

Basic Tools for Water Utilities



by Doug Smorol,
Circuit Rider II

The Circuit Riders for the New York Rural Water Association are, in my opinion, well equipped to diagnose, locate, and repair many of the day-to-day problems that occur at water utilities here in New York State. We carry a variety of locators, magnetic locators, colorimeters, solution strength kits, and leak detection equipment, as well as, a variety of wrenches and tools needed to access curb-stops and valve boxes. Sometimes large hammers and bars are need to access stubborn covers, caps, and manholes. I like to carry a small shovel to dig up buried curb-stops and valve box covers. I carry a small shovel because I like to take out a nice round plug of sod when I am digging up a utilities customers yard. This way I can leave the property the way I found it without leaving a big mess. What is this all leading up to you ask? Well this article is about being able to carry the basic tools to do the job and what tools should be in your truck at all times. Now many of you guys wear a lot of different hats for the system you work for (DPW, Water, Sewer, Etc.) so it might be difficult for some of you to carry everything you need all the time. So we need to make up a list of basic tools that do not take up a lot of space that we can carry on a daily basis. As a Circuit Rider, I carry many tools that I use on a daily basis and many that I just do not like to be without.

So to start the list, I would suggest a curb-stop wrench. I carry several different types because I work in lots of different systems and not all systems utilize the same type of valve box. I would suggest a combo wrench with a sliding head. Then you will need a 5-sided wrench in case you need to get in a Buffalo Box or meter pit. I also like to carry a line valve wrench. I have an extendable one that is capable of reaching deeper valves. A line valve wrench is useless unless you have a means to remove the valve box cover. I carry several different tools to accomplish this with a couple of old screwdrivers at the top of the list. I also use a 3-foot pry bar (point / chisel-end), valve tongs, and of course, the obligatory 2 lb. ball peen hammer and chisel for those covers that will just not cooperate. Next, of course, I carry a couple of pipe wrenches (24 inch), several different open-end / box-end wrenches (15/16, 1-1/16, 1-1/8, 1-1/4) for pipe bolts. A measuring tape, OD tape, and measuring wheel for the obvious reasons. A paint stick with 2 extra cans of blue marking paint (for us water guys). No truck should leave

the shop without a magnetic locator, and this can usually be placed behind the seat of the truck. Many of you may not agree, but I like to carry a pipe locator, they take up a lot of room but when you need one, you need one. Like I said earlier I carry a small shovel, a pickaxe, and a pointed bar for digging and probing. Another item I found that I like to carry is a PVC pump. It is about 4 ft. long and is great for pumping meter boxes, valve boxes, etc. I carry rubber boots, hardhat, safety vest, gloves, rags, latex gloves, eye protection, and earplugs. Now here is the actual list:

- Curb-stop wrench
- 5-sided wrench
- Line-valve wrench
- Screwdrivers, chisel, valve tongs
- Large hammer (2 or 3 lb.)
- Pipe wrenches (24')
- Box-end / Open-end wrenches (15/16, 1-1/16, 1-1/8, 1-1/4)
- Measuring tape, OD tape, Measuring wheel
- Marking paint
- Magnetic locator
- Pipe locator
- Shovel
- Pick-axe
- Pointed bar / Pinch-bar
- PVC hydrant pump
- Safety equipment (*gloves, boots, latex gloves, safety vest, hardhat, eye protection, ear plugs*)
- Orange Cones

I am sure I missed something (everything in the cab) but I tried to keep the list down to the basic tools needed by the utility worker to keep the Quality on Tap!!!! 💧

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