitrox and Oxygen diving gases. If the regulator that you use is fitted with a Yoke or threaded DIN connection, it is designed for use only with compressed breathing air (21% oxygen and 79% nitrogen). DO NOT USE this equipment with other mixtures or with gases containing more than 21% oxygen.

Aquatics Regulator Systems

SECOND STAGES	T3	ST1	M1	B2(x)	Z2	Z3
Pressure balanced 2nd stg.	✓	✓	✓	✓	✓	✓
AFC automatic flow control	✓	✓	✓	✓	✓	✓
Titanium seat saving orifice	✓	✓	stainless	✓	✓	✓
Comfort swivel hose	✓	✓	—	✓	—	✓
Rapid adjustment knob	✓	✓	✓	✓	✓	✓
Titanium lever	✓	✓	✓	✓	✓	✓
Valve body material	titanium	titanium	zirconium over brass	titanium	zirconium over brass	zirconium over brass
Limited lifetime warranty	✓	✓	✓	✓	✓	✓
COMPLETE SYSTEMS	T3	ST1	M1	B2x/B2	Z2	Z3
Weight <small>(with yoke)</small>	794 g (1.75 lb)	1059 g (2.33 lb)	1191 g (2.62 lb)	1143 g (2.51 lb)	1070 g (2.35 lb)	1151 g (2.53 lb)
Weight <small>(with Threaded Connection)</small>	734 g (1.61 lb)	964 g (2.12 lb)	1030 g (2.41 lb)	996 g (2.19 lb)	844 g (1.86 lb)	894 g (1.97 lb)
Service interval	3 years or 300 dives	2 years or 300 dives				



WARNING

ENRICHED AIR NITROX (EAN) USE — ALL MODELS
IMPORTANT NOTICE - BEFORE USING YOUR REGULATOR, READ AND UNDERSTAND
ALL THIS SECTION WHICH CONTAINS INFORMATION CONCERNING THE USE WITH
OXYGEN ENRICHED AIR.

Oxygen exposure can be toxic and can cause injury or death. The maximum operating depth and exposure times are dependent on the oxygen content of the gas you are using. A gas with more than 22% oxygen is considered to have a high percentage of oxygen and is called Enriched Air Nitrox (EAN). Diving with Nitrox requires specialized advanced training and you must not dive with Nitrox unless certified for this specialty by a nationally-recognized training agency. Use of Nitrox or oxygen introduces a risk of a catastrophic fire; the risk increases with the percentage of oxygen in the gas. Special care must be taken to reduce this risk.

Regulators used with Nitrox must be compatible and be specially cleaned for oxygen use at least annually or any time normal compressed air has been used where hydrocarbon content is potentially greater than 0.1 mg/m^3 , e.g. Grade E or EN12021 compressed breathing air. If a regulator becomes grossly contaminated with dirt, oils, or greases from any source, have the regulator recleaned before using it again with EAN. Do not use silicone or hydrocarbon greases in or around regulators being used for EAN Nitrox or oxygen mixes. Do not under any circumstances use these regulators with pure oxygen. Failure to comply with the above warnings could cause serious personal injury or death from fire or explosion.



WARNING
ENRICHED AIR NITROX (EAN) USE — INSIDE EEC
(EUROPEAN ECONOMIC COMMUNITY) COUNTRIES,
WHERE EN 144-3 AND EN13949 APPLY.

In EEC countries, diving with EAN/Oxygen is controlled by standards EN 144-3 – Respiratory protective devices – Gas cylinder valves – Part 3: Outlet connections for diving gases Nitrox and Oxygen and also EN 13949 – Respiratory equipment – Open circuit self-contained diving apparatus for use with compressed Nitrox and Oxygen – requirements, testing and marking.

Atomic Aquatics regulators fitted with a Yoke or threaded (DIN) connection, are designed and only suitable for use with compressed breathing air (21% oxygen and 79% nitrogen). DO NOT USE this equipment with other mixtures or with gases containing more than 21% oxygen. Disregarding this rule could result in serious injury or death caused by fire or explosion.



WARNING **ENRICHED AIR NITROX (EAN) USE — Outside EEC** **(European Economic Community) countries.**

Your Atomic Aquatics Regulator has been prepared and may be used interchangeably with oxygen compatible (clean) air or EAN mixes of up to 40% oxygen* concentration at 3500 psi (241 bar) maximum. They need not be dedicated for EAN use, provided that they are only used with oxygen compatible or 'Hyper-filtered' air or EAN mixtures with a hydrocarbon content not greater than 0.1 mg/m³. Note: Standard compressed breathing air such as EN12021 or Grade E does not necessarily meet this criteria, which can allow a hydrocarbon content greater than 0.1 mg/m³, and while not considered harmful to breathe this can pose a risk in the presence of elevated oxygen. Passing hydrocarbons through a regulator creates a cumulative effect where hydrocarbons build up over time, and when these hydrocarbons come into contact with elevated levels of oxygen they are at risk of combustion. Therefore, if a regulator has been used with Grade E or EN12021 standard breathing air, it should be returned to an Atomic Aquatics authorized dealer for cleaning.

* The Atomic Aquatics M1 has been specially designed to handle high EAN mixes. ONLY the M1 model may be used interchangeably with oxygen compatible (clean) air or EAN mixes of up to 50% oxygen concentration at 3500 psi (241 bar) maximum.

The M1 may be used with up to 80% oxygen concentration at a maximum pressure of 3000 psi (207 bar), provided it is dedicated for this service and kept in an oxygen clean condition. This is a special-use condition, intended only for those persons trained and certified in the safe handling of high-pressure oxygen/oxygen mixtures. Oxygen cleaning requires a more stringent level of cleanliness and special care should be taken to keep the regulator in this condition.

If you have any doubt consult with your local Atomic Aquatics dealer.



WARNING **COLD WATER USE**

For diving in extreme cold waters below 50°F (10°C), we recommend having the first stage sealed with the installation of the anti-freeze kit (fitted as standard in T3, ST1 & M1). This is a rubber sleeve that fits over the ambient chamber ports of the first stage to prevent icing of the first stage. This is a factory or dealer installed item, as it requires special tools and disassembly of the first stage for filling of the chamber with a special low temperature lubricant. Regulators marked >10°C are not suitable for use in water temperatures below 10°C (50°F).

THREADED CONNECTIONS

A threaded style connection is available which is typically for use at pressures above 232 bar (3365 psi) up to 300 bar (4351 psi). (This is sometimes referred to as a DIN connection). It replaces the Yoke connection and can be ordered as standard or as an option installed by the dealer.



*First stage
with Threaded
Connection*

Innovative Product Features

First Stages - T3, ST1, M1, B2x/B2, Z2/Z3

Compact Size: *Small size, high performance, high flow first stage.*

Balanced, flow-through piston design: *Large piston for high air flow and stable intermediate pressures.*

Optional freeze protection kit (Standard on T3, ST1 & M1):
Ambient chamber seal kit reduces the possibility of freezing at low temperatures and seals water and contaminants out of the first stage.

2 year or 300 dive service interval*: *Unique self-lubricating piston seal system for low maintenance and corrosion resistant materials throughout.*

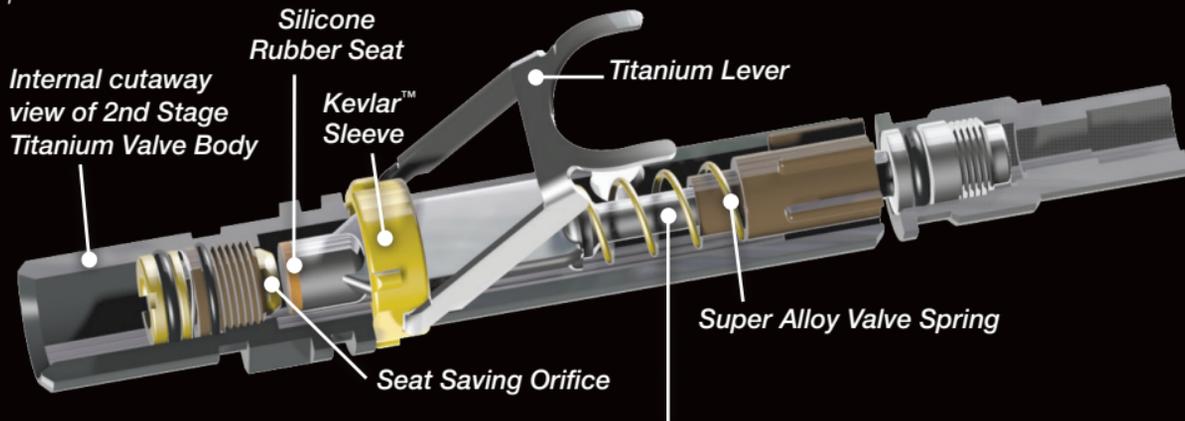
**T3: 3 year or 300 dive service interval.*

Two high pressure ports and five low pressure swivel ports (T3, ST1, M1, B2x/B2) or ultra-compact 7 port fixed cap (Z2/Z3): Allows virtually any hose orientation.

Limited Lifetime Warranty (All first and second stage models).

Innovative Product Features — All Second Stages

Low friction bearing surfaces: provide smooth, silky inhalation, even after millions of cycles due to this proprietary Kevlar™ reinforced polymer insert at the pivot point of the lever.



Balanced Poppet: Aerodynamic, pneumatically balanced poppet provides enhanced airflow and easy breathing, regardless of cylinder pressures.

Kevlar is a registered trademark of DuPont.

Super Alloy Valve Spring: *This proprietary, special spring alloy is over 10 times the cost of conventional stainless steels, but has superior tensile strength and corrosion resistance compared to stainless or even titanium. Its high strength allows us to use fewer coils in the design for uninterrupted airflow through the second stage.*

Titanium Valve Body (T3, ST1, B2x/B2 only): *Performance is always at its peak because the vital internal sliding surfaces will never rust or corrode.*

Titanium Lever: *Absolute safety and reliability. This crucial part is the mechanical link to your air supply. Formed from a proprietary aerospace titanium alloy, this part is immune from stress induced fatigue or corrosion.*

Seat Saving Orifice: *This new orifice design dramatically prolongs the life of the rubber seat. Seat wear is the number one cause of regulator leaks and performance degradation over time. The first and only adjustable dynamic orifice (pat. #5,803,073) is pressure energized and only contacts the rubber seat when the regulator is being used. The orifice is constructed of corrosion-free titanium or in the case of the M1, stainless steel.*

Automatic Flow Control (AFC): *Just enjoy your diving. No dials to turn or buttons to push, this regulator automatically tunes itself as you dive. The first and only depth activated venturi control that automatically balances performance and stability (pat. #5,678,541). A computer designed airfoil inside of the mouthpiece changes position with response to depth to maintain consistent, natural feeling, effortless breathing at all depths.*

Rapid Adjustment Knob: One-turn manual override adjustment allows quick de-tuning for surf entries, octopus use or other special situations.

Elliptical Exhaust Valve: Dramatically reduces exhalation effort at depth. Over-size, high flow valve and airfoil shaped support smooths out every exhalation.

Comfort Swivel: A standard feature on the B2x/B2, ST1 (stainless), Z2, Z3 (chrome plated brass) and the T3. The Atomic Aquatics Comfort Swivel can also be added to any Atomic Aquatics second stage to provide an effortless 30 degree range of motion without pulling or binding. (Patent # 7,188,869).

Comfort Mouthpiece: Specifically formulated dual hardness silicone mouthpiece is comfortable and soft, yet extremely durable.

Special Features —M1 Second Stage

1. Anti-Surge Front Cover: This newly designed front cover eliminates the free flow that might occur if in a strong current, such as might be encountered in caves or open water. The ambient water ports of the second stage are directed to the sides, where a frontal current will not upset the regulator diaphragm.

2. Extended Exhaust Tee: Soft extensions on the exhaust tee help divert the bubbles to the sides of the mask and away from your face. (Available as an accessory for any Atomic Aquatics second stage.)

3. Cold Water Thermal Sink: High thermal conductivity sink helps transfer cold out of the second stage to reduce freezing effect in cold water.



System Set-Up

Hoses

Your regulator was function tested and is ready for use from the factory. You will need to install your high pressure gauge, instruments and low pressure accessories such as inflators. If you are in doubt on how to do this, see your Atomic Aquatics professional retailer for assistance.

Low Pressure Hoses (LP thread size 3/8"-24)

Your regulator has either 5 low-pressure (LP) ports on the swivel end of the first stage (T3, ST1, M1, B2x/B2) or 7 low pressure ports (Z2/Z3) in a fixed orientation. Choose the ports that give you the best orientation for your particular set-up. The LP port plugs can be removed by unscrewing with a 5/32" (4mm) hex wrench. Install the LP hoses into the port and snug up with a wrench. Do not overtighten as this will not improve the seal and may damage the threads.

High Pressure Hoses (HP thread size 7/16"-20)

Your regulator has 2 high pressure ports (marked HP) on either side of the body. The HP ports and plugs are larger in size than the LP plugs. Remove the plugs with the same hex wrench and install the high pressure gauge hose into the high pressure port and snug it with a wrench.

 **CAUTION**

Do not assemble any low pressure hoses to the HP port of the first stage. The hose could rupture and could cause serious personal injury. Do not assemble the high pressure gauge to the low pressure port or the gauge will not indicate cylinder pressure.



**Comfort Swivel
Second Stage Hose**
Patent # 7,188,869

**2 High
Pressure
Ports**

5 Low Pressure Ports on First Stage Swivel

Operation



These regulators operate similarly to others of this type. There are some unique features of the Atomic Aquatics second stages you should be familiar with.

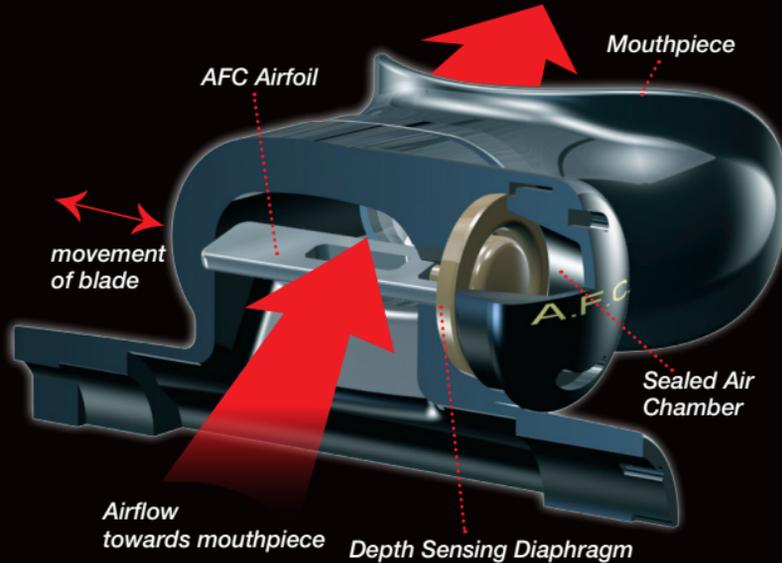
RAPID ADJUSTMENT KNOB

There is only one diver adjustable control on the second stage. It is the rapid adjustment knob on the side of the regulator that can be used to “decrease” or increase inhalation effort. Under normal use, the knob should always be turned all the way out (counterclockwise) for the lowest breathing effort. During entries through the surf, jumping off of a boat, or situations where the regulator is not in your mouth, you may want to turn the knob all the way in (clockwise) to desensitize it. A common misconception is that setting the knob in, (clockwise) will conserve breathing gas, which is not true and will only make breathing slightly harder. Never force the knob past its stops in either direction.

FLEXIBLE PURGE COVER

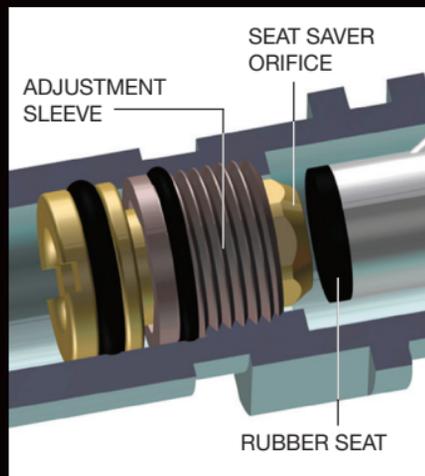
The entire front cover of the second stage is flexible and can be depressed to purge the regulator.

AUTOMATIC FLOW CONTROL (AFC) pat. #5,678,541



Atomic Aquatics has developed the first and only automatic flow control that automatically changes the breathing characteristics with depth. At depth, the air density increases (gets thicker) and it becomes harder to move through the regulator. The result is increased breathing effort at depth. Many regulators have different types of devices to increase flow (venturi) but these are either fixed in place or manually set and

either overcompensate at the surface or do not provide adequate venturi at depth. The AFC is a small blade (airfoil) inside the mouthpiece that changes position with response to depth to maintain consistent, natural, effortless breathing at all depths. The blade is attached to a depth sensing diaphragm that retracts it to gradually boost the venturi the deeper you go. No dials to turn or buttons to push, the regulator “tunes itself as you dive”.



SEAT SAVER ORIFICE

pat. #5,803,073

The Achilles Heel of all second stages is a small rubber valve seat. In standard designs, this seat is pushed tight against a sharp edged orifice from the day it leaves the factory, eventually making a deep impression in the seat resulting in poor performance and annoying leaks, not unlike that of an old leaky faucet. That’s why sometimes your regulator is fine when you put it away and it leaks the next time you use it. Our orifice only contacts the seat when pressurized. When not being used, the orifice automatically retracts away from the seat just enough

to prevent damage during storage. This dramatically increases the service life and maintains “like new” performance. (See additional post-dive care note pages 32-33.)



CAUTION

DO'S AND DON'TS

Do set up your equipment carefully before each dive and check your entire system for signs of damage, loose hose fittings, and air leaks. Make sure the yoke knob or threaded connection is hand tight before turning on your air supply. Purge the regulator and take a test breath before entering the water.

Do not use your regulator if you notice any problems or malfunctions. Return it to the factory or authorized dealer to have it checked or repaired.

Do not pick up your cylinder by the hoses. You may damage them or work loose a connection that could lead to loss of air.

POST DIVE CARE

A simple fresh water rinse after every dive to clean the regulator of salt, sand or dirt is all that is required. **Do not rinse or soak the regulator in solutions containing bleach as this can permanently damage the silicone rubber components.** Dry or blow off any water in the first stage dust cap and fit it in place. Rinse through the ambient ports of the first stage (unless fitted with an anti-freeze kit) and through the mouthpiece

of the second stage. Rinsing is particularly important with the chrome plated brass first stages (M1, B2x/B2, Z2/Z3) to maintain it in top condition and keep the chrome looking attractive. **Avoid soaking the regulator unpressurized, as water may enter the second stage and first stage mechanism.** If the second stage is purged when it is rinsed or soaked, it is a good idea to re-connect the regulator to a cylinder and blow out any water that may have entered the first or second stage.

Store the regulator away from direct sunlight to prevent fading and deterioration of the rubber and plastic parts. Keep away from excessive heat, humidity or insects.

REQUIRED SERVICE

The major service interval for the Atomic Aquatics regulators is once every 2 years or 300 dives*. We recommend that you take your regulator to an authorized Atomic Aquatics dealer **annually** for a safety inspection. At this time, they will inspect and check for proper operation, and advise if a major service is required. The major service will include replacement of all seals, seats and o-rings. The labor charges for this service will vary with the individual dealer. Parts replacement will be in accordance to the terms of the limited lifetime warranty in this manual.

**T3: 3 years or 300 dives.*

Limited Lifetime Warranty

Atomic Aquatics warrants this regulator against defects in materials and workmanship for the lifetime of the original owner with the exception of mouthpieces, hoses, o-rings, filters, or valve seats, which are warranted for 2 years*. Atomic Aquatics will at its option repair or replace any components it finds defective.

This warranty covers regulators only purchased from **authorized Atomic Aquatics dealers**. Warranty registration is available at www.atomicaquatics.com/warranties/

All titanium components are warranted for the lifetime of the original owner against the effects of corrosion. Chromed or plated brass components are subject to corrosion and require as a minimum reasonable maintenance fresh water rinsing after use in salt water and proper storage as described in this manual.

This warranty is not contingent upon proof of service and will maintain in effect for the lifetime of the original owner. It is recommended however that maintenance include an annual safety inspection to be performed by an authorized Atomic Aquatics dealer or by the factory. **Factory or authorized dealer servicing is required at intervals of 300 dive hours or 2 years*, whichever occurs first.** This service will include disassembly, cleaning, replacement and lubrication of all o-rings and seals, and safety check.

To obtain warranty service, you must deliver the regulator to Atomic Aquatics or one of its authorized repair facilities. If you send the regulator to the factory, you must pay the shipping charges to the factory. If the regulator is returned to the factory and it is determined that the problem is due to material or manufacturing defect, there will be no charge for parts, labor or return shipping within the continental USA.

This warranty does not cover damage or defects due to neglect, misuse, alteration, or attempted repairs by someone other than an authorized dealer.

Atomic Aquatics shall not be liable for loss of use of this product or incidental or consequential costs or damages incurred with the use of this regulator. Some states do not allow this exclusion so the above may not apply to you.

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

**T3: 3 years or 300 dives.*

ANNEX A

Models and part numbers covered by this manual

Atomic Aquatics B2 Demand Regulator

PART NO.	DESCRIPTION
03-0027-3P	B2 Yoke Unsealed, Black
03-0027-4P	B2 DIN Unsealed, Black
03-0027-6P	B2 Yoke Sealed, Black
03-0027-7P	B2 DIN Sealed, Black

Atomic Aquatics B2x Demand Regulator

PART NO.	DESCRIPTION
03-0028-3P	B2x Unsealed Yoke
03-0028-4P	B2x Unsealed DIN
03-0028-6P	B2x Sealed Yoke
03-0028-7P	B2x Sealed DIN

Atomic Aquatics M1 Demand Regulator

PART NO.	DESCRIPTION
03-0030-6P	M1 Yoke Sealed Gray
03-0030-7P	M1 DIN Sealed Gray
03-0030-7P-LH	M1 DIN Sealed Gray -2.1m (84") hose.

Atomic Aquatics ST1 Demand Regulator

PART NO.	DESCRIPTION
03-0060-3P	ST1 Yoke Unsealed
03-0060-6P	ST1 Yoke Sealed Gray
03-0060-7P	ST1 DIN Sealed Gray

Atomic Aquatics T3 Demand Regulator

PART NO.	DESCRIPTION
03-0100-6P	T3 YOKE SEALED, BLACK (SYSTEM)
03-0100-7P	T3 DIN SEALED, BLACK (SYSTEM)

Atomic Aquatics Ti2 Demand Regulator

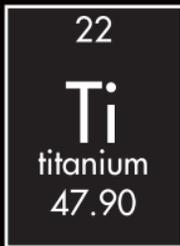
PART NO.	DESCRIPTION
02-0005-3P	Ti2 Octopus, 914 mm (36") hose, Yellow

Atomic Aquatics Z2 Demand Regulator

PART NO.	DESCRIPTION
03-0050-3P	Z2 Yoke Unsealed Gray
03-0050-4P	Z2 Din Unsealed Gray
03-0050-6P	Z2 Yoke Sealed Gray
03-0050-7P	Z2 DIN Sealed Gray
03-0051-3P	Z2 Yoke Unsealed Blue
03-0051-4P	Z2 DIN Unsealed Blue
03-0051-6P	Z2 Yoke Sealed Blue
03-0051-7P	Z2 DIN Sealed Blue

Atomic Aquatics Z3 Demand Regulator

PART NO.	DESCRIPTION
03-0090-3P	Z3 Regulator Yoke
03-0090-4P	Z3 Regulator DIN
03-0090-6P	Z3 Regulator Yoke, Sealed
03-0090-7P	Z3 Regulator DIN, Sealed



ATOMIC
AQUATICS

Toll Free: (888) 270-8595
www.atomicaquatics.com

MADE IN THE U.S.A.

Rev. 12/2025

AT.01.05.0010