# The **Repair Guys**



Mark Inman



**Doug Taylor** 

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.

#### Question

When I find a Reduced Pressure Assembly leaking, the first thing I do is replace the relief valve (RV). If that does not take care of the problem, I replace the whole assembly. I would like to find a way to cut down the cost to my customers. Can you give me some ideas?

#### Doug

Now, I know we have all heard the argument that it costs less to replace a valve than to repair or diagnose the problem. We have found that a majority of the time, a technician who is knowledgeable on repairs can fix a valve for less money and time than replacing that valve. There are times when



replacing makes sense, but this should be looked at as the exception and not the rule. A good example would be your car. You take your car in to an A. S. E. certified technician because it seems to be running a little rough. When he brings the car into the garage and pops the hood, does he immediately pull the motor and start tearing it down or replace the engine completely? Of course not, he has diagnostic tools, computers and techniques he uses to

## Mark

If you replace parts before you know what the problem is, you are just guessing at what needs to be repaired. Troubleshooting an assembly is one of the most important things that a backflow technician should do in the field. Anyone can replace a RV assembly, but do you know why it was leaking? Anyone can memorize test procedures, what hoses go where, what valve to turn, and what the needle does as long as the device is working correctly. But, if a problem occurs, does the technician understand how to use that information to identify or diagnose the problem? Backflow technicians should be able to troubleshoot first before they repair or replace an assembly.

troubleshoot and pinpoint the problem. It would be a little costly and silly to replace an engine that only needed spark plugs. The same thing applies to backflow preventers.

## Mark

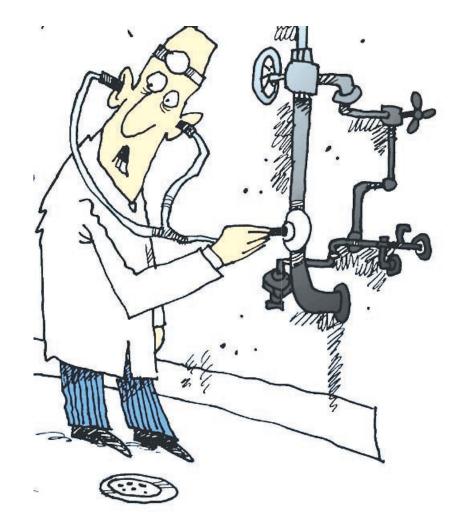
My definition of troubleshooting would be the ability to gather and use information available to determine or diagnose a mechanical problem. To me troubleshooting is an art. It is not something you are born with, it is something that is learned and developed over a period of time. I consider troubleshooting a step-by-step process that is used to verify a problem.

Once a problem is verified, you can pinpoint where it is and concentrate your energy

there. The main issue we see is that many technicians will try to repair a valve before they troubleshoot the problem. This can cost needless time, money and headaches if they don't get lucky the first time. Backflow preventers are designed and manufacturered to be tested and repaired. So the bottom line is if you take the time to troubleshoot, you can learn how to make repairs more cost effective.

# Doug

Troubleshooting is something we have all done before, whether we realize it or not. Lets face it, repairing a backflow preventer is not brain surgery, but if we can save time and money for the customer or for ourselves then it can be a very valuable tool. As with any other skill, you must develop your expertise through practice and education. After a difficult repair what can you say you have learned from the experience? The next time you come across a similar situation will you be better prepared to handle it? If you can answer yes to this then you have added an additional tool to your troubleshooting bag. Hopefully, we have brought up some good ideas of what troubleshooting is and why it should be an important part of the repair process.





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