

AP VALVES Inspiration / Evolution

PRE-DIVE CHECKLIST

Check for signs of dirt, deterioration and damage to any part of the CCR at all stages

DIVE NUMBER

1 2 3

- 1. Inspect pneumatics hoses
- 2. Inspect handsets, cables, electrical connections
- 3. Check batteries
- 4. Refill scrubber basket if necessary
- 5. Install charged basket, lubricated o-ring and spacer ring
- 6. Check lid o-ring and attach lid
- 7. Analyze, check pressure, and install filled gas cylinders
 - O₂ _____ % _____ psi/bar Diluent _____ % _____ psi/bar
 - O₂ _____ % _____ psi/bar Diluent _____ % _____ psi/bar
 - O₂ _____ % _____ psi/bar Diluent _____ % _____ psi/bar
- 8. Install canister (snorkel to right), blow oxygen hose clear and attach to solenoid inlet, attach hoses to counterlung T-pieces
- 9. Assemble counter lungs and install manual gas addition valves
- 10. Check hoses, mouthpiece, verify non-return valve operation, and install ensuring gas is to the right
- 11. Negative pressure test
- 12. Turn on cylinders, pressurize lines, turn off, look for pressure drop
- 13. Turn on cylinders
- 14. Check interstage pressures (oxygen (7-7.5 bar) and diluent (8.5-9.5 bar)
- 15. Turn on electronics, confirm all OK
- 16. Calibrate—"Yes" before every dive if handset has been turned off
- 17. Verify operation of oxygen and diluent manual addition valves
- 18. Verify operation of automatic diluent addition valve
- 19. Positive pressure test
- 20. If not diving immediately, turn cylinders off, drain IP lines, flush breathing loop with air, and turn electronics off
- 21. Replace cover
- 22. Stow

Immediate Pre-Dive Checks:

- 1. Verify all gas supplies on
- 2. Verify bailout supply (ies) and check bailout regulators
- 3. Check BC
- 4. Confirm ADV is operational
- 5. Verify both handsets on AND DO NOT SWITCH OFF
- 6. Check PO₂ at least 0.7 atm
- 7. Verify mouthpiece (open/closed)
- 8. Check for gas leaks

Appendix ____
PROCEDURES GUIDE
AP VALVES INSPIRATION / EVOLUTION

Because CCRs are in a continual state of modification and development, these procedures are provided as guidelines only. The manufacturer's procedures should be referred to and followed in all cases. In the event of any discrepancies, always follow the most current version of the manufacturer's instructions. **At all stages the operator should be checking for signs of dirt, deterioration or damage to any part of the apparatus.** Note that gas flow in the Inspiration flows in from over the left shoulder, and out over the right shoulder.

There are several versions/models of AP rebreathers. These procedures cover the Classic Inspiration, Inspiration with Vision electronics, Evolution, and Evolution Plus. Some differences exist when working with the Vision electronics compared to the Classic electronics. When there are differences, the step will be listed twice, with the step number followed by a "c" for Classic and a "v" for Vision electronics (example, Step "3c" versus "3v"). Follow the procedures for the electronics you are using. Note that for Classic electronics, button use is achieved by sliding the magnetic switches upward and releasing. Vision electronics button use is achieved by pressing the switch pads with the ball of a finger.

PRE-DIVE PROCEDURES
AP VALVES INSPIRATION / EVOLUTION

Step #	Step	Procedure
1	Inspect pneumatics hoses	Check all gas lines, manifold, tubing, connections, regulators, addition valves, mountings and SPGs for signs of looseness, dirt, corrosion or damage. Replace if necessary.
2c	Inspect handsets, cables, electrical connections	Inspect both handsets, cables, mountings, electronics pod, alarm, solenoid, sensors, battery box and connectors for correct alignment, looseness, dirt, corrosion and damage, clean or replace as necessary.
2v	Inspect handset, HUD, cables, electrical connections	Inspect the handset, HUD, electrical cable leading to handset and audio alarm, fiber optic cable leading to HUD, mountings, electronics pod, alarm, solenoid, sensors, battery box and connectors for correct alignment, looseness, dirt, corrosion and damage, clean or replace as necessary.
3c	Check batteries	Remove battery box lid and install two 2CR223 batteries in battery box, contacts down. Place lid on battery box and install mounting screw. Turn on both handsets by first moving the black switch to the up position and then sliding the left button up. On the handset you turned on first (master handset), when it says "DIVE NOW?" slide the center button up. When it says "CHECK DILUENT" confirm with the center button. When it says "CALIBRATE?" say "No" using the right button. When it says "OPEN O2 VALVE" confirm using the center button. All 3 sensors should be reading approximately 0.21 atm. The alarm should be beeping and the screen should be alternating between "MASTER 0.70" and "LOW OXYGEN." If you see a message that says "LOW BATTERY" the battery for that handset must be replaced before continuing. Wait for the second handset to display slave mode information. Turn off first handset by sliding black switch down. Slave handset should change to master handset display. Turn on second handset. The new master handset should be showing "LOW OXYGEN" warning. If it also alternates to "LOW BATTERY" warning then the battery for that handset needs to be replaced. After the second handset enters slave mode, turn off the current master handset. The slave handset should switch to master handset mode. Turn master handset off.
3v	Check batteries	Remove the electronics cover by unscrewing center retaining nut and

		lifting off center tube. Remove battery box lid and install two 2CR223 batteries in battery box, contacts down. Place lid on battery box and install mounting screw. Turn on the electronics by depressing the left button for a minimum of four seconds. The handset will automatically scroll through a series of self-tests. When it gets to the battery checks, it will test each battery under load. If either battery indicator reads less than 2 squares after this check, replace the battery indicated. Turn electronics off by depressing the left and right buttons simultaneously, then confirming power down using the right button.
4	Refill scrubber basket if necessary	See specific absorbent basket packing procedure following this section
5	Install charged basket, lubricated o-ring and spacer ring	Drop charged basket into housing, spring-side down. Clean and lightly lubricate lid and sidewall o-rings with appropriate lubricant. Place sidewall o-ring on top of the absorbent basket. Place spacer ring on top of sidewall o-ring.
6c	Check lid o-ring and attach lid	Install lid on scrubber housing aligning notch in lid with snorkel on housing. While holding lid down, secure lid with four lid screws. Do not over tighten.
6v	Check lid o-ring and attach lid	If CCR is equipped with the optional temperature stick, connect the temperature stick wiring connector. Insert excess wiring into the electronics cover to prevent wires being pinched when the lid is installed. Install lid on scrubber housing aligning notch in lid with snorkel on housing. While holding lid down, secure lid with three clips. Clips are spring loaded, so you may need to lift them slightly before rotating them 90° to secure them.
7	Analyze, check pressure, and install filled gas cylinders	Select appropriate diluent for intended dive profile. Analyze the gas in both the diluent and oxygen cylinders. Confirm both are full. Place cylinders in case, oxygen on the right, diluent on the left. Check o-rings are in place and attach the regulators. Secure cylinders with Velcro bands .
8	Install canister (snorkel to right), blow oxygen hose clear and attach to solenoid inlet, attach hoses to counterlung T-pieces	Place canister stack in center of case with Velcro restraining band between the snorkel and absorbent housing, and the snorkel laying on the right side against the backframe. Place breathing hoses into appropriate notches on top of case. Settle canister with snorkel nestled towards the bottom of the case next to the oxygen cylinder. Secure restraining band. Briefly turn on oxygen cylinder to blow solenoid oxygen line clear. Lubricate solenoid gas line o-ring and connect to solenoid fitting on top of lid using knurled collar. Do not over tighten. Route alarm cable through notch adjacent to left breathing hose notch and place alarm retaining ring on left counterlung T top. Clean and lubricate 2 o-rings on 2 breathing hoses coming from scrubber basket. Connect to top of T-fittings on each counterlung. Make barely finger tight.
9c	Route electronics cables	Place electronic hoses in case notches next to breathing hose notches. One handset and alarm cable on left, one handset on right.
9v	Route electronics cables	Place electronic line attached to handset through the case notch adjacent to left the breathing hose. Route the fiber optic cable leading to the HUD through the same notch if you will wear it on the left side of your mouthpiece, or through the right breathing hose notch if wearing it on the right side of your mouthpiece. If to the right, you may have to temporarily slide the scrubber canister down to allow it to be inserted.
9	Assemble counterlungs and install manual gas addition valves.	Confirm assembly screw is tight pushing addition valve button open and tightening assembly screw with fingers. Lightly lubricate both o-rings and place o-rings in addition valve mounts on counterlungs. Install manual addition valves on counterlung by placing on top of o-ring and tightening knurled collar until snug. Position so quick disconnect nipple

		points towards addition line. Oxygen additional valve attaches to exhalation (right) counter lung. Diluent manual addition valve attaches to inhalation (left) counter lung. Do not attach manual addition valves to counter lung while connected to gas supply lines. Confirm harness (2") and counter lung (1") straps are connected. Connect gas lines to manual addition valves.
10	Check hoses, mouthpiece, verify non-return valve operation, and install ensuring gas is to the right	Inspect mouthpiece barrel, hoses, connectors and o-rings for dirt, cuts, nicks, deterioration or damage; replace if necessary. Operate mouthpiece several times to ensure free operation. Open mouthpiece. Place inhalation (left) hose end against palm and try to inhale. If it is possible to inhale, then the exhalation valve is either missing, defective or installed incorrectly, or there is a hole in the hose; replace/reinstall as necessary. Repeat this process with the exhalation hose end (right) and attempt to exhale, if it is possible to exhale then the inhalation valve is either missing, defective or installed incorrectly, or there is a hole in the hose; replace/reinstall as necessary. Confirm gas flow is in from left and out to right. Close mouthpiece, check that o-rings on hose connections are in place, clean and lubricated, and attach to lower T's on counterlung. Ensure inhalation hose is connected to inhalation counter lung (left side). Make barely finger tight. With the hoses hanging down, check mouthpiece alignment. Bite tabs should be facing up. If not, loosen connectors and realign as necessary. Failure to check the mushroom valves can lead to CO₂ buildup within the breathing loop causing hypercapnea or death.
11	Negative pressure test	Place mouthpiece in mouth, open the mouthpiece and inhale through the mouth and out your nose until there is a slight vacuum. Close mouthpiece and remove from mouth. Wait 30 seconds. Open the mouthpiece. You should hear an inrush of air. If unsuccessful, check for loose or poor connections or a hole in the breathing loop.
12	Turn on cylinders, pressurize lines, turn off, look for pressure drop	Turn on the oxygen cylinder valve. Pressurize the lines. Turn off the valve. Watch the SPG and look for pressure drop. If drop is seen, check the oxygen regulator DIN connector. Try again. If drop is still seen, check all other connectors and solenoid. Repeat with diluent cylinder.
13	Turn on cylinders	Turn both cylinders on.
14	Check interstage pressures: oxygen (7-7.5 bar) and diluent (8.5-9.5 bar)	Using an interstage pressure (IP) gauge, check both oxygen and diluent IPs by disconnecting gas lines at the manual gas addition valves. Oxygen IP should be 100-110 psi (7-7.5 bar), diluent IP should be 125-140 psi (8.5-9.5 bar). Reconnect the gas lines to the manual addition valves.
15c	Turn on electronics, confirm all OK	Turn on both handsets by moving the black switch to the up position and sliding the left button up. On the handset you turned on first (master handset), when it says "DIVE NOW?" slide the center button up. When it says "CHECK DILUENT" confirm using the center button.
15v	Turn on electronics, confirm all OK	Turn on the electronics by depressing the left button for a minimum of two seconds. The handset will automatically scroll through a series of self-tests.
16c	Calibrate—"Yes" before every dive if handset has been turned off	If the handset was turned off for any reason, then start calibration ("YES") by sliding the left button up. The next screen asks for ambient pressure. If you know it, adjust up/down by sliding the left or right buttons as appropriate. Slide the center button up to confirm with default or true value. "OXYGEN PERCENTAGE" is then requested. Set to actual percentage of oxygen used (if different than 100%), or use 98% as a default. Slide the center switch up to confirm. Open the mouthpiece, and slide the center button up to confirm. Confirm "OPEN O2 VALVE" using the center button. The solenoid will begin adding oxygen until it

		says “CALIBRATING.” You will now have all three sensors providing oxygen readings. Close the mouthpiece!
16v	Calibrate—“Yes” before every dive if handset has been turned off	If the handset was turned off for any reason, then start calibration (“YES”) using the left button. “OXYGEN PERCENTAGE” is then requested. Set to actual percentage of oxygen used (if different than 100%), or use 98% as a default. Confirm with center switch. Open the mouthpiece, and confirm with center button. Confirm “OPEN O2 VALVE” using the center button. The solenoid will begin adding oxygen until it says “CALIBRATING.” You will now have all three sensors providing oxygen readings. Close the mouthpiece!
17	Verify operation of oxygen and diluent manual addition valves	Depress the manual diluent addition valve (inhalation counterlung on the left side). You should hear gas being added. Depress the manual oxygen addition valve (exhalation counterlung on the right side). You should hear gas being added.
18	Verify operation of automatic diluent addition valve	Place the mouthpiece in your mouth. Open mouthpiece. Inhale through your mouth and out your nose until you hear and feel gas being added from the automatic diluent addition valve. Close the mouthpiece.
19	Positive pressure test	Close the overpressure relief valve by screwing it clockwise. Inflate the breathing loop using the oxygen manual addition valve until the overpressure relief valve operates. Submerge the CCR in water, looking for bubbles. Pay particular attention to all breathing hose connectors. There should be no bubbles. If bubbles found, remove CCR from water and correct problem. Reopen overpressure relief valve.
20	If not diving immediately, turn cylinders off, drain IP lines, flush breathing loop with air, and turn electronics off	If you will not be diving until the following day, turn the cylinder valves off, and drain the IP lines using the manual gas addition valves. Flush the breathing loop manually with air until PO ₂ drops below 0.5 atm. Then turn the electronics off by as previously explained.
21	Replace cover	Replace the cover and fasten the case latches. On older Inspiration units, clip four case clips. On newer units and Evolutions, pull two black handles over case projections.
22	Stow	Stow the unit securely, so it will not shift during transport. Verify that no SPG hoses, electronics cables, or BC are pinched or liable to contact hard surfaces. Secure handsets to prevent mechanical shocks and vibration.
	Immediate Pre-Dive Checks:	
1	Verify all gas supplies on	Verify gas contents on SPG. Confirm cylinders are on by injecting gas into the breathing loop using first the oxygen and then the diluent manual gas valves, simultaneously watching appropriate SPG. If SPG needle moves during manual valve operation, check cylinder valves to insure they are turned on.
2	Verify bailout supply (ies) and check bailout regulators	Breathe from the alternate second stage on the BC inflator to confirm function. If used, turn bailout cylinder ON. Check SPG for contents. Breathe from bailout regulator, while watching SPG. SPG should remain steady. If not, confirm cylinder valve is ON.
3	Check BC	Verify BC LP inflator hose is attached. Add a small amount of air to BC with LP inflator.
4	Confirm ADV is operational	Insert mouthpiece in mouth and open. Inhale from mouth, and exhale through nose. Repeat until ADV activates, adding diluent into the loop. Close mouthpiece and remove from mouth.
5	Verify handsets are on AND DO NOT	Confirm handset(s) and HUD are operational. DO NOT SWITCH HANDSET(S) OFF UNTIL AFTER THE DIVE IS COMPLETED!

	SWITCH OFF	
6	Check PO ₂ at least 0.7 atm, pre-breathe	Place mouthpiece in mouth and open. Breathe on loop while watching handset. Confirm that all three sensor readings vary with respirations. Raise PO ₂ to at least 0.7 atm.
7	Verify mouthpiece (open/close)	If entering water while using the rebreather, leave mouthpiece in mouth, open. Otherwise, close mouthpiece and remove from mouth.
8	Bubble check	After entering water, submerge just below the surface and have buddy perform visual check of breathing loop and connectors for signs of leakage or bubbles. If found, correct before diving.

ABSORBENT BASKET PACKING PROCEDURES AP VALVES INSPIRATION and EVOLUTION

You must follow proper packing procedures when filling the absorbent basket. Improper filling can lead to channeling, and CO₂ buildup in the breathing loop. This can lead to diver injury or death.

Step #	Step	Procedure
1	Remove spider and upper scrim	Unscrew spider retaining nut. Remove spider and upper scrim.
2	Install lower scrim	Insure lower scrim is dry. Place in the bottom of the scrubber basket, with the split edges spread evenly against the inner walls of the basket.
3	Fill basket	Place the basket on a roll of tape or other suitable stand allowing the scrubber basket to sit flat and steady without resting directly on the thumb removal tab or thermistor cable. Pour CO ₂ absorbent granules into the center of the basket so that the grains push the scrim edges against the inner basket wall. Fill until about one third full. Fill from about 12 inches (30 cm) above the basket, to allow excess dust to blow off. Avoid skin contact. Ensure granules are evenly spread. Gently tap the basket and allow granules to settle (do not handle too roughly, thus preventing powdering of granules). Repeat the process by thirds until the granules reach about 5 mm (1/4") below the upper rim of the basket. Do not use the last inch of absorbent from the supply container, as most of the dust and powder caused during transport will have settled there.
4	Install spider	Install the upper scrim by placing over the center shaft, and allowing the split edges to drape over the edge of the basket. Install the spider on the center shaft, ensuring that the rim sits within the basket wall. Screw on the spider retaining nut. Do not over-tighten. Screw should be finger tight only.
5	Settle grains	Gently tap basket sidewalls. Rotate basket as you do so. Tighten spider retaining nut every 5-10 taps. Do not over-tighten. Screw should be finger tight only. If the spider bottoms out, reopen spider and continue from Step #3. Do not over pack the scrubber basket. This may cause channeling, increase work of breathing, and lead to early breakthrough and/or hypercapnea.
6	Seal canister	If the filled basket is going to be left unused for >24 hours, seal it in doubled plastic bags. Mark the outer bag with number of hours of use, absorbent size, and the date. If the CCR will be used in the next 24 hours, you may install it in a dry unit with the breathing loop sealed to prevent any absorbent decay.

AP VALVES Inspiration / Evolution POST-DIVE CHECKLIST

Check for signs of dirt, deterioration and damage to any part of the CCR at all stages. For hygienic reasons a post-dive check must be completed between users.

DIVE NUMBER
1 2 3

- 1. Switch unit off, inspect harness, unlatch cover
- 2. Rinse unit with fresh water
- 3. Check and remove gas cylinders, recharge if necessary

- O₂ _____ psi/bar Diluent _____ psi/bar
- O₂ _____ psi/bar Diluent _____ psi/bar
- O₂ _____ psi/bar Diluent _____ psi/bar
- 4. Remove scrubber assembly
- 5. Check counterlungs for water ingress (drain)
- 6. Disinfect breathing hoses, mouthpiece, counterlungs (10 min soak time)
- 7. Open scrubber canister, remove absorbent basket
- 8. Remove absorbent basket
- 9. If absorbent basket is still usable, seal basket and log absorbent use (hours:minutes)

- Total Time Used: _____ hr: _____ minutes
- Total Time Used: _____ hr: _____ minutes
- Total Time Used: _____ hr: _____ minutes
- 10. Rinse scrubber housing and hang to dry
- 11. Rinse breathing hoses, mouthpiece, counterlungs thoroughly with potable water and hang to dry
- 12. Inspect displays, cables, electrical connections
- 13. Inspect pneumatics assemblies
- 14. Cover breathing hose ports with breathable mesh or vented plugs
- 15. Allow CCR to dry
- 16. Reassemble CCR
- 17. Secure straps
- 18. Stow unit

POST-DIVE PROCEDURES

AP VALVES INSPIRATION / EVOLUTION

Check for signs of dirt, deterioration or damage to any part of the apparatus at all stages of the post-dive procedures. For hygienic reasons a post-dive check must be completed between users.

Step #	Step	Procedure
1c	Switch unit off, inspect harness, unlatch cover	Turn black switches on both handsets to the down position. Examine harness for loose, missing or damaged buckles, fraying or cut webbing assemblies, etc, replace if necessary. On older units, unclip four case clips by pushing red catches forward and releasing black clips. On newer units, pull two black handles off case projections.
1v	Switch unit off, inspect harness, unlatch cover	Turn electronics off by depressing the left and right buttons simultaneously, then confirming power down using the right button. Examine harness for loose, missing or damaged buckles, fraying or cut webbing assemblies, etc, replace if necessary. Release cover by pulling two black handles off case projections.
2	Rinse unit with fresh water	Ensure mouthpiece is closed. Thoroughly rinse the exterior with fresh water, including latches, manual gas addition valves, cylinders, hoses, gas lines, regulators, ADV, BC, and canister housing.
3	Check and remove gas cylinders, recharge if necessary	Check cylinder pressures and record. Ensure both cylinder valves are closed and purge lines using the manual gas addition valves. Check that SPGs read 0 psi/bar. Remove regulators and lift cylinders out, refill as needed. Cap the regulators.
4	Remove scrubber assembly	Unscrew breathing hose connectors at the top of the T's on the counterlungs. Remove the audio alarm retaining ring. Free all electronics cables from retaining notches. Unfasten Velcro retaining band from scrubber housing. Unscrew oxygen line collar from the lid. Remove scrubber assembly from case.
5	Check counterlung for water ingress (drain)	Having removed hoses and/or caps, tilt unit so inhalation port faces. Remove manual gas inflation valves from the bottom of the counterlungs by unscrewing the knurled collars. Drain any liquid from each counterlung. If quantities are excessive, check system for leaks that may have contributed to the problem.
6	Disinfect breathing hoses, mouthpiece, counterlungs (10 min soak time)	Disconnect breathing hose couplings from scrubber assembly. Spray disinfectant solution into mouthpiece, breathing hose openings, counterlung T's (upper and lower), and the manual gas addition valve mounting ports. Let stand 10 minutes before rinsing.
7c	Open scrubber canister	Unlock the lid by holding it down and removing the four retaining screws. Do not lose the screws. Remove the lid. Dry excess condensation from the inner area of the lid, and hang lid to dry..
7v	Open scrubber canister	Unlock the lid by slightly lifting and rotating the three retaining nuts 90°. Remove the lid. Remove the electronics cover by unscrewing center retaining nut and lifting off center tube. Dry excess condensation from the inner area of the lid, and hang lid to dry.
8	Remove absorbent basket	Lift out the spacer ring and sidewall o-ring. Lift out the scrubber basket. If using Vision electronics with temperature stick, disconnect the temperature stick wiring and install protective caps on each end.
9	If absorbent basket is still usable, seal basket and log absorbent use	Dry the outside of the absorbent basket. If the charged basket is going to be reused, seal it in doubled plastic bags. Mark the outer bag with number of hours of use, absorbent size, and the date. If the CCR will be used in the next 24 hours, you may reinstall it in a dry unit with the breathing loop sealed to prevent any absorbent decay. Log the total number hours of use on the log sheet. If the basket will not be reused,

		remove the spider retaining nut, remove the spider and upper scrim, and dispose of the used absorbent. Remove the second scrim and allow both to thoroughly dry.
10	Rinse scrubber housing and allow to dry	Rinse the scrubber canister housing and set to dry.
11	Rinse breathing hoses, mouthpiece, counterlungs thoroughly with potable water and hang to dry	Rinse breathing hoses and mouthpiece by flushing water from the inhalation hose through the hose assembly. Hang to dry. Remove the manual inflation valves from each counterlung. Remove the sealing o-rings, and place on the gas supply lines to prevent loss. Rinse the counterlungs with fresh water by flushing from the tops and bottoms of the T's, and allowing to drain from the manual inflation valve ports at the bottom of each counterlung. Leave standing upright to dry. Manipulate each counterlung after drying to drain residual water from the manual inflation valve ports.
12	Inspect displays, cables, electrical connections	Inspect both handsets (Classic electronics) or the handset and HUD (Vision), alarm, cables, and connectors for looseness, dirt, corrosion and damage, clean or replace as necessary.
13	Inspect pneumatics assemblies	Check all lines, pipes, tubing, connections, regulators, addition valves, mountings and HP gauges for signs of looseness, dirt, corrosion or damage. Replace if necessary.
14	Cover breathing hose ports with breathable mesh or vented plugs	Plug the ports on the breathing hoses and counterlungs with breathable mesh (nylons) or vented plugs, to prevent ingress of insects or other organisms.
15	Allow CCR to dry	If diving will continue immediately, reassemble the unit, ensuring all components are dry. Otherwise, leave the unit open in a secure place to thoroughly air dry. Leave the lid out, but cover the sensors with a dry paper towel.
16	Reassemble CCR	When thoroughly dry, loosely reassemble all components. Unless using the unit within 24 hours, do not install the battery or a packed canister. If a packed canister is installed, clearly mark the outside of the unit with the total time of use. Leave the sealing o-rings out of the manual gas inflation valves. (They can be placed over the gas supply lines to prevent loss.)
17	Secure straps	Ensure all straps, buckles and harness components are in good condition and untangled; secure as needed. Stow SPGs and displays to minimize strain and kinking of cables and hoses. The handset(s) should be clipped or otherwise securely fastened to the unit, to prevent damage from dangling.
18	Stow unit	Store unit in a clean, dry location with moderate temperatures; or if diving will continue within 24 hours you may pre-dive as required.

12	Check battery and electronics module	If diving will continue immediately, turn the unit on and check battery status with the secondary display; turn unit off. Otherwise, remove the bleed screw on the battery compartment, then remove the battery. Check battery voltage with a voltmeter and record. Dry any residual moisture with a towel, and access the calibration pots module. Look for water. If present, field strip electronics module and return CCR to manufacturer for servicing ; otherwise reassemble loosely with battery disconnected or removed.
13	Allow CCR to dry	If diving will continue immediately, reassemble the unit, ensuring all components are dry. Otherwise, Leave the unit open in a secure place to thoroughly air dry. Leave the canister housing open, but cover the sensors with a dry paper towel.
14	Plug breathing hose ports	Plug the ports on the canister housing where the breathing hoses attach.
15	Reassemble CCR	When thoroughly dry, loosely reassemble all components. Unless using the unit within 24 hours, do not install the battery or a packed canister. If a packed canister is installed, clearly mark the outside of the unit with the total time of use.
16	Secure straps	Ensure all straps, buckles and harness components are in good condition and untangled; secure as needed. Stow SPGs and displays to minimize strain and kinking of cables and hoses. Displays should be clipped or otherwise securely fastened to the unit, to prevent damage from dangling.
17	Stow unit	Store unit in a clean, dry location with moderate temperatures; or if diving will continue within 24 hours you may pre-dive as required.