

Scuba Equipment Care—The Service Technician

In this final part of the series of four articles, we discuss the role of the service technician. A technician is specially trained and certified to do maintenance on your dive equipment.

The user manual

The equipment you purchased comes with a user manual. It can be a printed version, or digital media on the manufacturer's website. I know, we are here for diving, not reading, but this manual has important information. It will specify how to take care of your equipment, and explain when maintenance is needed to keep the warranty valid. Some manufacturers have specific requirements that you should be aware of.

The service technician

This amazing person has gone through specific training with one or more manufacturers and is licensed as kind of a doctor for your diving gear. She will take it apart, change faulty or broken parts, reassemble the unit and restore it to working order. Service technicians usually work for a dive shop. They might not be able to service equipment from every manufacturer, but they will be able to point you in the right direction should they not be able to service your equipment.

Some of you might be service technicians, but most of aren't. Just to avoid any confusion, here are some guidelines to determine if you are one or not.

You are not a service technician if:

- You don't know how to assemble and disassemble your equipment.
- You think you know how to service gear but don't have any training from the manufacturer.
- You fix problems with duct tape.
- You don't have the appropriate tools or spares.
- You don't have a valid service technician certificate from the manufacturer

If one or more of the above applies to you, don't service dive equipment—leave it to the pros.



Periodic maintenance

Most people think regulators need to be serviced once a year. You may be surprised to learn that isn't always true. Maintenance schedules are actually written in the user manual. Most manufacturers require annual servicing, but some use a longer time interval. And it isn't only about time, but also how often the regulator is used. The manual might say you need service annually, or every 100 dives or diving hours, whichever comes first.

Although there are no requirements for periodic maintenance on a wetsuit or a simple mask, full diving masks, dry suits and BCD are another matter. Check the manual to see if your equipment needs periodic maintenance and follow the manufacturer's guidelines.

As pressure vessels, cylinders require visual and hydrostatic testing; national laws specify the exact maintenance intervals. Don't forget that the same law applies to pony bottles and spare air cylinders. It is also worth mentioning that valve replacement should be done by a technician. It is simple, but that doesn't mean you should do it yourself. Threads and valves can be damaged as a result of improper disassembly and assembly. Finally, if your cylinder falls on its valve, have it checked by a technician as the valve or threads could be damaged.

Call in the technician

Imagine you found a problem that you couldn't fix yourself, for example replacing a small o-ring in a low pressure hose fitting. If you don't know how to do it, are not trained, or don't have the right tools, you should bring it to a technician. If you don't have the right tools, you can cause damage.

A leaking valve (dry suit or BCD) might need to be opened for cleaning or might need replacement. This is actually relatively easy to do, but again consult the user manual to see if you are allowed to do it yourself. When we disassemble components, such as pressure release valves or replace them, there might be parts such as o-rings or seals that need to be replaced before reassembly. Also make sure the components you

replace are from the same manufacturer as the old one.

The MacGyver do-it-yourself technician

Be aware of this kind of technician. Fortunately, they are easy to recognise. Something breaks when you are about to enter the water and you don't have spare parts? No worries; here he comes with strings, cord, tie wraps, and duct tape. Nothing is too difficult for him. If your dry suit or BCD keeps inflating, he will suggest you disconnect the hose when it's not needed. He will do everything in his power to save your dive. It all seems too good to be true, until you discover the problem is not fixed and you end up having an emergency. Take spares with you on every dive trip, but also be responsible —call the dive if you can't fix a problem.



Have a dive centre and do maintenance yourself?

That is fine, if you are trained and certified for it. If not, then you have a safety and liability issue. And

remember that the dive centre's equipment is used frequently, sometimes on a daily base. That means that service will need to be done more often.

Proper servicing

When your equipment is serviced by a certified technician, they typically give you the old or broken parts. It's a way that a professional proves that they serviced and repaired your gear. You should also get a maintenance certificate that proves the service or repair was done by a professional. Usually the certificate lists the type and brand of item serviced and the serial number. This avoids questions when there is a problem, including possible warranty issues.

How to maintain the health of your equipment

In this series we looked at how we should keep dive equipment in good condition. If you want to know more, check with your Instructor or dive centre and ask if they have equipment specialty courses. There you will not only learn more about how your equipment works, but also how to maintain it in a good (and safe) condition.

The value of your life and equipment is too high to underestimate the need for proper maintenance. The time and investment needed to maintain your gear properly is relatively small and will ensure that you can dive with peace of mind.