

## Cave Diving Group (founded 1946)

## **Generic Rebreather Dive Preparation Checklist**

1	Plan dive and verify diver is fit and well.	
2	Analyse both diluent and oxygen cylinders and check	
	pressure.	
3	Analyse and check bailout system. Note accident statistics	
	often reveal the diver did not have adequate bailout; plan	
	wisely.	
4	Pack scrubber canister or canisters; label with date and time	
	remaining.	
5	Check interstage / medium pressure of oxygen and diluent	
	(outlet pressure from) first stages.	
6	Check loop and mouthpiece for damage or tears.	
7	Check mushroom valves in mouthpiece are in good order and	
	undamaged.	
	Install scrubber canister into rebreather. Clean and check O-	
8	rings.	
9	Install counterlung or counterlungs into rebreather and check	
	O-rings.	
10	Install loop (or "breathing hoses") onto Rebreather and check	
	O-rings.	
11	Install oxygen cylinder onto rebreather with correctly routed	
	hoses.	
12	Install diluent cylinder (if fitted) with correctly routed hoses.	
13	Turn on handset and check battery voltage and cell readings,	
	check HUD (If fitted).	
	1	

## 14 Record millivolts on linearity table and do initial maths.

mv	/ 0.21	x 1.6	Actual	%

15	Do negative pressure test of loop. A successful test will result in
	crushed loop and breathing bags and once mouthpiece open again
	an audible sound of air being drawn in.
16	Do positive pressure test of loop, fill loop with air until over
	pressure valve passes air. Loop should maintain pressure until
	mouthpiece is opened to release.
17	Open oxygen cylinder.
18	Open diluent cylinder (if fitted).
19	Check oxygen solenoid (if fitted).
20	Check ADV is working (if fitted).
21	Check oxygen manual add valve.
22	Check diluent manual add valve (if fitted).
23	Flush unit with oxygen and calibrate unit and HUD (if fitted).
	Take millivolt reading in 100% oxygen and complete cell linearity
24	table. Note If cells are past recommended life or unable to read high
24	P02 (current limited). Replace them in either case, to avoid
	becoming a (likely) fatality.
25	If not diving immediately, turn off cylinders, drain IP lines, flush
	out oxygen and turn electronics off.

M Thomas CDG Somerset Training Officer with thanks to J N Cordingley and A M Ward CDG National Training Officer (2020).

2 Cave Diving Group.