User manual
&
Safety instructions

Seagow 200
&
Seagow 300

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V. 1.0 from 25th July 2018 (check the updated version on www.seagow.com)
Preamble

Thanks for choosing Seagow. You are now free to breathe under water with an equipment made and designed with the collaboration of beginners and experienced underwater divers.

To begin with, before the first use of a Seagow product, it is very important to entirely read and understand this instruction manual.

Please, always be sure that the product is used according to the conditions defined in this manual, no matter who the user is.

Seagow can not be held as responsible of any material or physical accident in case of non respect of the given instructions.

Seagow was developed to be used in sea or swimming pools. A use in a different environment can potentially accelerate the aging of the equipment.

Seagow retains the right to change or to improve the manual without warning. Please get to know the current version during the usage of the product.

It is necessary to keep the user manual during the life of the product. You can also find it on the updated version website www.seagow.com.

The end of particular parties contains the mention "WARNINGS" to underline a specific situation which have to be taken into consideration to avoid a risky situation.

To be put in a plane for a journey, the tank must not be pressurized, you will certainly need to unscrew the cylinder tank from the valve. To do this, drag the protection of the tank towards the valve and unscrew (counterclockwise) simply the 2 elements. These 2 elements must be screwed down properly with the original O-ring for reassembly.

INSTRUCTIONS TO RESPECT IMPERATIVELY

Open COMPLETELY the valve before use
NEVER block your breathing, breathe continuously
NEVER go up to the surface faster than air bubbles
Use at SHALLOW depth
Watch your MANOMETER VERY REGULARLY
USE PROHIBITED WITHOUT KNOWLEDGE OF USE HAZARDS
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1. **Content of the box (not including pack and options)**

   - 1 0,5L aluminium diving tank with his DIN valve
   - 1 first stage regulator
   - 1 manometer
   - 1 MP (Medium Pressure) hose
   - 1 second stage regulator
   - 1 manual & safety instructions
   - 1 white scratch tape of 5cm width
   - 1 black scratch tape of 2cm width

2. **Warnings**

   - We advice users **to follow the elementary rules related** to the scuba diving which are given by authorized organizations
   - A use without **the awareness of the security rules endangers the user**
   - Don't use Seagow with an air supply from the surface
   - No assembly of setting can be done by the user, except the ones provided by this purpose
   - A piece or an element of the Seagow should not be used on an other device, or else the guarantee could be cancelled and the users could endangers themselves
   - **Always open slowly and completely the valve and orient the manometer (gauge) towards the ground**
   - The recommended minimum age to use the Seagow is eight (under adult supervision)
   - Never grease the pieces of the equipment, it can lead to the deterioration of the equipment and of the leakproof seals
   - The user always has to correctly ready the good pressure unit **(bar or PSI)** on the manometer(s)

**WARNINGS**

- The use of Seagow **under 3 m (10 ft) depth is forbidden** for any person who did not follow specific formation of scuba diving from an official center
3. Description

4. Technical features

Seagow 200:
- Internal water volume of the tank: 0.5 L
- **Maximum authorized pressure (PS):** 200 bar (3000 PSI)
- Service temperature: +10°C / +40°C (50°F / 104°F)
- Weight: 2.1 kg (4.6 lbs) empty for Seagow 200
- Dimensions (L x l x h): 24.5 x 6.8 cm for Seagow 200
- **Maximum authorized depth of use:** 3 m (10 ft)
- **Maximum operational depth of the equipment (allowed for certified divers according to their scuba certification):** 50 m (164 ft)

Seagow 300:
- Internal water volume of the tank: 0.5 L
- **Maximum authorized pressure (PS):** 300 bar (4500 PSI)
- Service temperature: +10°C / +40°C (50°F / 104°F)
- Weight: 2.1 kg (4.6 lbs) empty for Seagow 300
- Dimensions (L x d): 33 x 6.5 cm for Seagow 300
- **Maximum authorized depth of use:** 3 m (10 ft)
- **Maximum operational depth of the equipment (allowed for certified divers according to their scuba certification):** 50 m (164 ft)
5. **Precaution of general use**

- Due to its vital function, always use it with care
- Never force on the valve
- **When Seagow is not used, don’t let the top compartment under pressure**, purge the air thanks to the second stage membrane
- Too much stress on the second stage membrane can engender a too important air expulsion, to stop it, obstruct the mouthpiece
- Avoid any contact between sand or condiment and the Seagow
- **Don’t expose the material to the sun for a long time**
- During the first use, connect the first stage regulator to the valve and make a complete test of the tank into the air to evaluate your feeling
- Be careful when you unscrew the top compartment (especially if it’s not completely purged) because it can expel the Oring between the valve and 1<sup>st</sup> stage regulator, replace it if it’s happens
- Only screw and unscrew the 1<sup>st</sup> stage by the plastic washer

**WARNINGS**

- In case of leak or suspicion of dysfunction, do not place your ears near the equipment, close the valve and refer to these instructions, contact your dealer if necessary

5.1 **Before diving**

- In addition to a good health, it is necessary for the user to consult an health specialist
- Visually control the equipment before opening the valve
- Before connecting the first stage to the valve, tie the black scratch tape to the valve.
- The MP and HP outputs of the first stage should not be easily slacked by hands when the pressure regulator is not under pressure, idem for hose / 2<sup>nd</sup> stage regulator connexion
- During the opening of the valve, **do not direct the manometer towards you**
- To open the tank, slowly turn the handle of the valve in the counterclockwise direction, **valve must be completely open, then make a quarter turn backwards (do not let the valve reach the stop)**
- Tie the black scratch tape to your neck and tie the white one to the tank and to your waist.
• Make 2 or 3 inspiration/expiration cycles test before setting to water to check the proper functioning
• Never do a rotation (except the ones provided by this purpose) of the element after the pressurization
• Adapt your dive to the pressure on the manometer

WARNINGS

• If the valve is not completely opened, the user will not be able to use all the compressed air of the tank. That’s why it is essential to entirely open the valve and then to do a quarter turn backwards

5.2 When diving

• Always adopt flexible and continuous breathing
• Use the equipment in a water above +10°C (50°F)
• Seagow should only be used by one person at a time
• The maximum depth authorized is 3 m (10 ft)
• Regularly control the remaining pressure of the tank with the manometer
• The user should stay at the surface when the remaining pressure is equal or inferior to 50 bar (725 PSI) (red zone of the manometer)
• Stop the dive in case of leak coming from the Seagow, slowly go back up to the surface
• Plan to stop using the equipment before the total lack of compressed air

WARNINGS

• Never go back up to the surface faster than the air bubbles
• Stop the dive in case of discomfort towards the ears or sinuses, do not dive with a cold
• NEVER stop your breathing during your descent or your ascent
• Do not immerse the Seagow 200 or 300 when it is not pressurized
5.3 After diving

After using the Seagow please follow the following instructions:
- Remove the remaining water in the second stage
- Untie the white scratch tape from your waist
- Carry the tank and untie the black scratch tape from your neck (be careful not to drop the tank)
- Close the valve
- Purge the top compartment by pressing the membrane
- Rinse the equipment with pure water
- Let the equipment dry

- Do not use aerosols or other solvents for the cleaning

WARNINGS

- The cleaning of the second stage has to be done gently. A too strong water jet through the mouthpiece can damage the internal membrane

6. Refill of compressed air

- The person who refills the tank is responsible for the quality of the compressed air
- If there is a difference between the pressure of the compressor and the manometer of the tank which has to be refilled, take into consideration the higher value.

WARNINGS

- The seacow 200 should not be refilled with a pressure superior to 200 bar (3000 psi). It is to the person responsible of the refilling to make sure of this.
- The seacow 300 should not be refilled with a pressure superior to 300 bar (4500 psi). It is to the person responsible of the refilling to make sure of this.

Classic dive compressor

- This filling operation should be done by a qualified person
- When the first stage is separated from the valve, protect it thanks to the supplied protection
• During the reassembling of the first stage regulator, make sure that the outputs are well-oriented

WARNINGS

• This operation has to be done by a professional
• The outlet air flow rate of the compressor has to be slowed down compared to the filling of a scuba tank called « usual » of several litters
• The filling must be done very slowly, from 0 to 200 bar (3000 PSI) in 2 mins 30 secs minimum
• The filling must be done very slowly, from 0 to 300 bar (4500 PSI) in 4 mins minimum
• Make a break during the filling in case of a too important heating

7. Dangers

• The non-respect of these elementary rules of scuba diving may engender risks of drowning or physical damages which can cause death
• In case of shock, the equipment can be damaged without visual harms, in case of doubt, make your equipment inspected by a specialist
• It is totally forbidden to change the layout or to modify the different parts of the Seagow
• Never integrate elements from the Seagow on an other (diving) equipment or vice versa
• Never introduce water in the equipment

8. Storage

• After the drying, store the products in a box or a clean and closed bag
• Store the products in a dry place, protected from the light, between +5°C and 35°C (41°F to 35 °F)
• Let the valve closed during storage, the top compartment should not be under pressure
• Do not store the products near gasolines, oils or other chemical products
• Do not store the products in a dusty place or where there is sand
• The flexible should be free from all constraints, tank should be in a vertical position, valve to the top
• During storage, remove the first stage regulator from valve and protect the output with the cap included
9. Maintenance and upkeep

- The proper functioning and the proper preservation of your equipment do not necessarily depend on its use frequency. Even when it is not used, a bad storage can significantly damage the device.
- Make your Seagow regularly inspected by a specialist, an annual inspection is recommended.
- The French law doesn’t impose inspection or obligatory re-test for the Seagow. It is not mandatory but recommended for the both Seagow 200 and 300 (inquire by country).
- The French law do not impose inspection or obligatory re-test for the pressure regulator but it is advisable (inquire by country).
- Prefer the replacement of a defective piece by an original one.
- If there is a leak in the 1st stage, tighten the MP output with your hand and the DIN connection with an Allen key.
- Do not try to fix your equipment by yourself else-way than by the instructions given in this manual.
- Do not forget that your security and the proper functioning of your equipment depend on its maintenance.
- For the upkeep of your regulators and your tank, consult a diving center.
- A FAQ is also available for all products on www.seagow.com.

10. Warranty

- The equipment is guaranteed for one year starting from the date of purchase of the products.
- The guarantee is only valid for the first owner of the equipment.
- In case of claim for guarantee, you will have to have a proof of purchase delivered by your dealer.
- This guarantee is only valid for « defective » parts due to a manufacturing fault.
- A non-followed maintenance can engender a guarantee cancellation.
- The guarantee does not cover the damages caused by a faulty use or by carelessness like it is said in this present document.
- The guarantee does not take in charge the « normal » usury of the products. The guarantee does not include the recommended periodic inspections. The guarantee is invalidated if the equipment has been disassembled in a different way from this guide.
In a case of modification of the product by a qualified person, he or she undertakes the responsibility of the repairs/changements done on the product.

The guarantee is available for the repair or the replacement of a part by Seagow, the freight charges and the packing costs are on the buyer.

The exchanged pieces are Seagow's goods. These new replaced pieces cannot extend the guarantee of the product in any case.

The responsibility resulting from the sale is limited to the described guarantee above. It excludes the possibility to use penalties, damages and interests.

The rules is apt to change according to the territories at a later writing date of the manual, an adaptation can be necessary.

Every modification of the product involves the loss of the guarantee and can involve risks during the use.

Do not interchange the parts between other equipments or your guarantee can be cancelled.

To benefit from the guarantee, please contact your dealer.

11. Standards and regulation

The regulators meet to standard EN250.

The products are evaluated, controlled and certified CE (n°0062), under the 2014/68.UE directive, the UE declaration of conformity is available on simple request.

Other norms or rules may be applied for some areas, including some in the European Union.

12. Behaviors to follow and avoid during diving

The non-respect of these instructions can expose you to dangers leading to serious consequences on your health.

Preamble

The scuba diving is a risky activity if it’s done without knowledge of safety rules. You will find in this document the main tips to follow and avoid to make your dives enjoyable leisure time. Other tips may be given by qualified diving instructors.
**Rules & basics advises**

**Prior to diving, it is highly advisable to consult your doctor to assess your fitness to dive.**
If you suffer from cardiovascular disease, asthma, diabetes, heart disease or vascular, ENT diseases, epilepsy and other neurological disorders, scuba diving practice is strongly discouraged. It also applies to transient diseases such as colds, sinusitis, bronchitis, infection of the nose, throat, ears (otitis) or teeth (caries).
Other factors must also make you give up scuba diving as peptic ulcer disease, retinal detachment, glaucoma, enlarged spleen (splenomegaly) or pregnancy.
You will find in Annex a (french) document of the FFESSM (French CMAS) with a more complete list of contra-indications.
**Do not fly and avoid ride in altitude the same day of diving.**
Throughout the dive, you need to adopt a continuous breathing while regularly checking your manometer gauge.
Do not use earplug, they prevent pressure equalization. Dive only if you feel good and you feel like it, hydrate yourself before and after the dive (to avoid drying up the mucous membranes with the cool and dry air)

**The descent**

The descent (even shallow) leads to an increase of the ambient pressure. To maintain a level of equal pressure between you and the environment, you have to do the maneuver of Valsalva. This process involves blowing (slowly) while holding your nose pinched and your mouth shut. By performing this operation you avoid the main risk during the descent : barotrauma, which exerts its effects on the eardrums and sinuses mainly.
If you can’t do this procedure correctly, you shouldn’t go deeper, ascend slowly to the surface.

**The ascent**

During the ascent, you have to do the maneuver of Toynbee, simply pinch your nose but this time swallowing (swallowing saliva).
Pulmonary overpressure accident is one of the most serious dive accident, it occurs when the diver stops breathing during an ascent. To avoid this, simply adopt a flexible and continuous breathing.
The diver's ascent speed mustn’t be faster than the small air bubbles.
For experienced users and graduates of an accredited center, the ascent of a significant depth may require decompression according to the dive time and the depth reached. The goal is to remove nitrogen accumulated in your body, if you ascend too quickly, the nitrogen will not be eliminated. Worse, gas bubbles of blood-borne risks to block some vessels, it can cause among other risk paralysis or thrombosis.

Any pain or discomfort during ascent or descent should get you to stop your progress. Go slowly and gradually to the surface while controlling the pressure of your tank and your breathing.

**Physical effort**

Do not make useless efforts before and especially during and after the dive. Do not apnea before and after the dive. Never attempt to exceed your limits, the Seagow 200 or 300 isn’t developed for performance. Manage your breath, in case of shortness of breath, slowly and gradually head towards the surface by adopting the slower breathing you can.

**Adaptation to the environment**

Underwater, touch only the elements you know and safely. Adapt your dive to your environment, poor visibility can be a stressful factor. Stress is often the beginning of a vicious circle ending accident, stress management is essential assure a good dive. Equip yourself the dive environment, choose a suitable mask and flippers. An emergency snorkel is also advisable. Cold can also be a stress factor, a suitable combination reduces problems due to cold as breathlessness. Do not dive in too choppy water, assess the current and ask about the weather.
**Contrê-indications à la plongée en scaphandres autonomes**

Cette liste est indicative et non limitative. Les problèmes doivent être abordés au cas par cas, éventuellement avec un bilan auprès d'un spécialiste, la décision tenant compte du niveau technique (dubitub, plongeur confirmé ou encadrant).

En cas de litige, la décision finale doit être soumise à la Commission Médicale et de Prévention Régionale, puis en appel, à la Commission Médicale et de Prévention Nationale.

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La survenue d'une maladie de cette liste nécessite un nouvel examen.

Toutes les pathologies affectées d’un (*) doivent faire l’objet d’une évaluation, et le certificat médical de non contre-indication ne peut être délivré que par un médecin fédéral.

La reprise de la plongée après un accident de désaturation, une surpression pulmonaire, un passage en caisson hyperbare ou autre accident de plongée sévère, nécessitera l’avis d’un Médecin Fédéral ou d’un médecin spécialisé selon le règlement intérieure de la C.M.P.N.