

Megalodon Pre-dive Check List (COPIS)

Name _____ Date of Pre dive check _____

Rig ID # (inside bottom of can) _____ Sensor s/n # (1) _____ (2) _____ (3) _____

Battery install date. _____ HUD battery (if installed) _____

Pre dive start time _____ end time _____

Initials **Caution, initial only after task is complete!**

- ____ 1. During assembly, inspect all parts for dirt, deterioration, damage, and lubricate as necessary.
- ____ 2. Charge O2 and diluent cylinders. Analyze Oxygen content of O2 _____% (98% minimum, otherwise calibration necessary)
- ____ 3. Install O2 (verify ambient pressure blocker in place on O2 Reg) and diluent 1st stage assemblies and mount cylinders to Meg housing. Lay housing on its back with open end facing you.
- ____ 4. Analyze diluent and bailout/deco cylinders if using mixed gas. Diluent _____(O2/HE) Bailout/deco 1 _____ 2 _____ 3 _____
- ____ 5. Install BC, or Wings, back plate, and harness to Meg housing, secure tight with wing nuts.
- ____ 6. Mount top of counter lungs to top of back plate/harness. Inhale on right, exhale (with exhaust valve) on left.
- ____ 7. Insert counter lung moisture pads into counter lungs (optional).
- ____ 8. Install ADV (if equipped) to exhale CL, route and attach LP hoses and HP hoses with gauges and secure to CL straps.
- ____ 9. Elongate breathing hoses to remove any residual moisture and conduct breathing check on DSV to verify proper check valve operation.
- ____ 10. Install breathing loop assembly to counter lungs, close DSV.
- ____ 11. Record accumulated service time on scrubber CO2 absorbent. _____ min or _____: _____ hours. Record expiration date on scrubber: _____
- ____ 12. Fill Scrubber canister, if fresh scrubber is required. Wipe any dust off of black mating ring. Deep dive=Fresh scrubber!
- ____ 13. Install moisture pads into tower spacer and install assembly into Meg housing, align the notches up and down.
- ____ 14. Install Scrubber canister into Meg housing, tabs in first, aligned up and down. Verify the fit to the tower spacer.
- ____ 15. Inspect sensors, wiring, sensor connectors and o-rings on base of head and sensor carriage.
- ____ 16. Install sensor carriage assembly, verify ease of install, do not force, verify that o-rings are still properly seated.
- ____ 17. Install sensor moisture pad into carriage, end flap toward center.
- ____ 18. Install sensor carriage lock plate, press down and twist locking plate until lock button snaps up.
- ____ 19. Positive pressure test sensor carriage assembly.
- ____ 20. Negative pressure test sensor carriage assembly.
- ____ 21. Inspect scrubber canister mating O rings on lock plate.
- ____ 22. Inspect head assembly for watertight integrity. (O-rings clean, damage free and components tight)
- ____ 23. Inspect battery housing(s) and verify connectors are hand tight.
- ____ 24. Verify power on for primary and secondary power supplies. (as equipped)
- ____ 25. Check handset and HUD (if equipped) for low battery warnings, replace batteries if necessary.
- ____ 26. Verify display operation, backlight operation and display readings in air. If backlight will not operate, replace system battery as soon as possible.
- ____ 27. Calibrate system if necessary. Flood sensor carriage with oxygen using end cap and dust cap to capture, taking care not to pressurize the entrapped gas.
- ____ 28. Connect oxygen injection line to top of head. Turn on oxygen cylinder (slowly), verify flow from oxygen injection to be .5-1.0 LPM using a flow meter.

Flow _____ L/min Interstage Pressure _____ psi/bar

- ____ 29. Disconnect oxygen injection hose. Install head assembly to Meg housing. Attach breathing hoses to head, observe RH and LH threads.
- ____ 30. Route HUD (if equipped) wire around inhale hose and attach to DSV, bracket between HUD and nut.
- ____ 31. Re-inspect all hand tight fittings.
- ____ 32. Tighten to limit OPV in exhale CL (clockwise) and conduct positive pressure loop test. You should be able to blow through the OPV with lung pressure. Loop must hold pressure for 2 min.
- ____ 33. Open O2 and Diluent cylinder valves 1 1/2 turns.
- ____ 34. Verify O2 and Diluent bypass (add) valve operation.
- ____ 35. Verify ADV operation.
- ____ 36. Record exact cylinder pressures. O2 _____ psi/bar Diluent _____ psi/bar.
- ____ 37. After 1 minute, close O2 and Diluent cylinder valves and wait 2 minutes.
- ____ 38. Record cylinder pressures and note that any changes are an indicator of leaks in the system and must be repaired prior to diving.

- ____ O2 _____ psi/bar Diluent _____ psi/bar.
- ____ 39. Perform negative loop pressure test. Verify 30 seconds no leaks. Listen for leaks around fittings. Note: regulators must be attached to a cylinder to prevent leakage through reg.
- ____ 40. Install O2 supply hose to head and turn on O2 cylinder valve.
- ____ 41. Breathe on unit, verify that displays track.
- ____ 42. Attach handset to loop until ready to dive. Turn off O2 and handset (menu button for 2+sec) until ready to dive.
- ____ 43. **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 unit. Consult the operation manual or contact ISC.**
- ____ 44. Fill in pre dive complete time above.

Remarks:

Diver signature _____ Date: _____