

## HOW TO MAKE A DIR INSPIRATION CCR

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A DIR Inspiration CCR. I really like this idea. It sounds almost as impossible as a cheap Ferrari.

As everybody can read so many things on the Internet about the “Doing It Right” approach, some rebreather divers may have a real wish to be part of the DIR community. Unfortunately some of the DIR gourous have been definitely against the Inspiration CCR (see the article “Inspiration or Expiration” and some violent posts from George Irvine III: “You need a shovel)

But don’t worry: you still can adhere to the DIR principle and apply some of the basic principles of the hogarthian philosophy to your favourite rebreather. You’ll be considered as a paria by the real DIR guys, and as a traitor by the CCR divers. But you don’t care. You Do It Right the rebreather way!

You must understand that the general concept is to:

1. Make your rebreather simpler and much more streamlined
2. Avoid as much as possible any equipment failure and risk of loop flooding
3. Standardize your equipment with an easy-to-use/easy-to-react approach during normal use and for emergency procedures
4. Look cool

If you think that the 4<sup>th</sup> item is obviously the most important, you first need to buy a black cover to replace the existing ugly-yellow-highly-visible-but-not-Tech-diving-compliant ABS cover.

Then you may use the following tips to modify your Classic Inspiration and, to a certain extend, your Vision Electronics Inspiration/Evolution.

### **Counterlungs, wings and harness**

First of all, you can simplify the front of the rebreather by separating the 2 counterlungs. This way, it’s more convenient because less bulky. You have more room for your arms in order to don and remove your unit. Simply cut the counterlungs with a pair of strong scissors and remove the intermediate piece in the middle.



Then attach the counterlungs the harness (you maybe need to cut a slot for the webbing on the top part of the CLs). The Harness is made from a one-piece webbing and features:

- A SS back-plate
- a crotch strap (one D-ring in front and one on the back)
- one D-ring on the right shoulder (below the exhale counterlung)
- one D-ring on the left shoulder (below the inhale counterlung)
- one D-ring on the left waist strap (for clipping the SPGs)
- a dive knife in a pocket in the middle of the waist strap (between the buckle and the place where the loop of the crotch strap is supposed to be)



Here is a closer view of the D-rings below the counterlungs. Note also the piece of inner tube to hold the back-up lights.



And here is the crotch strap (very useful to have the Inspiration firmly attached, if a diver wants to steal it from you). The front D-ring can be used to be towed by a scooter.

## Gas supply:

The 2 SPGs (Diluent and O<sub>2</sub>) are run on the left hand side and attached together (obviously with a piece of DIR-approved cave line). This way, they can be clipped to the D-ring on the left waist strap.

By the way, remove the rubber protection from the SPGs. A good DIR diver would consider them useless as they can hide some small leaks (often the tiny O-rings in the swivel).

When you want to check your SPGs, just clipped them off. Otherwise, they are in the back, between your body and the wings, and can't drag and catch anything.

Another important thing is to remove the AutoAir. A lot of the Inspiration CCR Divers, even the non DIR ones, think it's a piece of crap, not convenient to use, prone to free flow and bulky.



The best option is to replace it by a standard LPI, more streamlined and easier to use. The LPI is held in place with a piece of bungee cord at the left hand side Tee-piece. This way, it's always at the right place and you don't use it a lot, anyway.

By the way, you could not call yourself a DIR diver if you don't remove the quick dump valve in the LPI corrugated hose. It can generate leaks and is definitely a failure point. Simply remove the cord inside the corrugated hose and glue the valve on top.

As we speak about the Wings, a good idea is to shorten all the small cords you can find on the dump valves. Too long and the cord can be entangled with something else and keep the dump valve open. You can even change the black ball by something smaller.

## And what about the back-up regulator?

Just add a normal 2<sup>nd</sup> stage directly on the manifold in the back of the Inspiration, on one of the remaining IP ports.

If you want to look like a DIR CCR Diver (if a such thing would ever exist!), the 7 foot long hose is always a good idea, even on the Inspiration: the diluent cylinder is clearly too small for a complete emergency up to the surface but the long hose is really convenient to help the victim at the beginning. Just to have more room during the time

you need to think about the best option to ascent. Note that a long hose 2<sup>nd</sup> stage can be set to avoid free flow, in a very similar way that real DIR Rebreather Divers (who dive the RB80 SCR), use a long hose. This second stage can be worn with a bungee loop around the neck (a black one!).

If you dive in a wreck or a cave, you'll certainly need dive lights. The main light should be a canister light attached on the right hand side waist strap. You can add 2 back-up lights, one on each shoulder D-ring, under the counterlungs. Remember the small pieces of inner tubes under the counterlungs: they hold the back-up lights firmly in place.

### Handset:

That's really a problem when converting your favourite CCR into a DIR hybrid.

If you have the Vision Electronics, you will never really look as cool as a real DIR Diver: the handset on your wrist and its hose are everything but streamlined in their original configuration.

With the Classic Electronics, things can be a little bit better as both handsets can be held together by a piece of cave line. They are routed on the right hand side, under the arm, and clipped on the side or in the front of the rebreather (behind the counterlungs). They are less easy to be constantly checked but less convenience is the price to pay to look cool!



### A final concern: entanglement.

The Inspiration CCR is full of those stupid things that can catch a line in a cave or a wreck. For instance, the weight pocket on top of the unit is perfect for that. Just remove it and put the necessary lead weights (either several soft weights or a custom made weight, well protected) in the case, on top of the scrubber. Be careful: when you move the unit, it shouldn't move, dislodge or kink any hose in the case.



So now, your all-black-DIR-compliant rebreather has to be used with an all-black diving equipment.

*"Good job, guys!" G13*