

# VALVES

*Genuine Bendix*

AHEAD OF THE CURVE



Valves

compressors

air dryers

electronics

air disc brakes

wheel end

XVision®



## GENUINE BENDIX – NO CUTTING CORNERS.

Face it. In today's economy, everyone wants to lower costs. The question is, are you willing to compromise safety and performance to save a few bucks? Are you willing to risk downtime by buying knockoffs?

When you buy Genuine Bendix new and remanufactured parts, you know you're getting the most dependable braking and control systems made. You're getting the valve systems spec'd by the vast majority of OE brake engineers. If they choose Bendix, why in the world wouldn't you? Remember, they spec'd Bendix as part of a braking system. If you use a knockoff, you could throw the whole system off spec.

And besides, Genuine Bendix parts actually save you money when you factor in the high cost of extra maintenance, downtime and the shorter product life of knockoffs. But Genuine Bendix parts not only save you money, they save your sanity by giving you peace of mind. As the industry leader, we don't meet standards – we set them. We provide powerful warranties, and we stand behind them. And we have a dedicated service team and an extensive network in place, ready to respond to your needs, whenever and wherever you need us. When you buy knockoffs, you don't know what you're getting. And you can't be sure your brakes will perform when you need them.

So, unless you enjoy being stranded on the side of the road, we suggest you take a minute to learn more about Genuine Bendix parts. You'll quickly realize that if you want to cut corners, brakes aren't the place to do it.

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TAKE A CLOSER LOOK.



THE GENUINE BENDIX E-6 VALVE COMPONENT

At 2,000,000 durability cycles, equal to roughly one million highway miles:

- good valve alignment still maintained
- uniform wear pattern
- even contact of sealing area for seal durability



THE KNOCKOFF E-6 VALVE COMPONENT

At only 450,000 durability cycles:

- excessive uneven surface wear
- severe scoring on the sealing surface

*Result: High air leakage. Possible vehicle sidelined.*



THE GENUINE BENDIX E-6 RELAY PISTON

At 2,000,000 durability cycles:

- still meets all original OE specifications



THE KNOCKOFF E-6 RELAY PISTON

At only 450,000 durability cycles:

- premature broken and cracked parts
- heavy surface abrasion on the piston bore

*Result: Unpredictable primary pressure delivery. Significant leakage and system imbalance. Poor vehicle brake performance.*



THE GENUINE BENDIX QUICK RELEASE VALVE

At 2,000,000 durability cycles:

- near-new condition
- valve functioning per specification



THE KNOCKOFF QUICK RELEASE VALVE

At only 450,000 durability cycles:

- torn diaphragm
- leaked supply air to atmosphere

*Result: High air leakage. Possible vehicle sidelined. Poor vehicle brake performance.*



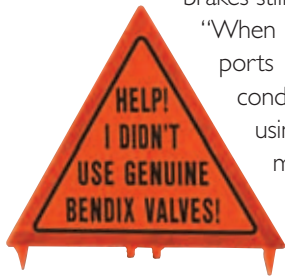
## THE STORY OF THE CHEAPER VALVE AND THE LOST DAY.

This is the true story of how Dan, the owner of a brake service shop in L.A., learned the high cost of saving a few bucks. One day a customer brought his truck in because the brakes weren't feeling right. After an inspection, Dan determined the problem was a worn-out relay valve. Dan usually buys Genuine Bendix valves, but a parts dealer friend of his had been bugging Dan to try knockoffs for a while. Dan gave it a try. And then the trouble started.

Dan installed the new knockoff relay valve, but the brakes still would not operate. According to Dan, "When you buy a new valve, you assume the ports are clear and the valve will be in top condition." That's because Dan was used to using Genuine Bendix valves. Dan kept making adjustments and rechecking the lines. Finally, after an hour or so, he discovered that the valve's control port wasn't drilled all the way

through. "I had to use a small screwdriver to punch out the blockage." Not exactly precision engineering, huh?

Dan's next move was directly to a different parts dealer to get a Genuine Bendix valve. "It went in easily and worked the first time," Dan said. But all is not well that ends well. Dan and his customer both lost over six hours. And Dan knows that if he hadn't been so thorough in his inspection of the knockoff, he might have sent his customer back on the road with only 20 percent of his braking capability. A scary thought for Dan, his customer and everyone else on the highway. Dan sums it up this way: "From now on, Genuine Bendix are the only valves I'll use."



### ONE KNOCKOFF VALVE CAN KNOCK YOUR WHOLE BRAKE SYSTEM OFF SPEC.

Your brakes are a system, not a set of individual parts. And that system has been carefully designed by an OE engineer. In fact, your service brake control valves – foot valves, relay valves and quick release valves – have all been designed to work together to deliver balanced, even air pressure to your brakes.

If you replace one valve with a knockoff that doesn't work right, the whole system can go out of spec. This isn't a theoretical engineering problem – it can be a real-world problem. By putting your system out of spec, you actually risk braking performance and stopping ability.

Here's what can happen: the mismatched valve can cause uneven air pressure to your brakes, which increases brake lining temperatures. In fact, as little as a 2-psi differential in brake threshold pressure can result in a 200° F increase in the brake lining temperature in city driving and possibly higher in hilly terrain.

The increased temperature can cause a lining to wear twice as fast as another axle's linings. And a higher temperature can lead to brake fade, which can put you in danger of not being able to stop when you need to. And that's a problem for you and everyone else on the road. All because you tried to save a few bucks on a valve.

If you want more evidence of the dangers of mismatching service brake control valves, call 1-800-AIR-BRAKE (1-800-247-2725), following the system prompts, press option 2, then option 1. We'll be happy to send you a technical paper on the subject.



***Stay on the road,  
not stuck on the side  
of it.***

*When you buy Genuine Bendix new and remanufactured parts, you know you're getting the most dependable braking and control systems made. With Bendix valves, you know you are getting a premium product and premium performance because Bendix valves are built to meet the highest engineering standards.*



FOR MORE INFORMATION ON OUR COMPLETE LINE OF PRODUCTS,  
CALL YOUR BENDIX ACCOUNT MANAGER,  
CALL US DIRECT AT 1-800-AIR-BRAKE (1-800-247-2725) OR VISIT [WWW.BENDIX.COM](http://WWW.BENDIX.COM).