INTRODUCTION
Congratulations. You have purchased one of the finest, most dependable BCs available in the world today. The end result of years of “evolutioneering”, your Mares BC uses processes and materials that are the result of thousands of hours of research. This means reliability, a feature that’s in high demand and found in EVERY Mares product. Any critical information or warnings that might affect the performance or result in the injury or death of the BC owner or other persons are highlighted with the following symbols:

WARNING
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

DANGER
Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

IMPORTANT:
Should any warnings or information contained in this manual be unclear or not fully understood, please contact Mares before using a Mares BC.

WARNING
Carefully follow these and all the other instructions concerning your Mares BC and all other SCUBA equipment. Failure to do so could lead to serious injury or death.

EN 250: 2000 CERTIFIED BC
The PPE (Personal Protective Equipment) described in this instruction manual has been subjected to type approval testing and certified in accordance with the EN 250: 2000 standards (D.e. 89/686/EEC category III, as harness for SCUBA) and EN 1809 (D.e. 89/686/CEE category II, as buoyancy compensator) by Registered Test Center n° 0474 RINA, Via Corsica 12, 16128 GENOVA, ITALY.

<table>
<thead>
<tr>
<th>Model</th>
<th>EN250: 2000</th>
<th>EN 1809</th>
<th>Marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYBRID/SHE DIVES</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>HYBRID PURE</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>HYBRID PRO TEC</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>DRAGON MRS PLUS</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>KAILA MRS PLUS</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>F-LIGHT</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>PRESTIGE MRS PLUS</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>PRIME</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>SPIRIT</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>ROVER DC/PRO DC</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>PEGASUS MRS PLUS</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>JOURNEY ELITE</td>
<td>0474</td>
<td>0474</td>
<td>CE0426</td>
</tr>
<tr>
<td>Technical characteristics</td>
<td>HYBRID/HYBRID SHE DIVES</td>
<td>HYBRID PURE</td>
<td>HYBRID PRO TEC</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------</td>
<td>-------------</td>
<td>---------------</td>
</tr>
<tr>
<td><strong>Inflator</strong></td>
<td>Ergo</td>
<td>Ergo</td>
<td>Ergo</td>
</tr>
<tr>
<td><strong>Sealing</strong></td>
<td>High frequency</td>
<td>High frequency</td>
<td>High frequency</td>
</tr>
<tr>
<td><strong>Buoyancy bag material</strong></td>
<td>Nylon 420/ Nylon 420</td>
<td>Nylon 420/ Nylon 420</td>
<td>Cordura 1000/ Nylon 420</td>
</tr>
<tr>
<td><strong>Backpack</strong></td>
<td>Foldable</td>
<td>Foldable</td>
<td>Foldable</td>
</tr>
<tr>
<td><strong>Cummerbund</strong></td>
<td>Quick Adjust System</td>
<td>Waist strap and cam buckle</td>
<td>Quick Adjust System</td>
</tr>
<tr>
<td><strong>Weight (size L)</strong></td>
<td>3,8kg / 3,7kg</td>
<td>3,1kg</td>
<td>4,4kg</td>
</tr>
<tr>
<td><strong>MRS Plus</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Trim Weight</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Soft Grip</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BPS (back protection system)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>BPS Plus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suspension system</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Metal rings</strong></td>
<td>7</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Acetatic rings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pockets</strong></td>
<td>2 with zip, self-draining</td>
<td>1 with zip, self-draining</td>
<td>2 with zip, self-draining</td>
</tr>
<tr>
<td><strong>Manual valves</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### SIZES TABLE

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SIZE</th>
<th>WEIGHT</th>
<th>HEIGHT</th>
<th>WAIST CIRCUMFERENCE</th>
<th>CHEST CIRCUMFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYBRID / HYBRID PURE / DRAGON</td>
<td>XXS-XS</td>
<td>&lt;55kg/120lbs</td>
<td>&lt;165cm/5' 5&quot;</td>
<td>70-90cm/27-35&quot;</td>
<td>&lt;95cm/37&quot;</td>
</tr>
<tr>
<td>MRS PLUS / F-LIGHT / PRESTIGE MRS PLUS</td>
<td>S</td>
<td>50-70kg/110-155lbs</td>
<td>165-175cm/5' 5&quot; - 5' 9&quot;</td>
<td>75-95cm/29-37&quot;</td>
<td>85-105cm/33-42&quot;</td>
</tr>
<tr>
<td>SPIRIT / PRIME / ROVER PRO DC / ROVER DC / HYBRID PRO TEC / PEGASUS MRS PLUS / JOURNEY ELITE</td>
<td>M</td>
<td>60-80kg/130-175lbs</td>
<td>165-180cm/5' 5&quot; - 5' 11&quot;</td>
<td>90-115cm/35-45&quot;</td>
<td>95-115cm/29-45&quot;</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>70-90kg/155-200lbs</td>
<td>170-185cm/5' 7&quot; - 6' 1&quot;</td>
<td>100-120cm/40-47&quot;</td>
<td>105-120cm/42-47&quot;</td>
</tr>
<tr>
<td></td>
<td>XL</td>
<td>&gt;80kg/&gt;175lbs</td>
<td>&gt;180cm/5' 11&quot;</td>
<td>110-140cm/43-55&quot;</td>
<td>&gt;120cm/47&quot;</td>
</tr>
<tr>
<td>KAILA MRS PLUS / HYBRID SHE DIVES</td>
<td>XXS</td>
<td>&lt;50kg/110lbs</td>
<td>&lt;160cm/5' 3&quot;</td>
<td>65-85cm/25-33&quot;</td>
<td>&lt;85cm/33&quot;</td>
</tr>
<tr>
<td></td>
<td>XS</td>
<td>&lt;50kg/110lbs</td>
<td>&lt;160cm/5' 3&quot;</td>
<td>65-85cm/25-33&quot;</td>
<td>&lt;85cm/33&quot;</td>
</tr>
<tr>
<td></td>
<td>S</td>
<td>45-65kg/100-145lbs</td>
<td>150-170cm/4' 11&quot; - 5' 7&quot;</td>
<td>80-105cm/31-42&quot;</td>
<td>85-95cm/33-37&quot;</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>50-70kg/110-155lbs</td>
<td>165-175cm/5' 5&quot; - 5' 9&quot;</td>
<td>90-115cm/35-45&quot;</td>
<td>95-115cm/29-45&quot;</td>
</tr>
<tr>
<td></td>
<td>L</td>
<td>&gt;60kg/130lbs</td>
<td>&gt;170cm/5' 7&quot;</td>
<td>85-115cm/33-45&quot;</td>
<td>&gt;90cm/35&quot;</td>
</tr>
</tbody>
</table>

### LIFT TABLE

<table>
<thead>
<tr>
<th>MODEL</th>
<th>XXS</th>
<th>XS</th>
<th>S</th>
<th>M</th>
<th>L</th>
<th>XL</th>
<th>XXL</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYBRID</td>
<td>140 N</td>
<td>140 N</td>
<td>190 N</td>
<td>190 N</td>
<td>220 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(19,3 kg/42.5 lbs)</td>
<td>(19,3 kg/42.5 lbs)</td>
<td>(22,5 kg/49.6 lbs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYBRID SHE DIVES</td>
<td>140 N</td>
<td>140 N</td>
<td>140 N</td>
<td>170 N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(17,3 kg/38.1 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HYBRID PURE</td>
<td>150 N</td>
<td>150 N</td>
<td>150 N</td>
<td>150 N</td>
<td>150 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
</tr>
<tr>
<td>HYBRID PRO TEC</td>
<td>245 N</td>
<td>245 N</td>
<td>245 N</td>
<td>245 N</td>
<td>245 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
<td>(25,0kg/55,1 lbs)</td>
</tr>
<tr>
<td>DRAGON MRS PLUS</td>
<td>140 N</td>
<td>140 N</td>
<td>170 N</td>
<td>190 N</td>
<td>220 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(17,3 kg/38.1 lbs)</td>
<td>(19,3 kg/42.5 lbs)</td>
<td>(22,5 kg/49.6 lbs)</td>
<td>(22,5 kg/49.6 lbs)</td>
<td>(22,5 kg/49.6 lbs)</td>
</tr>
<tr>
<td>KAILA MRS PLUS</td>
<td>140 N</td>
<td>140 N</td>
<td>140 N</td>
<td>160 N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
</tr>
<tr>
<td>F-LIGHT</td>
<td>140 N</td>
<td>140 N</td>
<td>160 N</td>
<td>200 N</td>
<td>235 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
</tr>
<tr>
<td>PRESTIGE MRS PLUS</td>
<td>140 N</td>
<td>140 N</td>
<td>160 N</td>
<td>200 N</td>
<td>235 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
</tr>
<tr>
<td>SPIRIT / PRIME</td>
<td>140 N</td>
<td>140 N</td>
<td>160 N</td>
<td>200 N</td>
<td>235 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
</tr>
<tr>
<td>ROVER DC / ROVER PRO DC</td>
<td>140 N</td>
<td>140 N</td>
<td>160 N</td>
<td>200 N</td>
<td>235 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(14,2 kg/30.8 lbs)</td>
<td>(15,3 kg/33.7 lbs)</td>
<td>(16,3 kg/35.9 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
<td>(24,0 kg/52.9 lbs)</td>
</tr>
<tr>
<td>PEGASUS MRS PLUS / JOURNEY PLUS</td>
<td>200 N</td>
<td>200 N</td>
<td>200 N</td>
<td>200 N</td>
<td>200 N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
<td>(20,5 kg/45.1 lbs)</td>
</tr>
</tbody>
</table>
REFERENCES TO EN 250: 2000 - OBJECT - DEFINITIONS - LIMITS

■ Object: The requirements and tests provided for in EN 250 are aimed at providing a minimum safety level for the operating of diving breathing apparatuses at a maximum depth of 50 m / 165 feet.

■ Scuba - Definition (EN 132): Self-contained, open-circuit compressed air underwater breathing apparatus in an apparatus which has a portable supply of compressed air carried by the diver, allowing him to breathe underwater.

■ Scuba - Minimum equipment (EN 250: 2000):
  a) Air cylinder / cylinders.
  b) Demand regulator.
  c) Safety device, e.g. pressure gauge / computer or reserve or alarm.
  d) Carrying frame or holding device for air cylinder(s) to mount the harness, or carrying system, e.g. backpack and/or straps, BC harness.
  e) Facepiece: mouthpiece assembly or full face mask or diving helmet.
  f) Operating instructions.

■ Limits (EN 250: 2000) - Maximum depth: 50 m / 165 feet.

■ SCUBA - Component units (EN 250: 2000): The SCUBA equipment may consist of separate component units such as cylinders, regulator and pressure gauge. The Mares BCs described in this manual may be used with any SCUBA components certified in compliance with EC directive 89/686. The air contained in the cylinders must comply with the requirements for breathable air set forth in EN 12021.

REFERENCES TO EN 1809 - OBJECTS - DEFINITIONS - LIMITS

■ Object: The EN 1809 directive examines the minimum safety requirements and the performance of inflatable buoyancy compensator vests.

■ Buoyancy Compensator Vest - Definition (EN 1809): A device allowing the diver to control his/her buoyancy during the dive.

■ Limits: The object of the EN 1809 Standard does not cover the requirements for floating devices or safety jackets. A buoyancy compensator vest is not intended to guarantee, on the surface, a head-up position to an unconscious or a temporarily disabled diver.

WARNING

Read this manual carefully. The improper use of any diving equipment can result in serious injury or death. SCUBA diving equipment should be used by certified divers only. Professional training should be obtained exclusively from a certified instructor. For your protection, your equipment should be serviced by Mares or a Mares AUTHORIZED SERVICE CENTER.

The BCs described in this manual have been tested and certified for temperatures between -20°C and +60°C.

IMPORTANT

Read the instructions carefully. The BC is not a life vest: it does not guarantee a head-up position of the diver on the surface. If the instruction manual is lost, it can be re-ordered from your Mares dealer. Before use, check for any air leaks and make sure all the components of the BC are working correctly. Connect the LP hoses to a Low Pressure port of the 1st stage BEFORE connecting the regulator to the tank.

After use, rinse the inside and outside of the BC thoroughly with fresh water. This operation is particularly important after use in a swimming pool. Inadequate maintenance may result in damage to the BC or impair its operation. Inflate the BC slightly before storing.

ERGO INFLATOR

The Ergo inflator (Fig. 1) is designed to guarantee immediate and precise buoyancy adjustment.

The Ergo inflator was designed to operate with a minimum supply pressure of 8 bar / 117 psi and maximum supply pressure of 12 bar / 176 psi. Check the technical specifications of your regulator before use.
**WARNING**

The hose must be connected to a LOW PRESSURE port of the first stage. Connection to a high pressure port may result in serious injury or death for the diver and damage the equipment.

- Connect the LP hose quick connect end to the inflator.
- For easier connection, this operation must always be performed while the first stage is not pressurized.
- Fasten the hose to the corrugated hose using the quick-connect LP-hose retainer (Fig. 2).

----

**CONNECTION TO THE FIRST STAGE**

- Connect the LP hose to a LOW PRESSURE port of your first stage.

**INFLATING THE BC**

To inflate your BC, simply depress the concave power inflator button (Fig. 3).

---

1) Corrugated hose  
2) Valve trigger line  
3) Line bushing  
4) Body  
5) Purge button  
6) Mouthpiece  
7) Air intake button  
8) Valve bushing  
9) Filter  
10) Quick connector  
11) Protection cap
When the button is released, air delivery must immediately stop; if it does not, refer to an Authorized Mares Support Center.

**DEFLATING THE BC**

There are two ways to deflate the BC:

1) lift the corrugated hose upward and depress the convex oral inflator button (Fig. 4) or

2) pull the inflator downward (Fig. 5).

**ORAL INFLATION**

The BC can be inflated orally using the soft mouthpiece (Fig. 6).

Follow the steps below:
- Put your lips on the mouthpiece.

**WARNING**

Do not use your BC as a source of breathable air. Do not inhale air through the inflator mouthpiece. The gas inside the BC may be incapable of supporting life.

- Press the purge button while exhaling into the mouthpiece.
- Then release the purge button.

Repeat the above sequence for as long as is necessary to achieve the desired level of buoyancy.

**Q.A.S. (QUICK ADJUST SYSTEM) SYSTEM**

Before the BC is used underwater, it must be adapted to the size of the diver by making some adjustments.

If the cummerbund needs to be tightened or enlarged, remove it from both the left and right inner loops and then, using the adjusting strap with buckle, obtain the desired length by moving the Velcro-covered part backward or forward (Fig. 7).
After completing the adjustment, put the cummerbund back inside its loops and check the resulting fit, taking into account the thickness of the wetsuit and ensuring that the two sides are exactly symmetrical. The cummerbund is correctly adjusted when the Velcro flaps overlap each other at the center of the diver’s waist. After obtaining the desired girth, use the quick-adjusting shoulder straps on the left and right side to finish customizing the fit.

**CAUTION**

If you have followed the above instructions correctly, the waistband will be properly stretched and will not wrinkle. If any wrinkles are present, that means that the straps are too tense with respect to the adjusted waistband length.

**ACCESSORIES**

The accessories for Mares BCs are of the highest quality and clearly demonstrate what care for the smallest details means. All the buckles are in technopolymer. D-rings are provided for attaching cameras and other accessories. The efficient swivel-snap hose retainers guarantee optimum and safe positioning of the Console or of the Octopus. All BCs also come with an unbreakable two-tone whistle. The inflator features an efficient protection cap for hose connection.

**INTEGRATED WEIGHT SYSTEM**

**MRS PLUS**

MRS Plus represents the evolution of the first mechanical-release weight system introduced on the market. It introduces a newly-designed buckle system: simply click the buckle in place for optimum security, and a single outward pull releases your weights. The interior is divided into multiple sections in the event you do not use the full capacity.

**ASSEMBLING THE INTEGRATED WEIGHT**

Open the zipper and insert the desired quantity of weights, up to a maximum of 6kg/13lbs for sizes M and bigger and 4kg/9lbs for sizes S and smaller in each weight pouch (Fig. 8).

When using a limited quantity of weights, close the Velcro (A) inside the pocket to prevent the weights from shifting during the dive (Fig. 9).
Close the zipper.

**INSTALLING THE MRS PLUS ONTO THE BC**

Insert the MRS Plus in the special housing inside the pocket of the deflated BC. Insert the male part of the buckle (A) of the MRS Plus weight pouch into the female buckle (B) located inside the BC pocket, pressing until it clicks (Fig. 10).

Make sure that the mechanism of the male buckle (A) is perfectly fastened to the female buckle (B) (Fig. 11).

**RELEASING THE MRS PLUS FROM THE BC**

To release the MRS Plus weight pouch from the BC, grasp the handle (C) of the MRS Plus weight pouch (Fig. 12).

Pull the handle (C) forward firmly to detach the male buckle (A) from the female buckle (B), and then pull out the whole weight pouch (Fig. 13).
SOFT GRIP
Neutrally buoyant padding, specifically designed to provide unparalleled comfort and ensure maximum adherence between the wetsuit and the BC.

B.P.S. (BACK PROTECTION SYSTEM)
A neutrally buoyant padding system that is both rugged and secure, thanks to a combination of materials with different mechanical properties. The capacity to absorb shocks is greatly superior to that of ordinary protection materials. What’s more, the contoured cut and the special design of the seams ensure exceptional adherence between the wetsuit and BC.

OVERPRESSURE / RAPID EXHAUST VALVE
Your Buoyancy Compensator is equipped with over-expansion relief, quick air dump valves (Fig. 14). The valve automatically releases air from the BCs when the internal pressure exceeds the external pressure by a preset amount.
The purpose of this valve is to prevent the BC from becoming overpressurized, thus being damaged. This valve is also used for rapid exhaust when pulling the knob connected to the line.
Two such exhaust valves are located at the upper right and lower right to favor the release of excess air regardless of the position of the diver.
The lower valve has a positive-buoyancy knob on the pull string for easy air release in the head-down position.

WARNING
A leakage of micro-bubbles does not necessarily indicate that the BC is losing pressure, but instead could be air that was trapped in spaces between the fabric fibers.

POCKETS
The pockets are high-capacity and can be easily accessed with the opposite-side arm. Always remember to close the zip or the Velcro flap to avoid losing any objects contained in the pockets.

WARNING
USE OF BC POCKETS AS WEIGHT HOLDERS (TEARING POCKETS): the pockets are not designed to hold excessive weight. They are intended exclusively to contain small objects. Inserting weights, stones, or sharp or pointed objects is considered improper use and will consequently invalidate the warranty.

HOSE RETAINER
The BC features a convenient quick-connect hose retainer for dive instruments (Fig. 15).
OPERATING INSTRUCTIONS

⚠️ WARNING
Read the following instructions carefully. The improper use of any diving equipment may damage your equipment or result in serious injury or death.

The purpose of a BC is to make diving easier by enabling the diver to maintain neutral buoyancy.
Prior to diving in open water conditions, practice using your BC in a swimming pool. Use all gear that you would normally use in an open water dive.
First of all, adjust the cummerbund and backpack to fit your size. A correct adjustment helps ensure optimal comfort and stability.

FASTENING THE BC TO A SCUBA TANK

⚠️ WARNING
Your BC was designed to be used with SCUBA tanks having the following minimum and maximum characteristics:
Diameter: min. 14.1 cm (5.5 in) - max. 21.5 cm (8.5 in)
Volume: single tank: max. 20 l; double tank: max. 2 x 10 l.

PRE-DIVE INSPECTION

1) Check that all fittings and valves are securely fastened and that the locking nuts are tightened.
2) Make sure that tank and backpack are properly connected (Fig. 16-17).
3) Inflate the BC and wait for approximately 15 minutes. If the BC deflates at all, do not use it and bring it to a Authorized Mares Support Center for inspection.
4) Test the inflate and deflate functions of the Ergo inflator several times. Carefully check the oral inflation system through the mouthpiece to be sure it operates properly.
5) Operate the overpressure / rapid exhaust valves (Fig. 18) to be sure they are functioning properly.
6) Do not leave the BC in the sun and do not place or drag it on rough surfaces that might chafe or puncture it.

**WARNING**

*WHEN USING A BC WITH INTEGRATED WEIGHTS, ALWAYS SECURE THE UNIT TO A LINE IF YOU ARE PLANNING TO PUT ON THE BC IN THE WATER. THIS IS BECAUSE, IN CERTAIN CASES, THE SCUBA UNIT CAN BE NEGATIVELY BUOYANT EVEN WITH THE BC FULLY INFLATED.*

**DONNING**

- Loosen the shoulder straps all the way and put your left arm through the left arm hole of the BC.
  
  Be sure the corrugated hose and LP hose are not tangled. Then proceed with the right arm.
- Close the waistband securely (Fig. 19, part 1).
- Fasten the chest strap, if present (Fig. 19, part 2).
- Tighten the shoulder straps (Fig. 19, part 3).
- Fasten the waist strap and adjust by pulling both strap ends simultaneously.

**WARNING**

*A BC is not a safety jacket or personal floatation device and is not designed to keep the diver on the surface with the head out of the water should he/she become unconscious.*

**OPERATION**

- **ON THE SURFACE**
  If you intend to remain on the surface, inflate your BC to increase your positive buoyancy.

- **DURING THE DIVE**
  Deflate the BC either by pressing the inflator purge button while keeping the corrugated hose in upward position (Fig. 4) or, using the rapid exhaust valve, by pulling the inflator downward (Fig. 5).

- **NEUTRAL BUOYANCY**
  Once the desired depth has been reached, neutral buoyancy can be obtained by blowing in and/or exhausting the appropriate air volume into/from the BC.

- **ASCENT**

  **WARNING**

  *When ascending, your buoyancy must be controlled to avoid too rapid an ascent when approaching the surface. For information concerning a safe rate of ascent, refer to a certified diving instructor or your diving manual. Follow your decompression table or diving computer during the whole ascent. Failure to make a slow, controlled ascent could lead to serious injury or death.*

  When ascending, the air in the BC expands thus increasing positive buoyancy, hence your ascent rate. Therefore, it is important to control inflation to obtain a correct and consistent rate of ascent.
**WARNING**
Do not use your BC to lift objects in the water. Should you drop the object, you could become too buoyant and your rate of ascent could become too rapid and potentially dangerous and serious injury or death could result.

**MAINTENANCE**
Proper maintenance will ensure long and trouble-free life to your BC. For that reason, it is essential for you to follow the instructions listed below:

1) Avoid prolonged exposure to direct sunlight.
2) Do not leave any pointed or hard objects in or around the BC.
3) Store the BC only when completely dry. Store partially inflated in a cool, dry and dark place.
4) At the end of every dive, always insert the protection cap on the quick connector after disconnecting the LP hose (Fig. 4).
5) At the end of every open water or swimming pool dive, always rinse your BC inside and out with fresh water.

To rinse it inside, do the following:
- Fill the BC approximately 1/4 full with fresh water (to get water inside the BC, depress the oral inflator button and allow the water to enter through the inflator mouthpiece). Use only a gentle water stream while filling.
- Inflate the BC orally and shake it from side to side and up and down.
- Keeping the bladder up and the corrugated hose down, purge water through the mouthpiece while keeping the oral inflator button down.
6) Rinse thoroughly all hardware and accessories on the BC.

**WARNING**
Do not use any solvents or detergents for cleaning your BC. Such chemicals may damage your BC to the extent that it could malfunction underwater, leading to serious injury or death.

**FREQUENCY OF CHECKS**
It is recommended that you have your BC checked once a year by an Authorized Mares Support Center.

**STORAGE**
Before storing your BC, rinse it with fresh water and drain the water from the bag. Leave to dry completely, and then inflate slightly and place in a dry location out of the sun.

**USE OF THE BCS WITH OXYGEN RICH MIXTURES**

**WARNING**
This product was designed for use with air or with Nitrox up to a maximum of 40% oxygen. The use of mixes with oxygen concentrations higher than 40% and/or the addition of helium can cause damage or deterioration and compromise the proper functioning of the BC.

**WARNING**
FOR NORTH AMERICA ONLY
Mares regulators, alternative second stages, and gas delivery components are designed for and compatible with open circuit SCUBA using compressed air or enriched air (Nitrox) mixtures not exceeding 40% Oxygen ONLY. These limits conform to the DAN Nitrox Industry Workshop Proceedings of November, 2000. Failure to follow this warning may result in SERIOUS INJURY or DEATH to the user due to fire, explosion, or the deterioration or failure of the equipment.

WHEN REPAIR OR SERVICING IS REQUIRED, THIS SHOULD BE PERFORMED ONLY BY MARES OR BY AN AUTHORIZED MARES SUPPORT CENTER.
THE LIST OF AUTHORIZED MARES SUPPORT CENTERS IS AVAILABLE AT OUR WEBSITE, WWW.MARES.COM.