PRIOR TO PERFORMING SERVICE

WHILE THE CUSTOMER IS STILL PRESENT

- Ask to see the original sales receipt or invoice showing the date of purchase.
- If over one year old, ask to see record of previous service, to learn which parts were replaced and what previous problems were experienced.)
- Ascertain the type of service to be performed (annual service or a specific repair).
- If a problem is being reported, determine the level of customer satisfaction and attempt to resolve any dissatisfaction by offering to instruct the customer how to better use and maintain the product. (Refer to the Recommended Maintenance Procedures outlined in the Administration section of this guide.)
- Ask the frequency of use since the last service, and what types of diving conditions and environments the BC has been exposed to.
- Ask how often the BC is rinsed during and after a dive trip, and the methods of rinsing and storage.
- Determine if warranty is still valid based upon the Terms and Conditions of Warranty for the BC. (Refer to the Warranty Guidelines outlined in the Administration section of this guide.)

GENERAL AIRLEAK INSPECTION

1. Connect the Power Inflator to a pure air source, via a quick disconnect hose, and depress the inflator button repeatedly to ensure that airflow is unobstructed.

⚠ **CAUTION: Before performing the next step, check to ensure that an Oceanic airway is attached to the BC. Certain Ovation and Ocean Sport BCs do not have a lower overpressure relief valve, and rely on the function of one that is included in the Oceanic integrated airway assembly that was originally sold with the BC.**

⚠ **WARNING: Inflation of the BC without the original airway attached may result in permanent, unrepairable damage to the bladder, and/or serious personal injury.**

2. Hold the inflator button depressed to fully inflate the BC until the Overpressure Relief Valve opens to release excess pressure. Examine the operation of this relief valve by inflating the BC repeatedly to ensure that the valve opens to relieve excess pressure, yet closes immediately to allow the bladder of the BC to remain taut and fully inflated.

3. Press the deflation button of the Power Inflator to ensure a rapid and unobstructed exhaust. Fully inflate the BC once again, and disconnect the Power Inflator from the air source to listen closely for any signs of leakage.

△ **NOTE: If leakage is not immediately detected, allow the BC to stand for at least 6 hours to ensure that none exists. If no leakage is found after 6 hours, proceed directly to the Visual Inspection & Service procedures**

4. If any leakage is heard, or if the BC has begun to deflate within six hours, fully inflate the BC once again with the use of the Power Inflator and completely immerse in fresh water to determine the source of leakage.

   Perform a complete overhaul according to the service procedure given for the specific component from which the leakage is detected.

SHOULDER STRAP & BUCKLE INSPECTION

1. Check webbing for signs of fraying, wear, or lacerations.
2. Inspect stitching at buckle ends to ensure it is intact.
3. Check quick release buckles for any signs of breakage or stress cracks.

△ **NOTE: If the shoulder straps or buckles are not found to be in satisfactory condition, return the BC to Oceanic for evaluation and replacement of these items, which may be performed at a nominal fee if not covered under warranty.**

WAISTBAND & CUMMERBUND INSPECTION

1. Check the cummerbund for signs of wear, to ensure that it is intact and completely attached to the waistband. Retaining loops should be securely stitched and fastened.
2. Inspect the waistband retaining loops which are stitched directly onto the BC to ensure that they are intact, securely stitched and in good condition.

△ **NOTE: If the waistband retaining loops are not found to be in satisfactory condition, return the BC to Oceanic for evaluation and replacement, which may be performed at a nominal fee if not covered under warranty.**

OUTER FABRIC & BLADDER INSPECTION

1. Closely inspect the outer fabric for any signs of wear or abrasion, and advise the customer of the condition if any is found.
2. Inspect the seams and outer stitching to ensure that they are intact and in good condition.
3. Look for any existing patches and closely inspect each one to ensure that it is correctly applied and perfectly sealed onto the outer material.

△ **NOTE: Oceanic USA provides a bladder replacement service at a cost much lower than that of a new BC. This price may vary, however, depending on the condition of the other components. Call Customer Service for details, or send in the unit for an evaluation and estimate.**

4. Completely fill the BC through the mouthpiece of the power inflator with the correct mixture of water and an anti-bacterial urethane conditioning solution, as specified by the directions given by the manufacturer of the solution. Agitate the solution inside the BC and allow to set for the correct amount of time specified by the directions given by the manufacturer.
5. If present, remove the lower Overpressure Relief Valve guardcap and inner components to completely drain the solution, and flush the BC with fresh water. Drain the BC completely once again, and allow to dry with the Overpressure Relief Valve removed.
6. Return the components of the Overpressure Relief Valve to their original position, and tighten the guard cap onto the upper retainer by hand until secure.

LOWER OVERPRESSURE RELIEF VALVE INSPECTION & SERVICE

1. Using a retaining nut tool if necessary, loosen the guardcap(46) in a counter-clockwise direction to remove from the valve retainer, exposing the spring(45), seat carrier(44), and seat(43).

2. Closely inspect the guardcap for any signs of cracking or distortion, especially around the threads. If found, discard and replace with new.

3. Remove the spring and seat carrier and inspect these items to ensure they are free of any signs of corrosion or other damage. Discard and replace with new if found.

4. Remove the seat from the seat carrier, discard, and replace with new. Set the seat carrier containing the seat aside.

5. Closely examine the valve retainer to determine whether it is fastened onto a lower valve retainer inside the BC bladder, or is the newer one-piece welded design.

△ **NOTE: If the BC contains the original two-piece upper and lower valve retainer design, follow steps 6-14 to perform a complete inspection of the valve retainers. Or, if the B.C. contains a one-piece welded valve retainer design, skip directly ahead to step 15.**

6. Fit the indexed head of the upper retainer tool into the upper valve retainer(33) and insert the stem of the lower retainer tool through the flattened side of the upper retainer tool. While holding the upper retainer tool secure, turn the lower retainer tool as necessary until it mates inside the two rounded tabs of the lower retainer(31).

7. While holding the lower retainer tool securely fitted onto the lower retainer, rotate the upper retainer tool counter-clockwise to loosen and turn the upper valve retainer off the lower.

8. Remove the double lipped gasket(32) from the bladder and discard. DO NOT attempt to reuse.

9. To remove the lower valve retainer from the bladder, create a downward fold in the bladder which runs through the center of the retainer opening. Turn the lower retainer vertically and gently pull out of the opening, being very careful to avoid tearing the bladder.

10. Closely inspect the condition of the upper and lower retainers, checking for any signs of damage or distortion, such as stress cracking, especially around the threads.
    NOTE: It is important to discard both parts and replace with new if any damage is found to either one.

11. To insert the lower retainer(31) into the bladder, create a downward fold in the bladder which runs through the center of the retainer opening. Turn the lower retainer vertically and gently work it through the opening, being very careful to avoid tearing the bladder. Turn the lower retainer inside the bladder to position the threaded stem facing up towards the opening, and move to one side of the opening.

12. Replace the double seal gasket(32) onto the bladder. Ensure that the double gasket seal is perfectly aligned and seated over both surfaces of the opening in the BC fabric.

13. Move the lower retainer into place, with the threaded stem protruding through the double seal gasket. Mate the upper retainer(33) onto the lower retainer and turn only until threading is started.

14. Check to ensure proper threading, and using the retainer tools, hold the lower retainer secure while tightening the upper retainer until completely snug.

⚠ **CAUTION: DO NOT cross-thread or overtighten.**

15. Place the carrier inside the upper retainer with the seat facing down.

16. Place the large end of the spring onto the center of the carrier, and tighten the guardcap onto the upper retainer by hand until completely snug.

17. After the overpressure valve assembly has been installed onto the retainer assembly, perform the General Airleak Inspection, and complete the remaining Visual Inspections and Service procedures as given.