

# Dry Bicycle Cables Installation

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It is my favorite time of year again, cyclocross season. I feel that equipment preparation for racing cyclocross is critical. In some ways maybe even more than for mountain bike racing. Cross racing is so fast and so short that if something goes wrong, even a few seconds can mean the difference between 1st and 10th or worse. If you are lucky enough to have a second bike and even luckier to have a pit mechanic you can mitigate some of your losses. Most normal folks have one ride and it pays to have your setup as fool proof as possible. That is why I always run a sealed derailleur cable system to keep shifting spot on even in the worst of conditions.

There are several products available on the market today. I actually will break down the options in another article. If you are new to sealed systems though I feel Dry Cables brand is the easiest to set up and get you on the way to enjoying the benefits of a sealed system.

The Dry Cables system is actually almost identical to the Gore Ride-On System that I used for years until they stopped producing it. Luckily Dry Cables stepped in and picked up where Gore left off.

What you get for \$29.95 is all you need to set up front and rear shifting on one bike. You get shift housing, 2 Teflon coated cables, housing liner, housing ferrules and cable end crimps. You also get a small utility blade to cut the housing liner.

Now as far as installation goes it is really almost as simple as setting up traditional cables and housing with a couple extra steps and precautions. If you are familiar with installing your own cables and housing you should be able to set up the Dry Cables with relative ease. For the purpose of this article I will focus on the installation for the rear derailleur and shifter because it is the most complicated. As a side note I normally install just the rear anyway. On the front I just use standard cable and housing. Front shifting isn't nearly as finicky as rear shifting and it also doesn't usually see all the muck that the rear does. Since the kit comes with enough material for front and rear, if you use just the rear you are left with a spare rear when the first one wears out.

The first step is to cut all the housing sections to fit your bike. Shifter to housing stop, housing stop to derailleur, so on and so forth. Now if the old housing pieces you took off the bike are the correct lengths you can save some time and just duplicate those lengths. If there is any question though it is worth the time to measure and cut new lengths. The key to get the correct length is to make sure all bends are gentle and there is enough housing to turn the handlebar 90 degrees both ways without binding. Always use a good quality, sharp pair of housing cutters to cut the housing. The old electrical dikes in your toolbox are not going to cut it, no pun intended. They will just crush the housing and make a mess. It is worth \$25 for the right tool like the Jagwire Cable Cutter and you will use it for years to come.

Even with the correct cutter the housing will deform a bit so after cutting your housing lengths you can open the ends of the housing back up with a small awl. Here at the shop we refer to this high tech device known as a "pokey tool." Basically we take an old spoke and grind the tip of it to a point. It is crude and it works perfectly. Of course the Jagwire Cable Cutter has a folding awl right in the tool. Now you can put the housing end caps on all the ends of the housing.

The next step is to feed the new shift cable through the shifter. The cable may come double ended, cut off the end you don't need. Double check the cable you removed and compare it against the new cable, once you cut it off you can't put it back on.

Now is where the extra steps come in to play. Feed the housing liner over the entire length of the shifter cable. One end of the liner has a tiny flange on it, this end should go towards the shifter. Be cautious handling the liner. It is very thin walled and can crimp and kink easily. If you kink it, it will be harder to feed it into the housing and could actually perforate thereby destroying the sealing.

You can now start to feed the cable/housing liner into the sections of housing starting at the shifter then working back towards the derailleur. After a housing section has the cable/housing liner in it you can place the housing in the housing stops and move on to the next section. If you have down tube cable routing you will have to feed the cable/housing liner through the bottom bracket guide. If for some reason the hole in the guide is too small you can drill it out just a little bit larger with small drill.

When you reach the rear derailleur feed the cable/housing liner through the derailleur first then set the housing in the stop on the derailleur.

The next step is to grasp the loose cable sticking out of the end of the liner and pull it hand tight to remove any slack. You now have to remove the excess liner. Cut the excess liner with the small utility blade leaving a couple millimeters sticking out of the derailleur. The cable is in there so you have to gently cut around the circumference to remove it. Pull

the cable just snug again and fix it with the cable fixing bolt on the derailleur. Now just adjust the cable tension to dial in the shifting. After the initial adjustment you may have to take additional slack out of the cable by resetting the cable fixing bolt.

Now you have sealed system! Unless the liner is damaged allowing contamination you should have super smooth shifting for a long time even through the nastiest of conditions.

I feel the only achilles heal of the Dry Cables system is the durability of the liner. As I mentioned before you have to be careful not to kink the liner before the cable is inside it. Once the cable is inside it is rigid enough to handle without kinking. I have always been nervous about the exposed liner when installed especially on down tube cable routed bike. The liner is exposed in some high risk areas and could get hit by rocks or other debris. Once the liner is perforated it can become contaminated fairly easily, especially in wet conditions. The solution I have used in the past to set my mind at ease actually works really well. In the installation process I put a protective outer sheath over the liner in high risk exposed areas. The Jagwire housing liner is under \$10 for a 30m roll. That is pretty cheap insurance if you ask me.