

MEGALODON PRE DIVE CHECK LIST (APECS 2.5A CE)

MEGALODON POST DIVE CHECK LIST (APECS 2.5A CE)

Name: _____ Date of pre-dive: ____/____/____

Date of post-dive: ____/____/____

Rig ID: _____ Sensor S/N: (1) _____ (2) _____ (3) _____

Post dive start time: _____ Stop time: _____

BATTERY DATES INSTALLED	PRIMARY	SECONDARY
-------------------------	---------	-----------

Table 1

Initials **Note:** Initial only when task has been performed.

- ____ 1. During assembly inspect all parts for dirt, deterioration, damage, and lubrication.
 - ____ 2. Charge O₂ and diluent cylinders if necessary.
 - ____ 3. Mount cylinders and install O₂ and diluent 1st stage assemblies if necessary. Analyze O₂ ____%.
 - ____ 4. Analyze diluent and bailout/deco cylinders. Dil _____
(O₂/HE) Bailout/deco 1 _____ 2 _____ 3 _____
 - ____ 5. Install BC bladder and install back plate assembly.
 - ____ 6. Mount counterlungs to back plate assembly. Inhale on right and exhale on left.
 - ____ 7. Install ADV, low pressure supply hoses to counterlungs and secure all hoses to harness assy.
 - ____ 8. Conduct a breathing check on DSV check valves and mouthpiece. Confirm flow, right to left, with no air leaks.
 - ____ 9. Install DSV assembly to counterlungs.
 - ____ 10. Record accumulated service time on CO₂ absorbent: ____ min. Expiration date: _____
 - ____ 11. Fill scrubber canister, if fresh scrubber needed. (Sofnolime 8-12 mesh / 797)
 - ____ 12. Install gas plenum canister moisture pads and support stand. Circle: **STANDARD CAVE MINI**
 - ____ 13. Install CO₂ canister. Circle type: 5.5 Radial / Axial, 4.0 MINI Radial / Axial, 8.0 Radial.
 - ____ 14. Inspect CO₂ canister mating O-rings on sensor carriage lid.
 - ____ 15. Inspect sensors and sensor wires. Insure screwed down, no cracks, damage, nor leaking of KOH.
 - ____ 16. Install sensor moisture pad and inspect sensor carriage orange o-rings.
 - ____ 17. Install sensor carriage assembly and lock down with carriage lid.
 - ____ 18. Positive pressure test sensor carriage assembly.
 - ____ 19. Negative pressure test sensor carriage assembly.
 - ____ 20. Inspect lid assembly for waterproof integrity (O-rings, and all fixed components).
 - ____ 21. Inspect battery connectors and battery housings.
 - ____ 22. Power on primary and secondary power supplies.
 - ____ 23. Set O₂% and Altitude if necessary. O₂% _____ Altitude _____ m/ft
 - ____ 24. Conduct air point calibration at ambient air pressure. **Note mv values:**
- | | | | | | | | |
|---------|-----|-----|-----|-----------|-----|-----|-----|
| Primary | S1: | S2: | S3: | Secondary | S1: | S2: | S3: |
|---------|-----|-----|-----|-----------|-----|-----|-----|
- ____ 25. Complete calibration at maximum O₂ in cylinder. **Note highest mv for O₂ flush:**
- | | | | | | | | |
|---------|-----|-----|-----|-----------|-----|-----|-----|
| Primary | S1: | S2: | S3: | Secondary | S1: | S2: | S3: |
|---------|-----|-----|-----|-----------|-----|-----|-----|
- ____ 26. Install lid assembly to gas plenum canister and latch down.
 - ____ 27. Install O₂ supply hose to O₂ supply intake.
 - ____ 28. Secure remaining breathing hoses to head assembly.
 - ____ 29. Install HUD.
 - ____ 30. Inspect all hand tight fittings.
 - ____ 31. Close vent valve, perform positive pressure test.
 - ____ 32. Perform negative pressure test (30 second test).
 - ____ 33. Slowly open both oxygen and diluent gas supplies.
 - ____ 34. Verify O₂ and automatic diluent bypass valve operation. Watch for HP gauge fluctuation.
 - ____ 35. Set setpoint to 0.5 atm(bar), breathe on it, then listen for oxygen injections and compare displayed information between handsets and HUD. Injections should cease when the setpoint is reached. Note: Primary handset has an "*" character displayed in the lower corner while injecting.
 - ____ 36. (Optional) Perform reverse O₂ flush until max PO₂ achieved (should match cylinder contents).
 - ____ 37. Record cylinder pressures O₂: _____ Diluent: _____ (PSI/BAR)
 - ____ 38. Close O₂ and diluent valves. Wait 2 min. then record pressures O₂: _____ Diluent: _____ (PSI/BAR)
 - ____ 39. Verify PRIMARY no load voltage _____ Load voltage _____ SECONDARY No-Load voltage _____.
- Insure appropriate power for duration of planned dive. Replace batteries BEFORE DIVING if batteries are at 5.4 volts or less. DO NOT DIVE with low batteries.**
- ____ 40. Secure displays to back plate assembly. Set setpoint to MAN. Turn off gases.
 - ____ 41. **Note: If the performance of any of the above tasks is in question or the performance/operation of the CCR is in question, do not dive the CCR! Consult the operation manual or call ISC.**
 - ____ 42. Remarks (continue on rear in remarks section if insufficient space).

Diver: _____

Initials **Note:** Initial only when task has been performed.

- ____ 1. Rinse CCR in fresh water.
- ____ 2. Record cylinder pressures O₂, _____ PSI/BAR Diluent: _____ PSI/BAR
- ____ 3. Close valves on O₂ and diluent cylinders then bleed down system via bypass valves.
- ____ 4. Disconnect all L.P. hoses.
- ____ 5. Remove DSV assembly from counterlungs and gas plenum canister. Disinfect and rinse.
- ____ 6. Disinfect counterlungs and rinse. Hang to dry upside down.
- ____ 7. Remove back plate assembly and BC.
- ____ 8. Remove first stage assemblies from gas supplies.
- ____ 9. Remove lid assembly from gas plenum canister. Install dust caps on the lid hose couplings.
- ____ 10. Remove scrubber canister and moisture pads and dry. Mark scrubber time on canister label.
- ____ 11. Remove sensor moisture pads and wring out. Hang to dry.
- ____ 12. Wipe down lid assembly and set down so sensors face down.
- ____ 13. Remove and fill O₂ and diluent cylinders.
- ____ 14. Record accumulated CO₂ scrubber absorption time in Table 2.
- ____ 15. If scrubber absorbent service time expired, remove scrubber and dump. If scrubber absorbent service time remains, store intact in air tight container.
- ____ 16. Record battery operational time in Table 2.
- ____ 17. Log PRIMARY no load voltage _____ Load voltage _____ SECONDARY No-Load voltage _____. **Replace batteries BEFORE THE NEXT DIVE if batteries are at 5.4 volts or less. DO NOT DIVE with low batteries.**
- ____ 18. Power off the primary and secondary electronics.

Accumulated Time: (Minutes)	Previous (Min)	This Dive (Min)	Total Used (Min)	Time Allowed (Min)	Time Remaining (Min)
Primary Battery (ISC Approved Alkaline 7.5v, 2850mAh)				4200	
Secondary Battery (ISC Approved Alkaline 7.5v, 2850mAh)				6000	
CO₂ Canister Type: Radial, 5.5lb/2.4kg				180	

Table 2

Remarks:

Diver: _____