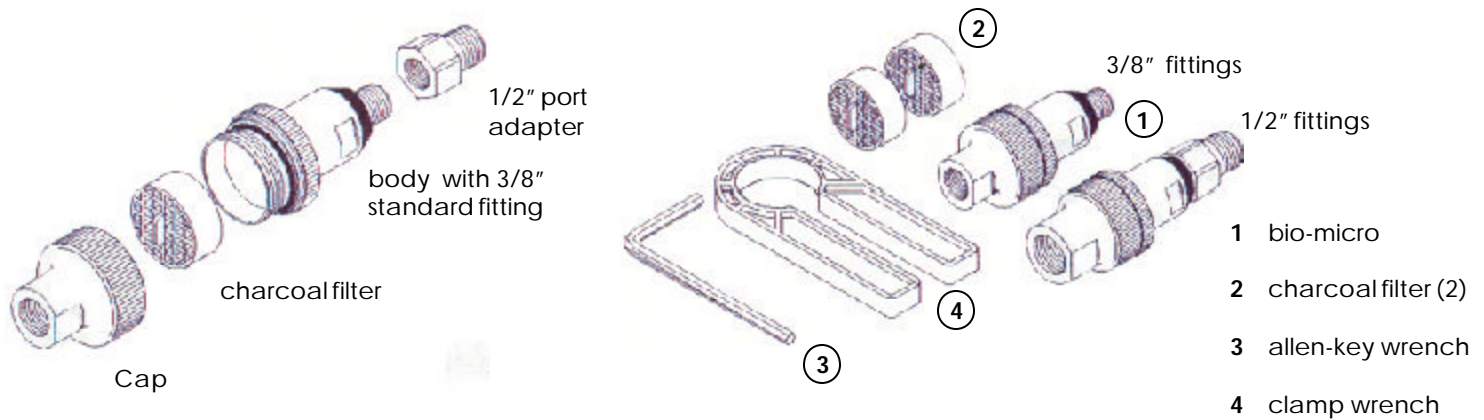


bio-micro ELECTROSTATIC FILTER

Apollo's air filtration system for any regulator



Introduction

Congratulations on your purchase of the bio-micro air filtration system. Please read and obey all instructions for use and care of this product. The bio-micro system filters dust, odors, and impurities from diving cylinder air to ensure a healthy air supply. This instruction manual was prepared for those who have obtained a C-card. Store this manual in a safe place, even after reading.

- Read both sides of this instructional insert until you understand the contents completely.
- This regulator is designed strictly for scuba diving use. Do not use for any other purpose.
- Do not use this product if you have not obtained a C-card (attesting to completion of training) from an internationally recognized training agency.

Items with the following headings describe scuba diving techniques and how to handle diving equipment. These sections must be completely understood. Read thoroughly before attempting to use this product.

- ⚠ **DANGER** Failure to obey the instructions under this heading may lead to accidents which result in serious injury or death
- ⚠ **WARNING** Failure to obey the instructions under this heading may lead indirectly to accidents which result in serious injury, death, and /or serious damage to equipment
- ⚠ **CAUTION** Failure to obey the instructions under this heading may lead to minor accident and/or minor damage to equipment.

⚠ **DANGER** Due to safety considerations, those who have not obtained a C-card (attesting to completion of training) from an entity providing diving instruction must not use this product. Make sure you are in good physical condition before you scuba dive. If you begin to feel cold, tired, or unwell, do not overexert. Stop your dive.

⚠ **WARNING** If free-flow leaking occurs and you are not able to correct, temporarily cease use of product and take to your Authorized Apollo reseller for service. The most common cause of free flow is improper pressure setting (1st stage) or problems with seat (1st /2nd stages). You can remove the bio-micro to see if problem ceases. However, the bio-micro has very few parts and the attachment is unlikely to cause a free-flow situation.

⚠ **WARNING** The bio-micro is only for recreational air diving use to depths not in excess of 130' seawater / 40 meters. Remove the charcoal filter when diving in excess of 130 feet. The system is not for use with nitrox above EAN level 40. Do not use any other mixed gas. **CAUTION** Before using under special conditions inquire with your Apollo retailer or Apollo Sports USA.

General use and care

The bio-micro may not fit all brands. Always confirm that you have purchased the correct fitting size for your regulator system.

Avoid placing items on your system or allowing any sudden heavy pressure. When the bio-micro and first stage are connected to a tank, take care not to knock over the tank, use bio-micro to pick up tank, or in any other way handle by holding the bio-micro.

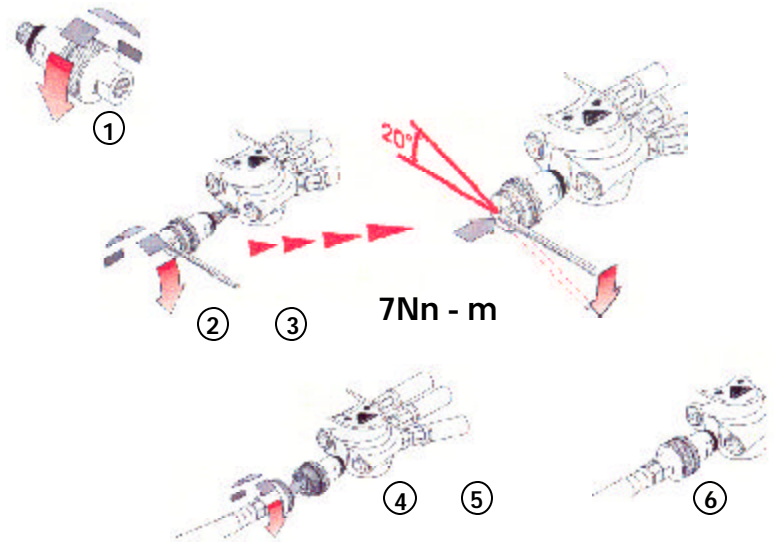
⚠ After a day of diving. Remove regulator from tank, unscrew cap from body, remove filter, and lightly rinse exterior housing and threads to remove any salt. Take care not to run water directly into port. Failure to remove all traces of salt may cause metal parts to rust. Never clean with gasoline, paint thinner, alcohol, detergent or other organic solutions. Doing so could cause the luster to fade, resulting in cracks or even warping the shape of product. See page two for suggested o-ring maintenance and annual overhaul.

Installation

The bio-micro air filtration system is designed for installation in the first stage of your regulator. Do not attempt attachment direct to tank. You will need to remove (unscrew) the hose for your primary second stage at the point it attaches to first stage. Always check o-rings on body and port screws for damage. O-rings should be smooth and free of tears or fraying.

! CAUTION Threads of body and port screw may be sharp. Take care when handling to avoid injury.

- 1 Grasp body and turn cap in a counter clockwise direction until the sections are separated. Remove the pre-installed charcoal filter.
- 2 Install body of bio-micro into the primary first stage port of your regulator. Screw in by hand.
- 3 Once body is installed; insert the allen key and rotate 20° to tighten. Do not overtighten.
- 4 Connect your regulator hose to the bio-micro cap with wrench. Do not overtighten.
- 5 Install the charcoal filter with handle facing you.
- 6 Connect (screw) the cap to the body. Tighten securely by hand.



For best results ask your local shop to install the body and attach hose to cap. The screw torque should be 7 n/m (Newton Meters)

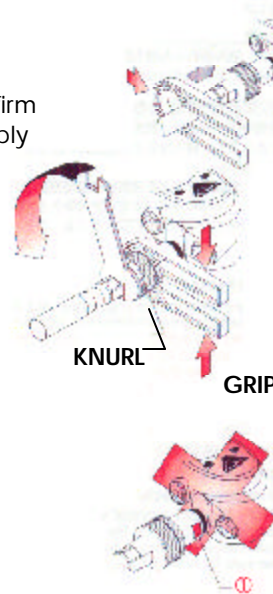
! DANGER Always confirm your breathing system is securely assembled and performing normally prior to entering water.

Replacing Charcoal filter

A well cared for bio-filter should be easy to open with a firm grip. However, the clamp wrench is helpful for disassembly when body and cap are difficult to separate (unscrew).

- 1 Regulator should NOT be attached to tank. Position between prongs of clamp wrench.
- 2 Slide up over cap and position round open portion of wrench on the body of bio-micro.
- 3 Secure the knurl with a spanner wrench (not included) and grip the clamp wrench firmly.
- 4 Turn the spanner wrench in a counter clockwise direction until the cap and body are separated.

! CAUTION Do not use the spanner for the body side [1] during disassembly. Failure to heed this warning will likely result in a damaged o-ring.



Charcoal Filter

Replace charcoal filter every 50 dives or earlier if the electrostatic filter becomes discolored.

After a day of diving

Remove regulator from tank, unscrew cap, remove filter, and lightly rinse threads. Take care not to run water directly into port.

O-ring maintenance and recommended annual overhaul

Proper maintenance of o-rings is vital to an airtight well performing system. You may need to remove o-rings for lubrication, cleaning or replacement. An o-ring cannot function properly when scratches, fraying, sand, dust, and other foreign matter are present. In order to protect o-ring and threads; do not use a screwdriver or any other sharp instrument for checking, placement, or removal.

O-ring #1 presence and integrity should be checked prior to each use. **O-ring #2 & #3** presence and integrity should be checked each time unit is detached from first stage. Proper o-ring lubrication is required to prevent surface deterioration. Be sure to use silicone lubricant. Spread lightly on o-ring so the surface shines. Wipe off any excess lubricant.

The bio-micro system should be checked annually along with your regulator. There are two additional o-rings installed in the body of bio-filter. These require tools to access and should be checked during your annual regulator service or if leaking appears to come from this area. This section does contain a ball joint and it is normal for it to move when manipulated. The built-in ball joint helps reduce chance of damage to port screw. Service Suggestion: Download complete schematic from website and provide to your chosen technician. This will help avoid any unnecessary hardship or damage to your filter during disassembly.

3/8 fitting
 1 arp-023 (399-35-92-023)
 2 arp-011 not included
 3 arp-011 (399-35-92-011)

1/2" fitting
 1 arp-023 (399-35-92-023)
 2 arp-013 not included
 3 arp-013 (399-35-92-013)

#2 O-ring should be included with your second stage hose. In most cases it is the same size as #3

Threads (where o-ring sits) may be sharp. Take care with hands to avoid injury.