

**Build check**Date: Build number#: Planned depth + site: 

- Analyse O2 tank:  %O2:  bar:
- Analyse Dil tank:  %O2:  %He:  bar:
- Install both tanks on the unit; check fixings correctly installed
- Connect regulators to tank valves

- Turn on Petrel and Nerd. Batteries OK? Petrel V:  Nerd V:
- Cell milliVolts in air:
 

c1: <input type="text"/>	c2: <input type="text"/>	c3: <input type="text"/>	c4: <input type="text"/>	c5: <input type="text"/>
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- Petrel SP = 0.7
- Fire solenoid 3x; external battery voltage > 6.5V  v:
- Petrel SP 0.19
- Check oxygen sensor life: youngest sensor is < 7 months old? If not add/replace sensor and mark date

- Check remaining scrubber  time/new:  If needed refill with fresh sorb
- Install moisture absorber in inhale lung, UNDER non-collapse tube
- Correctly install sensor grid and solenoid grid (ADV at 9 o'clock); check cable routing
- Install scrubbers; RMS arrows pointing up; "TOP" marker on exhale scrubber
- Check scrubber O-rings; clean sealing surfaces; grease if needed
- Close cover, screw hand tight

- Check breathing loop hoses:
  - squeeze out any remaining liquid in loop (concertina);
  - perform stereo check (non-return valves);
  - check bite-piece, O-rings breathing loop, clean sealing surfaces, grease DSV if needed
- Install breathing loop on rebreather
- Wrap Nerd cable 3-4 times clockwise around loop (under)
- Attach hose protectors if used

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**Closed check**date: 

- Open O2; add O2 manually; pressure  bar:
- Turn on Petrel and Nerd. Batteries OK (>1.25V/3.30V)?  
Petrel V:  Nerd V:
- Change Shearwater controller to set-point high; check solenoid fires 3x?
- External battery voltage > 6.5V  v:
- Change Shearwater controller set-point to 0.19
- Full O2 flush: 3 X / DSV in mouth / close DSV / re-open gap
- Shearwater Petrel calibrate OK? Cal mV:  c1:  c2:  c3:
- Shearwater Nerd calibrate OK? Cal mV:  c4:  c5:
- Close O2 / pressure drops OK (orifice)? Depressurise O2 line

- Open Dil; suck ADV; close loop
- Add Dil manually; pressure  bar:
- Overpressure test; OPV releases pressure?
- Inflate wing to max; check dumps
- Flush dil : PPO2 0.21 – 0.22 ?
- Close dil: pressure stays?
- Negative test (start)

- Analyse content of bailout tank(s):  
Tank1:  %O2:   %He:   bar:   
Tank2:  %O2:   %He:   bar:
- Check Petrel & Nerd: gasses correctly programmed in CC/OC
- Check bailout(s) regulators, hoses correctly assembled?
- Open bail-out(s): pressure? breathe, pressure remains?
- Close bail-out(s); check mushroom valve regulator by inhaling
- Check sufficient scrubber time for the next dive?  time/new:
- Negative test ok? Turn off Shearwaters

- Check suit inflate cylinder assembled & attached? Pressure  bar:
- Check umbilical lights connected to battery; suit heater cable connected; batteries charged?
- Check harness, crotch strap, gag strap, lights....  weight:

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