



IT'S PROPER TITLE IS: "MAIN VALVE"

Dan Tousley | Circuit Rider III

I'm not sure who coined the phrase: "A rose by any other name is still a rose." But the basis of the phrase is a valid one. We hear it all the time in politics today. When a party or organization is finally exposed for their real world view and things get a little tight for them, the solution is simple: change your name and continue on 'till you're caught up with again. We do not buy 'used' cars anymore; we buy 'preowned' cars! Sounds better huh? 'Liberal' is out, 'progressive' is now in.

Everything we eat today has a 'lite' version to it. For a great example of this foolishness, google 'Gluten Free' and see what **that** is all about. Why we can even hang a bogus title on a product and raise the price, example 'Organic'. Does anyone really believe 10% ethanol in our gasoline is for **our** benefit? We used to **add** lead to our gas to lubricate our engine valves. Not good for the environment, so let's stop buying and adding lead and at the same time—RAISE the price of the gas! Examples go on and on today and the fool things we simply take as gospel are running rampant.

I think you get the idea of this article. It is to call a spade a spade. Hmm, come to think of it, what does that mean? Is there something evil about a spade?

In the base, or 'shoe', of most of today's fire hydrants is a vital piece of engineering used to control the flow of water and its proper name is: **MAIN VALVE**. This is a round, flat piece of rubber (SBR) with a flat piece of steel embedded in it. One side of it has a bevel to engage the seat ring surface and stop the flow of water through the hydrant. I am amazed at the terminology I hear used in the field to indicate this particular piece. Let's see, the donut, the rubber, flopper, flapper, disc, hockey puck, round thing, the list goes on. Call it what you will, its purpose is to control the flow of water which is exactly the purpose of a valve and in this case, it is the 'main' valve in the hydrant.

A big pat on the back for Mueller Company here: A few years back they began designing their main valves with a bevel on **both** sides so if one side was compromised it could be flipped over and used a second time. Great idea! Check your model year to see if your hydrant is so designed. A hydrant main valve is exposed to many hazards such as small stones that can be caught between the seat ring and main valve and be compressed into the main

valve damaging the sealing surface and causing the hydrant to leak. Years ago, the main valve in a Kennedy Hydrant was called a 'balata' valve because of the material it was made of. It was like many layers of canvas type material glued and compressed into a flat, solid disc with a bevel on one side to engage the brass seat ring. These hydrant main valves came in 4", 4¼", 4½", 5", 5½" and 6" sizes. So far in my travels I've never encountered a 6" hydrant but have seen the 6" main valves. The markings like this that you find embossed on a hydrant upper barrel are in reference to the main valve and related parts i.e. seat ring and drain valve size, not the hydrant shoe or the barrel size. It is the main valve assembly size only.

Hydrants are designed to be operated at full open or closed, not to throttle water. As a hydrant is opened, the first two or three turns allows water to be forced out of the opened drain valve(s), flushing them out. As the opening continues, the drain valves are sealed off stopping leakage while the hydrant is operated. Continuous flushing (throttling) can undermine a hydrant causing problems of a different sort.

In most installations today, out in front of the hydrant, between it and the water main, you should find a valve box and valve used to control the flow of water to the hydrant. This valve is properly called a 'guard valve'. I suppose because it stands guard over the hydrant. Well, that's enough 'guards' and 'valves' and 'rings' for one day. I've got to go; I can't seem to find what I've done with my hockey puck!

'Till next time, Dan Tousley, Circuit Rider
New York Rural Water Association 💧💧

