Maintaining a Fischer Connector: By Curt McNamee

Just like any other part of our dive gear, if you have a Fischer Connector, it needs ongoing maintenance.

The main enemy of any electrical part that might be used underwater or in a moist environment is corrosion that can cause failures and/or give you inaccurate information.

Fischer connectors seem to always get moisture trapped inside and will with time corrode the electrical pins & sockets turning them green. If you see green, you have corrosion that needs to be removed.

On the end of your cable you will usually have the male side (pin side) of the Fischer connector. The computer usually has the female (socket side) of the Fischer connector.

The O-Ring seal that is suppose to keep the moisture out is located at the bottom of the inside of the female (socket) side of the connector mounted on the computer.

There are two types of male Fischer Connectors, one with, and one without a locking ring. The Shearwater seems to be the only computer that is using the locking ring at this time.

The idea of the maintenance is very straightforward, <u>you must not let moisture be</u> <u>present inside the Fischer connector for any extended period of time</u>, <u>and if you find any corrosion you must remove it.</u>

By checking for moisture often and coating the inside of the Fischer connector with food grade mineral oil, you will prevent the corrosion that so many people seem to complain about that creates problems.

The steps and idea behind the maintenance is very simple.

- 1) Before diving, inspect the Fisher connectors for corrosion, if any is noted then you need to remove it. Once the corrosion is removed, coat the insides of both ends of the Fischer connector with food grade mineral oil.
- 2) After diving and before you let your dive gear sit around for very long, inspect the connectors for moisture, blow out with dry air and coat with mineral oil and store with the protective caps.
- 3) Once you have coated with mineral oil, let it drain to eliminate any excess oil.

The protective caps will keep the moisture out, the mineral oil in and also protects the o-ring sealing surface on the male end of the connector.

The food grade mineral oil can be found in any pharmacy or drug store.

To remove any corrosion, I have use "DeoxIT" which can be found on line at DiveRite Express or Radio Shack. Any other type of high quality electrical corrosion remover would also work just fine.

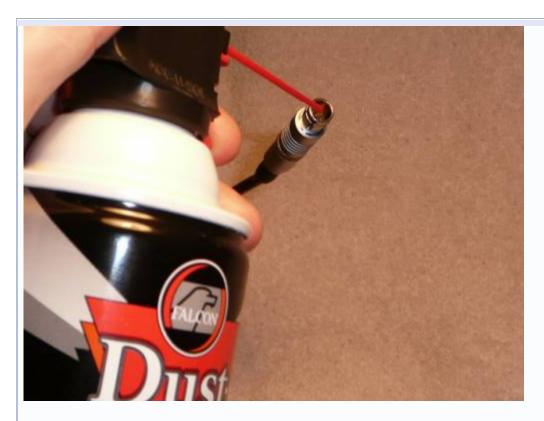
Once the corrosion is removed, I would flush out the connectors with an electrical contact cleaner and then re-coat with mineral oil.

I have been maintaining my Fischer connectors for several years this way and have had no problems.

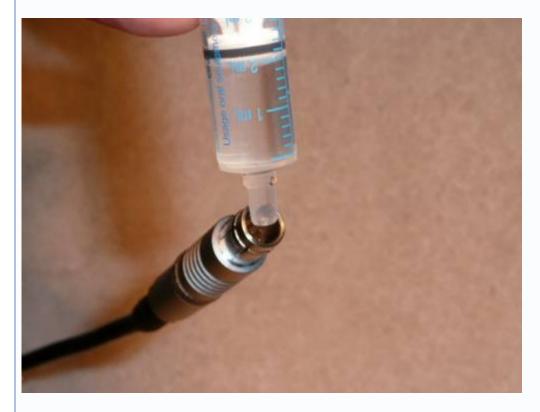
Shearwater Fisher Connector with Locking Ring



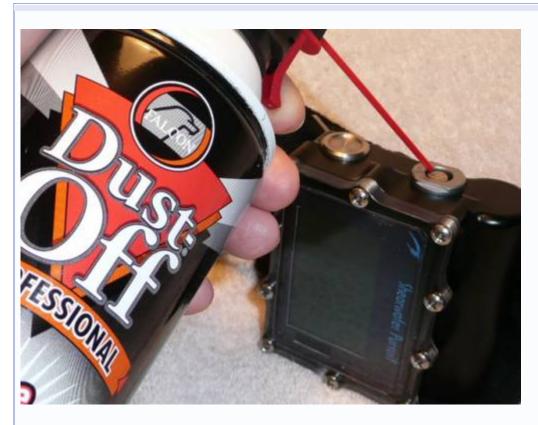
Drying Male Fitting with Dry Air



Adding Mineral Oil to Male Fitting



Drying Female Fischer Socket



Adding Mineral Oil to Fischer Socket



Food Grade Mineral Oil



5 ML Oral Syringe



Dry Air "Dust Off"



CRC Contact Cleaner



DeoxIT Corrosion Remover and Conditioner



