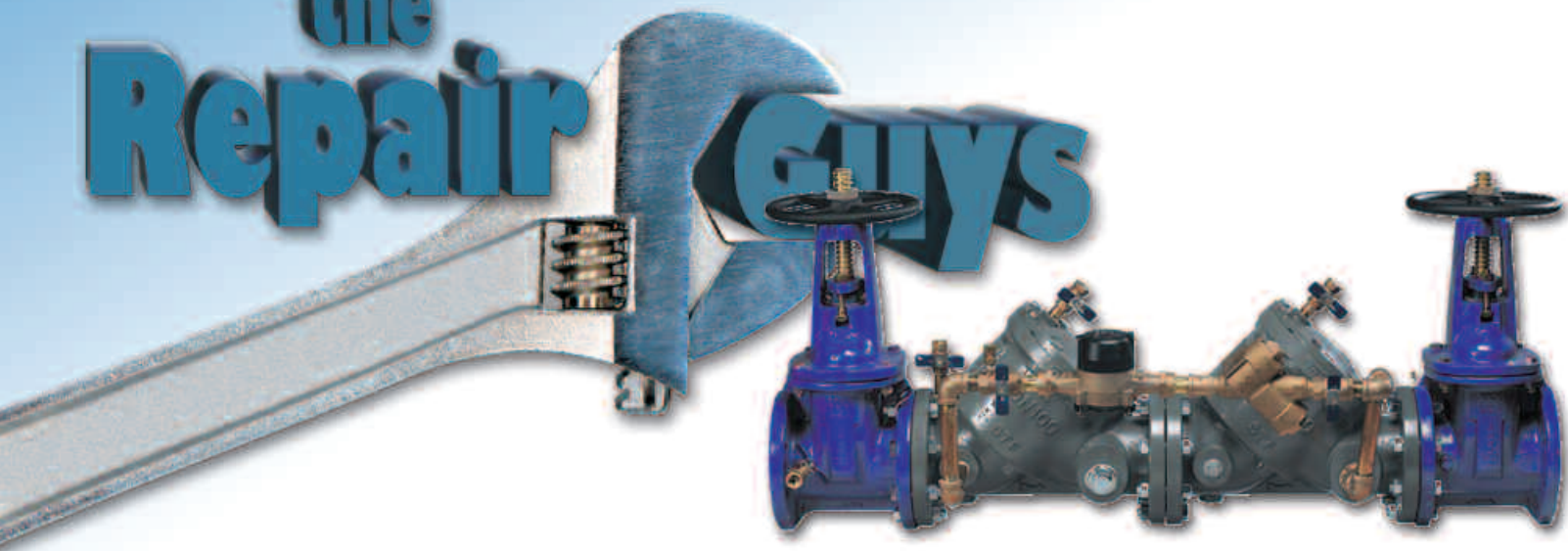


the Repair Guys



6 Inch FEBCO 825

In our line of work, we field questions from contractors and technicians concerning repairs, installations, and general backflow prevention practices. We'd like to share some questions that we receive as well as our answers. Everyone has different opinions on these subjects and we would like to hear yours. Contact us with questions and ideas via email at: imark@backflowparts.com or mail us at American Backflow Products Co., PO Box 37025, Tallahassee, Florida 32315.

-- Mark Inman and Jason Gregg

Question:

I have a badly damaged check valve seat in a 6-inch FEBCO R.P.A. that needs to be replaced. I know the assembly is fairly old. I am not certain, but I think that it may be a model 825. Are there any special tools required to replace the seats on this model?

Mark:

Well, first we need to make sure of the correct model number to verify the type of seat and if a special tool is required for removal. FEBCO has three different models of the 825 series. There is the model 825, 825D, and the 825YD. The two main differences between these models are in the seats and relief valves. The model number will help indicate if the seat is threaded or bolted into the check valve body. Let's take a minute to look at the major differences concerning the assemblies and the check valve seats.

Jason:

The model 825 was produced from the mid 1970's through the late 1980's which had a body constructed of cast iron with an epoxy coating to help inhibit rusting. The check valve seats are replaceable on this model but you'll need a

seat removal tool because they are threaded into the device body. The check valve seats thread into the body clockwise and are sealed by an o-ring. FEBCO does not offer a seat removal tool but gives specifications on how to build one. Some of the seat tools can be easily made from Sch.80 PVC pipe. Depending on the condition of the body, size, and age of the assembly, the seat may be a little harder to remove. You will probably have better success using steel pipe to manufacture a tool. We have included the specification sheet from FEBCO for building the seat removal tool.





Mark:

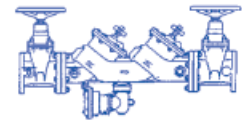
The Model 825D was produced for a couple of years in the late 1980's following the model 825. The 6-inch size of the 825 and the 825D share all of the same rubber parts except for the cover o-rings because of a change in the construction of the device body. The model 825D had a body made of ductile iron which allowed a change in the seat design. The check valve seats in the 825D are bolted into the body as opposed to threaded into the body. The check seats are sealed with an o-ring and held into place by three 5/16 inch stainless bolts and flat washers. No special tools are required to remove the check valve seats on the 825D. Simply remove the bolts and pull the seat straight out of the body

Jason:

The next in this series to be produced was the 825YD. The difference between the 825D and the 825YD would be a change in the design of the relief valve. The 825YD device body was also constructed of ductile iron, allowing the seats to be bolted into the body. The check seats are sealed with an o-ring and held into place by three 5/16 inch stainless bolts and flat washers. No special tools are required to remove the check valve seats on the model 825YD. Simply remove the bolts and pull the seat straight out of the body. Always remember to apply some food grade lubricant to the o-ring to help the o-ring slide into place and not get pinched while you are installing the new seat.. ▼



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