# **NEPTUNE III SERIES PRODUCTS**

OWNER'S MANUAL



# **NEPTUNE III SERIES - OWNER'S MANUAL**

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### 1 - INTRODUCTION

For more than 75 years, OCEAN REEF has been involved in the underwater diving industry. We have contributed much to this industry, from fins and snorkels to the most modern systems of underwater communication. Through the spirit of intrepid pioneers, brilliant inventors, passionate divers, and dynamic entrepreneurs, OCEAN REEF has been able to turn dreams into reality in the underwater world.

The Neptune III package includes the Neptune III mask, the first stage SL 35TX, the Octopus, the pressure gauge and the hoses and must be used for underwater diving and maintained in accordance with the instructions reported in this manual related to the use, the limitations and the maintenance. The use of the Neptune III Package implies the knowledge, understanding and the compliance to the present owner's manual. Incorrect use, use of unsuitable spare parts, alteration of the equipment or bad maintenance and storage are dangerous for health and safety of the user and invalidates the warranty, exonerating the Manufacturer from all liabilities. For everything which is not mentioned in the present manual, the general conditions of sales and warranty apply.

It has to be stressed that any Personal Protective Equipment (PPE) for respiratory protection, such as the Neptune III Package, must always be used by specifically trained people, perfectly aware of its applications limits.



If you lose this manual or if you should require more copies, it is possible to download at diving. oceanreefgroup.com/support/ or contact the Manufacturer: Mestel Safety SRL, Via Arvigo 2, 16010 Sant'Olcese (GE), IT. Phone: +39 0107082011. E-mail: infoitaly@oceanreefgroup.com. Website: diving.oceanreefgroup.com

The Neptune III Package has shown to meet the health and safety certification requirements of the European Regulation 2016/425. Every component of the Neptune III Package is CE marked and it has been tested in accordance to the requirements of the EN 250:2014 standard.

The Neptune III Package cannot be used with other diving products without CE mark. The air supply must meet the requirements of EN12021:2014 standard for breathing air.

The Manufacturer has carefully worded and edited this owner's manual. However, in no event the Manufacturer will be responsible for any damage caused by text misunderstanding, misprints and/or incompleteness.

The Manufacturer will not accept liabilities for any damage caused by:

- Insufficient, incorrect and improper maintenance, not following the plan described in this manual
- · Absence of periodic tests and checks of the Package, not following the plan described in this manual
- · Incorrect and improper use of both the Neptune III Package and each of its components
- Use of non original spare parts
- Not observance of prescriptions collected in the owner's manual
- · Alterations and/or modifications of both the Neptune III Package and each of its components

In the above mentioned situation, being potentially dangerous to the health and life of the users, the manufacturer is released of any responsibility and the warranty is nullified.

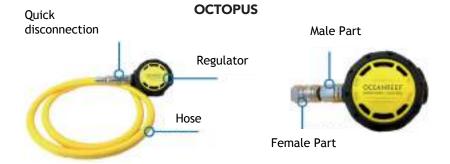
The Manufacturer is certified ISO 9001:2015 (https://diving.oceanreefgroup.com/support/#ISO\_CC).

# 2-GLOSSARY

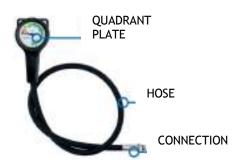
### **FIRST STAGE**



Color - part	Additional notes
HP PORT	2 in total (1 on each side)
LP PORT	4 in total (2 on each side)
ANTIFREEZE	
COVER	



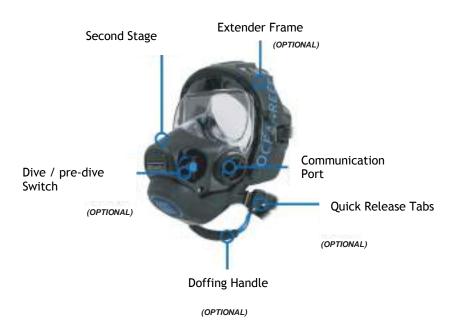
### **PRESSURE GAUGE**











# NEPTUNEIII BASIC



### NEPTUNEIII





2 HANDS (1 HAND OPTIONAL)

(OPTIONAL)

INTEGRATED 2ND STAGE

COMMUNICATION PORT

EXHAUST VALVE

EXTENDER FRAME

SURFACE AIR VALVE

DIVE/PRE-DIVE

RELEASE SYSTEM



1 HAND

#### 3 - CERTIFICATION AND EU MARKING

The Neptune III Package is a Personal Protective Equipment (PPE) for respiratory protection that falls under Category III with regards to the European Regulation 2016/425. The Neptune III Package has been certified in conformity to the harmonized standard EN250:2014, satisfying all their requirements in terms of health, safety and performances even when used at water temperatures <10°C.

The conformity tests following the harmonized standard EN250:2014 and the authorization for CE marking (EU-TYPE EXAMINATION - Module B) have been carried out by the Notified Body Eurofins Product Testing Italy SrL, Via Courgnè 21, 10156 Torino (IT), identified with the Notified Body number 0477. The conformity to type based on quality assurance of the production process (Module D) has been carried out by the Notified Body Italcert SRL, Viale Sarca 336, 20126 Milano (IT), identified with the Notified Body Number 0426.

The declaration of conformity of the Neptune III Package is available here: diving.oceanreefgroup.com/support/

### Markings Examples according to EN 250:2014 standard

The following marking is reported on all the components belonging to the Neptune III Package:



Second stage marking



First stage marking



Octopus marking

#### Where:

- OCEAN REFE is the trademark.
- EN 250:2014 indicates the reference standard.
- CE is the marking indicating the conformity to health and safety requirements of European Regulation 2016/425 and to the EN250:2014 standard.
- A indicates that the Neptune III Package conforms to Annex B of the EN250:2014 standard The number 0477 identifies the Notified Body Eurofins Product Testing Italy SrL, Via Courgnè 21, 10156 Torino (IT) in charge of the certification process (Module B).
- The number 0426 identifies the Notified Body Italcert SRL Viale Sarca 336, 20126 Milano (IT) in change of the quality assurance of the production process (Module D).
- N12345 is the generic serial number for the Neptune III mask second stage. OCXXXXX is the generic
  serial number for the octopus. L.I.XXAXXXXXXX is the generic serial number for the first stage. The
  mask traceability is ensured by the production date on the visor. Serial numbers on the second stage,
  first stage and octopus univocally identify these components for warranty purposes.

### 4 - GENERAL WARNINGS / OWNER'S AND USER RESPONSIBILITIES

#### WARNINGS, CAUTIONS, NOTES LEGEND

Pay special attention to information provided in warnings, cautions, and notes, that is accompanied by these symbols:



A WARNING indicates a procedure or situation that, if not avoided, could result in serious injury or death to the user.



A **CAUTION** indicates any situation or technique that could cause damage to the product, and could subsequently result in injury to the user.



A NOTE is used to emphasize important points, tips, and reminders.

#### **IMPORTANT**

The content of this manual is based upon the latest information available at the time of going to print. OCEAN REEF reserves the right to modify any products, processes and manufacturing techniques at any time. It is the technicians' responsibility to acquire the latest information and parts from OCEAN REEF for service and repairs to be performed.

If the instructions provided in the manual are unclear or difficult to understand, please contact OCEAN REEF at infoitaly@oceanreefgroup.com before using the equipment or attempting any repairs.



This instruction manual does not replace a diving course.



OCEAN REEF highly recommends that you practice in a pool before using your mask in open water.



Carefully read this instruction manual before use, and keep it for future reference.



The high quality of the product does not allow the user to ignore the problems connected with the correct use of the product and the rules for safe diving.



High pressure gas systems must be handled with care. Carefully read and follow these instructions concerning OCEAN REEF SCUBA products equipment.

Use of SCUBA equipment by uncertified or untrained persons is dangerous and damage to high pressure gas system components may result in serious injury or death.



Before using this mask, you must have successfully received training and certification in the technique of SCUBA diving from a recognized certification agency (or any U.S. Military or government operated diving school). Use of this equipment by a person who is not certified by a recognized agency shall render all warranties, express or implied, null and void.

In the following cases:

- · Damage to some parts of the mask
- Difficult to breathe
  - Dizziness and/or light-headedness

The dive must be aborted.



All dives must be planned and carried out so that at the end of the dive the diver will still have a reasonable reserve of air for emergency use. The suggested amount is usually 50 bar (725 psi).



All users of the Neptune III Package must periodically undergo training in Emergency Procedures in shallow water to maintain preparedness in the event of an actual emergency.



OCEAN REEF refuses all responsibility for damages caused by non-compliance with the instructions contained in this manual. These instructions do not extend the warranty or the responsibilities stated by OCEAN REEF terms of sales and delivery.



Before using the NEPTUNE III Package, the user must ensure that every component has been properly inspected and maintained. (see Chapter 12 Maintenance).



Do not modify or alter in any way the Package consisting of the Neptune III mask + first stage + octopus + pressure gauge + hoses.



In order to maintain the warranty, factory prescribed service for the products must be performed at least once annually by a factory trained OCEAN REEF Service Technician who is employed by an Authorized OCEAN REEF Dealer and whom keeps proper maintenance records. Repair, service, disassembly, or first stage adjustment must not be attempted by persons who are not factory trained and authorized by OCEAN REEF.

For details, contact an authorized OCEAN REEF dealer at: https://diving.oceanreefgroup.com/shop-dealers/



It is known that in certain conditions, when the Neptune III is donned and connected to the cylinders, during <u>exhalation only</u>, the membrane of the  $2^{nd}$  stage, residing in the exhalation air deflector may vibrate, producing a humming sound.

For extra caution and safety, <u>If this does not describe properly your experience you should not dive and contact Customer Service</u>.



Given the <u>very high sensitivity of the  $2^{nd}$  stage and the high amount of airflow, you may,</u> in certain conditions, experience a slight vibration during inhalation as you descend in the first very few feet/meters of water.

This is absolutely normal and should not alarm you.

This is normal and should not alarm you.

For extra caution and safety, <u>If this does not describe properly your experience you should</u> not dive and contact Customer Service.

#### 5 - WARNINGS / REMINDERS BEFORE THE DIVE

Before connecting the regulator to the cylinder, check the following:

- Check that the O-ring on the cylinder is in place on the valve and is in perfect working condition (INT WITH Yoke nipple CGA 850 version only). If it is damaged or missing, it should be replaced.
- Verify that the instrumentation and accessories have been installed correctly.

OCEAN REEF first stages are available with various cylinder valve fitting connectors (according to ISO standard): DIN: screw connection up to 300 bar INT: yoke connection up to 232 bar.



While opening the cylinder valve, the pressure gauge face must not be directed towards the user or others, in the event and risk of a pressure gauge malfunction.



If you use quick connection hose always pressurize the Neptune III gradually by opening the cylinder valve slowly. When opening the cylinder valve, the second stage purge button should be slightly pressed, so that the second stage valve is open.



The octopus is usually considered as an auxiliary emergency second stage to be used by the diver in case of need (Emergency auxiliary breathing device). The OCEAN REEF Octopus described in this manual is intended to be used connected to OCEAN REEF first stages - Maximum depth: 50 m / 162 feet (According to EN regulation).



If a SCUBA second stage is configured for and used by more than one diver at the same time, then it shall not be used at depths greater than 30 meters.



Do not push down on purge button for extended periods of time in low temperatures, as this may facilitate a second stage freeze-up.



Insert hoses into the ports and tighten using a wrench without using excessive force.



Verifying quick connection hoses before the dive is imperative. Attach and detach hoses from male connections multiple times (before and after pressurizing) to ensure the connection system operates smoothly. Make sure, once finally connected, that the coupling is secure by pulling on the female part of the hose, without unlocking the quick connections. The hoses must remain assembled on the male part firmly. Always make sure you do not get dirt, sand or other material in the hose mechanism.



Check the COMMUNICATION port plug: it should be in place, screwed into it's fitting if you have not installed a communication unit microphone/PTT assembly. IF you have opened and closed this port plug, make sure youu have placed the flat gaskeet that should be on the inside perimeter - back in place.



Ice diving, cave diving and other hazardous diving practices require specific training and should be performed by experienced divers. Each involve unique procedures for both preparing a dive and exectuing a dive. OCEAN REEF products are made for all types of diving IF and only if the diver is trained, highly experienced and well versed in those conditions and has properly conducted safe excersises with his new gear addition. By no means the high performance of the product, or added comfort and safety provided by it, should overtake responsability for knowing one's limits/health conditions and abilities.

### 6 - NITROX



Neptune III is not CE certified to be used with NITROX! SL35TX 1st stage can't be used with NITROX. Always use NITROX compatible 1st stages when NITROX is required.



The Neptune III mask can be used with NITROX mixes up to 40% O<sub>2</sub>. It is always recommended to use cleaned air from a specified cleaned air source.

Note: not valid in the European Union.



The Neptune III mask is Nitrox compatible up to 40% of oxygen. (NOT valid in the European Countries).



To prevent severe and potentially lethal injuries DO NOT dive using Nitrox (oxygen enriched air) mixes unless you have first obtained adequate training and certification in their use by a recognized certification agency.



Maximum operating depth (MOD) and exposure times to Nitrox (oxygen enriched air) mixes are dependent upon the oxygen concentration of the mix in use.

The term Nitrox (oxygen enriched air) defines breathable mixes composed of oxygen and nitrogen and containing oxygen in a percentage higher than 21% (atmospheric air). The higher oxygen concentration limits the use of these mixes with standard scuba equipment and requires the use of materials and procedures that differ from those required by the use of atmospheric air.

#### USE OF NITROX MIXES OUTSIDE OF THE EUROPEAN UNION

Standard production OCEAN REEF regulators distributed to countries outside of the European Community use normal INT or DIN connections and are manufactured with materials, assembly procedures and lubricants that ensure compatibility with gas mixes containing oxygen up to 40%. In these countries, users are required to follow the same safety procedures that apply to dedicated Nitrox regulators and to comply with the regulations set by each country concerning the use on Nitrox mixes for diving.

#### USE OF NITROX MIXES WITHIN THE FUROPEAN UNION

Within the European Community the use of Nitrox mixes is regulated by norms EN 13949 and EN 144-3. OCEAN REEF has designed and manufactured a special regulator line that complies with the aforementioned regulations. The first and second stage regulators of this line are identified by the marking "Nitrox" and also feature components colored green to allow an immediate identification.

These regulators can be used with oxygen enriched air containing an oxygen concentration higher than 22% and up to 100% (pure oxygen), at a maximum operating pressure of 200 bar (2900 psi) or 300 bar (4351 psi) depending on the version.

### Main features of Nitrox dedicated regulators

As required by European Standards, Nitrox first stage regulator connections have been designed and approved to be used exclusively with Nitrox cylinders and cylinder valves, in order to prevent confusion with the corresponding standard-production compressed air regulators. OCEAN REEF Nitrox connections comply with EN 144-3. In Nitrox first stage regulators, compatibility with high pressure oxygen (higher than 40 bar / 580 psi and up to 200 bar /2900 psi or 300 bar (4351 psi) depending on the version) is ensured by the choice of special materials used to manufacture seats, O-rings, gaskets and seals used in the high pressure first stage mechanism valves. Components are lubricated with a specific oxygen lubricant. OCEAN REEF Nitrox regulators are assembled in a dedicated area in order to comply with the high cleanliness standards required for oxygen compatibility.



Do not use Nitrox regulators with oxygen enriched air if they have been used with compressed air. There might be residues of flammable materials that could cause serious accidents.



Do not use silicone grease for the lubrication of Nitrox regulators.



Second stage regulators, pressure gauges, consoles and other accessories used in combination with Nitrox first stage regulators must also be compatible with the use of Nitrox mixes.



Maintenance on regulators that use Nitrox must be performed every 100 dives or at least annually.

## 7 - FIND YOUR MASK (IDM) SIZE

The Neptune III is available in two sizes, Small/Medium and Medium/Large.







The illustration of the mask measuring chart is not to scale

It is essential to choose a suitable size. You can choose between size S/M (for adults with smaller faces, women and children over 12 years old) and size M/L (for an adult male, or larger faces). Measure the distance between the bridge at the top of your nose and the bottom of your chin.

- Choose size S/M if it is BETWEEN (3,9") 10 cm and (4.5") 11.5 cm.
- Choose size M/L if it is MORE than (4.5") 11.5 cm.

There are two different size categories on the chart: Small/Medium and Medium/Large. If the measurements fall within the both ranges, then the diver should technically be able to wear either full face mask (M/L or S/M), and in that case should try on a mask to select the best fit.



TRY YOUR MASK: Don and doff the mask following the instructions in paragraph 9.2 - once the mask is tight on your face, if there is NO SPACE between your chin and the silicone skirt of the mask, you've got the right size.

### 8 - NEPTUNE III PACKAGE\*

\*Other selling configurations are available

#### 8.1 Neptune III Series



OCEAN REEF is proud to provide you with a complete, certified package. Neptune III with first stage, quick-connection hose, octopus, 120cm quick connection hose and pressure gauge is a fully EN PPE certified apparatus (read pg6). The Neptune III air circulation system is designed to minimize fogging and reduce the amount of  $CO_2$  build-up. The silicone oral-nasal pocket is built with two one-way valves through which air is inhaled.



Scan the QR code and watch the diving skills tutorials related to your Neptune III mask!



Make sure you master these skills in a safe environment before scuba diving in open water.



Patented design 3-way directional adjustment system: up/down, wide/narrow, close/far. Made for maximum comfort and nose breathing. Pushing the mask towards the face when needed causes the plugs to create a nasal seal.

The Neptune III is equipped with a patented internal device to close the nostrils and allow underwater equalization. By loosening the screw it is possible to move the plate up and down to find the most comfortable position to equalize. The silicone caps can be turned easily. By turning the caps you may adjust them to fit a larger or smaller nose (distance between the nostrils). Two additional plastic inserts are supplied. By removing the silicone cap it is possible to install the insert in the plate (cap post) increasing the distance of the cap from the plate and allowing it to fit closer to the nostril. This is sometimes necessary for flatter noses or when a hood is used under the mask. To close the nostrils for equalization, simply press the top part of the mask (or push on the regulator front cover especially if using the visor light). The two equalization silicone caps will move upward and close the nostrils. The silicone caps when correctly positioned should allow breathing through the nose and close the nostrils only when pressing the top part of the mask to equalize.



### 8.2 First Stage SL 35 TX

\*Sold separately for Neptune III basic and some configurations.





The Neptune III should be used with this high performance, balanced diaphragm 1st stage with anti-freeze kit.

The first stage has adjustable medium pressure and is made of brass with a satin finish body, stainless steel poppet, Teflon seat, and stainless steel spring.

It is available with the following characteristics:

- 200 bar Yoke connection (code 9922)
- 300 bar DIN connection (code 9923)
- 2 high pressure ports 7/16 -20 UNF
- 4 Medium pressure ports 3/8-24 UNF
- Flow rate of approx. 4800 l/m at 140 bar



HOSE TUTORIAL

#### 8.3 Hoses

\*Sold separately for Neptune III basic and some configurations.



EXTRAFLEX QC HOSE 120CM /48" YELLOW



EXTRAFLEX QC HOSE 80CM /32" BLACK



RUBBER BLACK HOSE 80CM /32"

Four layer technology, inner layer non-toxic polyurethane blend. Polyester first layer reinforcement, thermo rubber jacket. Polyethylene anti-scratching reinforcement.

#### HOSE ASSEMBLY

Use a 4mm Allen wrench to remove the LP port plug on the first stage, then screw the loose end of the hose into the open port and tighten by hand using a 14mm wrench without using excessive force.



PRESSURE GAUGE TUTORIAL

### 8.4 Pressure Gauge

\*Sold separately for Neptune III basic and some configurations.



Single piece brass body: copper beryllium coiled inner mechanism; bourdon tube; rack and pinion movement for smooth and precise operation; tempered glass transparent window; plastic cover with loops for fixing: graduation 350 BAR/5000 PSI, full scale.

#### Graduation display:

Clear, easy to read dial design; red zone from 0 to 50 BAR / 0 to 725 PSI; increments 10 BAR, all over the scale.

Dual graduation.

Fluorescent background will maintain readability for some time after being exposed to light.

#### PRESSURE GAUGE ASSEMBLY

Use a 4mm Allen wrench to remove the HP port plug on the first stage, then screw the loose end of the pressure gauge hose into the open port and tighten by hand using a 14mm wrench without using excessive force.



OCTOPUS TUTORIAL

### 8.5 Octopus

\*Sold separately for Neptune III basic and some configurations.



Standard downstream valve with dive-predive switch, no adjustment knob.

Weight (without hose) 230g

Quick connection male part assembled on the Octopus.

Quick connection Hose length 120cm

Yellow Extraflex hose.

Static intermediate pressure 9.5-9.8bar



#### OCTOPUS ASSEMBLY

Use a 4mm Allen wrench to remove the LP port plug on the first stage adjacent to the hose of the primary second stage, then screw the loose end of the Octopus hose into the open port and tighten by hand using a 14mm wrench without using excessive force.



SAV III TUTORIAL

#### 8.6 SAV III

\*Sold separately for Neptune III basic and some configurations.



SAV III: Pre-assembled on Neptune III FFM

The Surface Air Valve / SAV III / SAV III basic allows the diver to breathe ambient air while at the surface conserving the diver's gas supply. To use, simply open the valve while on the surface or outside of the water to breathe ambient air, and close it when ready to dive.



Keep in mind cold water diving might require specific procedures.

- Easy to grab, sturdy design.
- Large air vents
- Easy to assemble on the mask

\*The Surface Air Valve III Basic is retro compatible with all prior OCEANREEF IDM models that do not have a Professional or Neptune III SAV installed and an available OCTOPUS/SAV port. The Neptune III SAV III is permanently installed on the IDM/FFM.



SAV III basic:

Code OR025030

**A** 



DO NOT USE the SAV III Basic if any part is broken.



DO NOT DIVE YOUR OCEAN REEF IDM IF SAV IS LEAKING WATER OR AIR. TROUBLE SHOOT THE SAV IF THERE IS SIGN OF WATER OR AIR LEAKAGE.



DO NOT OVERTIGHTEN OR OVER OPEN THE SAV - THIS CAN CAUSE THE VALVE CAP OR SCREW/RING TO BECOME STUCK OR DIFFICULT TO OPERATE. As with all valves operated while SCUBA diving, tightening, and opening should be done gently and never with force. Saline, water, and other residues can affect operating the SAV. Follow maintenance instructions properly to avoid issues.



It is essential that the diver using this product is properly trained and equipped and fully understand these instructions before attempting to use the SAV. Testing the use on surface and in confined water is strongly recommended.



While the SAV provides the diver the ability of breathing ambient air on surface, it does not change or eliminate the potential hazards of diving. As a further component of the diver's equipment, it should be operated according to this manual and included in one's configuration only when fully understood and confident use achieved.



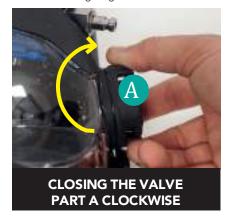
While our SAVs feature a valve to avoid water to rush in the mask when submerged, this is intended in vertical position and normal diving trim position. According to the position of the valve, leaking can be more serious. For this reason, the valve should not be forgotten open, upon submerging as instructed in this manual.



Dust and any debris in the area of the SAV can cause malfunction in the product or even compromise its correct use. In order to avoid this, before use, make sure that the SAV is perfectly clean.



OPENING THE VALVE PART A COUNTER-CLOCKWISE



Practice opening and closing the top (part A) of the SAV to ensure proper operation of the product. Part A should be closed and opened by operating only on the part itself and not the valve body (B). Opening the valve is achieved turning part A counterclockwise, closing = clockwise. Part A should not be overtightened nor cranked open to avoid getting stuck.







WITH YOUR SCUBA SETUP CONNECTED AND OPEN (FULL) CYLINDER VALVE donn the mask as instructed in Neptune III Series Products manual, with part A SAV screw open. Once the mask is donned properly test breathing from the SAV. You will notice you are breathing ambient air and not gas from cylinder. Close the SAV screw (part A). Proper sealing of the mask on the face and proper closing of the SAV will result in you now breathing gas from cylinder.



**NOTE!** Before each dive make sure part B (SAV Body) is tightened properly on the OCTOPUS/SAV mask port, if not fully tightened working on part A (Top) can cause the body (B) to open resulting in water leaking that could cause serious injury and may even lead to fatal accident.

### **SAVIII - TROUBLESHOOTING**

#### Leaking SAV:

Any leaking should be easily spotted while operating the pre-dive checks before descent. In case the leaking is noticed once the dive has started (bubbles seen from the valve, or you feel water seeping in from the SAV side):

- 1. Ensure the SAV is closed while upright. If not, close the SAV and verify you don't have leaks. Exhaling/clearing the mask as per training skills will dump all water and you will be able to identify if the SAV is still leaking.
- 2. If the SAV is closed, but it is still leaking <u>ABORT THE DIVE</u>. When on the boat/ on land, ensure the SAV is clean, doesn't have any debris or other deposit that prevent it from closing properly. If you have a SAV III basic make sure the body of the valve is properly screwed in the port and make sure that the gasket in the port is in place. If you own a Neptune III with installed SAV III, make sure there is no debris or deposit that prevents the ring to close, make sure the cap is not unscrewed.

If these steps of troubleshooting don't result in a perfectly working SAV - contact a Service Center or our Customer Service. **DO NOT DIVE.** 

#### 9 - BEFORE DIVING

### 9.1 LEAKAGE AND FUNCTION TEST

Carefully open the cylinder valve to fully open. Close the valve a quarter turn!



Check the pressure on the pressure gauge to make sure that there is the required amount of air for the planned dive. OCEAN REEF recommends that the cylinders should be full before every dive.

If using primary breathing valve press the purge button on the breathing valve. Check that a strong flow of air is heard. Release the purge button.

If using an octopus breathing valve, press the purge button on the breathing valve. Check that a strong flow of air is heard. Release the purge button. Reset the locking lever against the valve housing. Test the entire system for leaks with the following steps. Close the cylinder valve. Wait for one minute. Check that the needle does not fall by more than 10 bar (145 psi).

If the test has been successful - open the cylinder valve following the procedure describe above.



If leakage is greater than the specified value, the equipment must be repaired by an OCEAN REEF certified service technician.

#### 9.2 DON THE NEPTUNE III FULL FACE MASK

Adjust the equalization system to fit perfectly your need and test it on your face until you feel completely comfortable. Check that the 3D equalization system is properly secured.

1







Neptune III How-to and other tutorials

Pressurize the Neptune III as previously described in section 9.1 leakage and function test.

Pull the head harness straps out as far as possible extending the head harness straps.

Don the NEPTUNE III mask by grasping the lower two head harness straps and pulling the head harness over your head. (MAKE SURE CYLINDER IS OPEN AND/OR THE SURFACE AIR VALVE (SAV) IS OPEN OR COMMUNICATION PORT IS OPEN TO ALLOW AIR IN).



Make sure that the orinasal cup fits properly and is not dislodged. Failure to do so may result in high  $CO_2$  levels which will increase the breathing rate, cause panic, and may even lead to fatal accident.

2 Completely pull down the central part of the strap and adjust the 6 straps, middle ones first, than bottom ones and finally the top ones.









3



With the LP hose plugged in press the purge button of the 2nd stage and check that the air flows freely. Release the button and check that air stops flowing.



(IF ASSEMBLED)

Close surface air valve before descending.

5

#### (IF ASSEMBLED)

On the left side of the mask there is a Dive/Pre-Dive switch (OPTIONAL) to prevent free flow when out of the water or underwater when the mask is not worn. Remember to rotate the knob to the DIVE position before initiating the dive ("DIVE" should be read regularly).





Check the pressure gauge to ensure adequate cylinder pressure.



Check that you are able to equalize (clear your ears) by pushing the breathing valve upwards.



Some neoprene hoods compress with increased depth. In those cases, readjusting the head harness straps will be necessary. Failure to do so may result in high  $CO_2$  levels which will increase the breathing rate, cause panic, and may even lead to a fatal accident.

### 10 - DURING A DIVE



Breathe normally through your nose or mouth, whichever is most comfortable.

To equalize, press the front part of the regulator or the top of the mask (without pushing the purge button). Breathing must be continuous, without holding one's breath.

### CHECKS DURING DIVING



- Periodically check the pressure gauge.
- Make sure that other equipment does not interfere with the operation of or access to the necessary controls and components.
- Check for leaks.

#### **PURGING**

The mask can easily be purged in the event that water enters the mask by pressing the exhaust button on the second stage. The water will flow out of the lower valve. The diver should be facing straight ahead, with the exhaust valve being the LOWEST part of the system while holding the top side of the mask with his/her palm.



The dive should be planned with the intention of not using a reasonable reserve of air for emergency use. The minimum recommended pressure that should be left in the cylinders upon dive completion is usually 50 bar (725 psi).

### 11 - AFTER DIVING/ POST DIVE PROCEDURES

#### DOFFING THE NEPTUNE III AFTER USE

There are two ways in which it is possible to doff the Neptune III:

- 1. Through the use of the quick release system
- 2. Through the use of the handle (optional), very useful and suitable for removal with one hand.



Neptune III How-to and other tutorials



Place both thumbs on the right and left quick releases.



Pull to remove the mask.



Grab the handle with one hand (Right or left is the same).



Pull to remove the mask.



2

Some people may experience discomfort due to the extender frame touching the head (depending on size/shape of the head or particular movement with which the mask is removed thanks to the handle). In this case we suggest the use of a hood if you want to use the accessory handle.

#### DISMANTLING

The apparatus should be cleaned as described in the section 13 titled MAINTENANCE, CLEANING, DECONTAMINATION AND STORAGE, before, carry out the following:

- Close the cylinder valve by turning the cylinder valve handle clockwise until it reaches following its end position.
- 2. Thoroughly vent the system by pressing the purge button on the breathing valve.
- 3. Disconnect the regulator(s) from the cylinder(s).
- 4. Make sure the dust cover is firmly in place to keep water out of the first stage.
- 5. Carefully rinse the regulator with fresh, gently flowing water. Do not press the purge button.
- 6. Do not pull on the hoses when the regulator is still attached to the tank and, after removing the hoses, avoid storing them on a tight loop.
- 7. When the regulator is not connected, the cylinder valve must be fitted with a plug.
- Damp equipment should be thoroughly dried if it is to be stored in the backpack for more than a few hours.



If you accidentally press the purge button during the rinsing procedures, then attach the regulator to the tank and press the purge button for 10-15 seconds to purge any water or debris from regulator.

# 12 - ASSEMBLY OF THE DOFFING HANDLE (OPTIONAL)

1



Unscrew the quick release system with a Phillips screwdriver holding the bolt positioned on the opposite side with one finger to prevent it from accidentally falling.



"Pull to remove the mask" text should be facing inwards - towards your neck when wearing the mask, while the group logo should face out, towards the front of the mask.





Slightly open the two parts of the cover at the bottom, making sure that the joint at the top remains in place. Insert the loop and close the two parts of the cover so that the screw can catch the bolt's threading.



Pull the handle to ensure it is assembled correctly - holding on to the screws.





Tighten the screw remembering to always hold the bolt on the opposite side with one finger.

There must be no space between the two parts of the cover.



Repeat this procedure on the other side. Once finished, check that the length of the laces is identical on both sides and that the handle is positioned securely (don and doff the mask a few times).

### 13 - MAINTENANCE, CLEANING, DISINFECTION AND STORAGE

### 13.1 MAINTENANCE, CLEANING, DISINFECTION

The Neptune III Package will work perfectly if the periodic program of maintenance, cleaning and disinfection collected in table 5 is applied during its whole life from the first use. General and visual inspection are related to the check that all the components and parts are not damaged, without any wear and tear. No damages must be detected on the face seal, orinasal mask, straps and membranes. If damages are detected, the mask cannot be used until repair.

TYPE OF ACTION	FIRST USE	BEFORE EACH USE	AFTER A DIVE	MOTHLY	EVERY YEAR	EVERY 2 TEARS
GENERAL FUNCTION CHECK	x	х				
GENERAL AND VISUAL INSPECTION	х	х		х		
LEAK TEST		х				
DISINFECTION		х	х			
CLEANING / RINSE			Х			
REGULATOR SERVICING					Х	_
MASK SERVICING						Х

Table 5: Periodic maintenance program

For optimum longevity of the mask and the proper functioning of its parts we recommend rinsing the mask thoroughly in fresh water after every use. DO NOT clean the visor with any abrasive materials. We recommend drying the visor, especially the inside parts, with a soft, clean cloth.

 $<sup>\</sup>star$ These actions can be performed by an authorized OCEAN REEF Servicing Center.

Equipment should be disinfected, especially when it comes into contact with the face, eyes or mouth. This includes but is not limited to:

- Second stage regulator (Octopus) and internal surfaces
- Snorkel
- BCD oral inflator
- Mask



Cleaning frequency must ensure to the user a good protection and the right functionality. When using any disinfectant, be sure to follow the manufacturer's instructions for use. Follow this with a thorough rinse in fresh water, and allow the equipment to dry completely before use. Since some chemicals can damage surfaces, they should be tested prior to use for each individual item or surface. After disinfecting, one must take care not to contaminate the equipment, such as by handling it when storing. Therefore, dry, pack and store any sanitized equipment in a disinfected bag or container using washed/sanitized hands.

For an efficient cleaning of any part of the equipment, soaking in clean warm water (around  $40^{\circ}$ C/ $100F^{\circ}$ ) adding a colourless not perfumed hand washing liquid soap is suggested.

Afterwards, rinse deeply under fresh water to remove any soap residual and allow the perfect drying in a safe and clean environment.

### 13.2 STORAGE

All the components belonging to the Neptune III Package should be stored in a ventilated environment preferably between -10°C (14°F) and +50°C (122°F), avoiding the direct action of sunlight, pollution, dirt, etc. For both storage and transportation the use of the original carrying backpack is suggested.

### 14 - TROUBLESHOOTING - EMERGENCY PROCEDURE



#### **VISOR FOGS**

#### Warning: Fogging is a signal that mask is not positioned correctly on face!

- a) Orinasal mask positioned incorrectly or pinched.
- b) Orinasal mask improperly seated—check that it is properly tucked around communication port and exhaust valve.
- c) Top harness straps pulled too tightly—loosen.
- d) Bottom harness straps not pulled tight enough.

#### AIR LEAKS

- a) Hair/hood trapped inside mask face seal.
- Sewing on hood-skirt will not necessarily seal on all hoods, especially if sewing on hood is where mask skirt fits.
- c) Straps pulled too tightly or improperly.

#### WATER LEAKS

- a) SAV forgotten on open position.
  - Close the SAV by turning the crown or part A cap depending on model.
- Missing or broken flat gasket in OCTOPUS/SAV port (if Neptune III basic).
   Contact customer service or an Authorized OCEANREEF Service Center.
- Missing or broken gasket in COMMUNICATION port. Contact customer service or an Authorized OCEANREEF Service Center.

#### **REGULATOR FREE-FLOWS**

- a) Purge button has sand/pebbles stuck inside.
- b) Regulator needs servicing \*.
- c) 1st stage intermediate pressure higher than 138  $\rightarrow$  142 psi / 9.5  $\rightarrow$  9.8 bar.

#### REGULATOR HARD TO BREATHE

- a) Regulator requires servicing \*.
- b) 1st stage intermediate pressure lower than 138  $\rightarrow$  142 psi / 9.5  $\rightarrow$  9.8 bar.

#### FFM VIBRATES

- a) Harness straps not adjusted properly—tighten bottom straps.
- b) 1st stage intermediate pressure higher than  $138 \rightarrow 142 \text{ psi} / 9.5 \rightarrow 9.8 \text{ bar}$ .
- c) Kindly note that due to how FFMs are designed there will be a certain type of breathing and position where the mask might vibrate. This will typically dissapear once you adjust your breathing / position of equalization system.



\* OCEAN REEF recommends that the regulator be serviced at least once a year, or after 100 dives. This should only be performed by an authorized OCEAN REEF service center which uses original spare parts. This also applies to any periodic servicing.



In case of persistence of these problems and failure to resolve, contact an authorized OCEAN REEF technician.

For more information visit our website at: diving.oceanreefgroup.com/shop-dealers/

# 15 - SPARE PARTS

Available spare parts for the handle/substitution by end users are limited to the components listed in the following table.

SPARE PARTS	CODE	Part of the Package
Sb5-C Eccentric equal block	6924	Mask
SB-5A Equalizer	6925	Mask
Washer M4 for Screw M4x8	15253	Mask
Screw M4x8	15255	Mask
Dive pre-dive handle cover	OR005034	Mask
Front logo plate	OR005039	Mask
Visor protector Neptune III	OR005040	Mask
NG-13 Standard seal	1361	Mask
NG-9B Pug	6515	Mask
FRB2 buckle	902	Mask
M-8 Strap for FRB2 buckle	9003	Mask
Quick release system III	OR005095	Mask
Extender Frame black, blue printing	OR002540	Mask
Extender Frame white, blue printing	OR002541	Mask
Bushing cover for extender frame	OR002556	Mask
Stop ball for extender frame	OR002563	Mask
Left bridge for extender frame	OR002557	Mask
Right bridge for extender frame	OR002558	Mask
Left neutral for extender frame	OR002559	Mask

Right neutral for extender frame	OR002560	Mask
Left earphone support for extender frame	OR002561	Mask
Right earphone support for extender frame	OR002562	Mask
Earphone plug for extender frame	OR002564	Mask
Bushing for extender frame	OR002555	Mask
NACS for extender frame	OR002565	Mask
Screw M3x8	OR007040	Mask
Equalization extension holder	OR003058	Mask
800 mm STD Hose	9950	Mask
Equalization extension 6mm - short	6927	Mask
Equalization extension 10mm - long	6928	Mask
Equalization extension 14mm - xlarge	6929	Mask
SAV III basic	OR025030	Mask
Dust Cap	OR003801	SL 35TX – 1ST STAGE

Table 6: List of spare parts



The above-listed parts can be replaced by the user. All the other spare parts of the Neptune III Package that are not indicated in this list, must be managed by an authorized service center for their replacement or servicing.

For more information visit our website at: diving.oceanreefgroup.com/shop-dealers/



Scan the QR code and watch the video instruction about the level O parts (Available for end users).

#### 16 - WARRANTY

- The OCEAN REEF Neptune III Package is guaranteed to be free of material or manufacturing defects for a period of 24 months from the time the unit is purchased, except the Neptune III IDM that has a limited lifetime warranty (check specific card for professional line products).
- For the duration of the above mentioned warranties, the Company's responsibility is limited to replacement of any parts that are defective and that have not been used incorrectly or handled negligently. The product must be returned to the outlet from which it was bought, along with the warranty card.
- 3. Even during the warranty period, this warranty shall not be valid where:
  - Damage was caused by incorrect handling or carelessness.
  - Damage was caused by the mask falling after it was purchased.
  - Damage caused by fire, earthquake, floods, lightning, or other natural disasters.
  - The warranty card is not produced.
  - Your name, the date of purchase, and the distributor's name do not appear on the warranty card.
  - The product has not been serviced as required through an OCEAN REEF authorized service center.
  - The product has been tampered with or has been repaired/serviced with non-original parts.

You can find a copy of this and other OCEAN REEF manuals online on our website. In order to limit our paper consumption, and as a part of our environmental friendly and responsible approach, OCEAN REEF recommends, in case you lose or damage this manual, to consult the documentation present online rather than print it out.

Please refer to our web site: diving.oceanreefgroup.com/support/





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