

Flat tires are the number one cause of vehicle immobilization in America, but Inovex Industries, manufacturer of Ride-On Tire Protection System (TPS), claims their product virtually eliminates these untimely and potentially dangerous interruptions. Having earlier wooed the transport industry-including heavyweight tire abusers such as landfill operators-Inovex recently narrowed its focus from 18 wheels down to two, test marketing the product through Bartel's Harley-Davidson in Los Angeles and Battley Cycles of Gaithersburg, Maryland. It was at the latter that I began investigations on my personal bikes.

Unlike aerosol sealants that are used after getting a puncture, Ride-On is a viscous liquid that's pumped into both tires through the valve stem (with the valve itself removed) before your bike gets a flat. Inovex claims that Ride-On seals punctures from objects up to 1/4inch in diameter, so why diddle around? We started by driving an awl into the rear tire of my Triumph Sprint ST, an OEM Bridgestone BT57, just worn to the wear bars. When we pulled it out, the tire expelled a squirt of beige liquid about the size of a rice grain, at which time I beat a hasty retreat, as proper sealing depends on the centrifugal force of the rotating wheel. For the first few miles I limited my speed to 35 mph, but as the tire showed no signs of rapid air loss I gradually increased speed.

For 45 minutes I traversed a variety

of roads, limiting maximum speed to 60 mph. Tire pressure, when I returned to the dealer, showed an increase of two psi-about one or two less than what you'd expect after normal heat rise. This apparent slight air loss probably occurred in the initial moments following removal of the awl. Satisfied, I decided to see how the additive might handle simultaneous punctures—not an unheard of occurrence. Rising to the challenge, Battley's most malevolent staffers brandished files and screwdriversvirtually every sharp implement they could find—and merrily plunged them into both tires. A total of four front punctures and five rear! I then repeated my test loop, plus a few extra miles and returned to the shop. One hour after they'd been punctured each tire showed a net loss of seven psi.

Chemical engineer and Inovex president Mark Farkhan reckoned a seven-pound loss was a bit sub-par, even for such an extreme violation. He noted that prolonged usage and heat build-up actually *improve* the sealant's performance. That's all well and good, but tubeless tires already have a modicum of self-sealing capability. How would the product perform in a tube-type tire, like those found on many cruisers and dual sports?

Inovex recommends Ride-On for both types of applications, but Farkhan claimed only a "60 to 65 percent effectiveness" rate for tubes—understandable considering how rapidly air escapes from a thin rubber membrane

and a rim with up to 40 unsealed apertures (for spokes). Given the serious nature of a tube failure, I considered it my obligation (though hardly one I embraced) to test the product on a tube-equipped motorcycle.

This time Battley's injected the substance into a pair of half-worn Michelin T66s on my '89 Honda TransAlp. One winter month later, having lost hope of ever warming the tires to optimum temperature, I dutifully drove a drywall nail into a tread block on the rear tire. The tire showed no measurable loss of air after two miles, so I waited half an hour, rode another mile (top speed 35 mph) then pulled the nail with a pair of pliers (Inovex recommends immediate removal of foreign objects, unscrewing threaded ones).

As with the tubeless tires, a tiny spurt ensued, but along with it a dispiriting hiss. I dutifully mounted and rode another half mile at 20-25 mph to see if the hole would seal. The road was wet, but when I stopped, nary a bubble emanated from the puncture. Total air loss over the past month has been four psi...all of it during the seconds following removal of the nail. I've suffered high-speed blow-outs on tube-type tires. On each occasion the bead separated from the rim, with only good fortune to avert a collision.



Is Ride-On a permanent or a temporary repair? "Our position is that it will seal a puncture for the legal life of the tire," explained Farkhan. "If the consumer notices that it continues to lose air, they should have it inspected by a tire professional."

Rubber manufacturers typically advise motorcyclists to discard punctured tires rather than attempt permanent repairs. However, introducing Ride-On into Michelin, Continental, Pirelli or Bridgestone tires will not void the warranties, according to letters which Inovex showed us from officials representing those companies. Unlike aerosol roadside repairs

and even Slime, the popular sealant favored by bicyclists and off-road riders, Ride-On's chemical's do not adversely effect aluminum rims. When I changed the Triumph's tires six weeks later, the liquid's consistency appeared unchanged, and a rinsing with cold water was all that the rims needed prior to the installation of new rubber.

By helping to maintain air pressure, Inovex's slick promo materials boast of better fuel economy, extended tire life, improved steering and dozens of other claims, which a million trucking miles over standardized routes might substantiate. Over 5,000 miles and a variety of riding conditions, I found no discernible effect positive or negative-upon wheel balance or any other area of performance...just a giant gain in the tires' ability to hold air in the presence of sharp metal objects. So perhaps you'll want to inspect your tires for foreign objects more frequently. Because it's more viscous than other (sometimes flammable) sealants and stays that way, Ride-On doesn't usually come out of or plug up the Schrader valve, and doesn't coat the inside of the tire with a gummy residue that is hard to scrape off. It's also environmentally friendly and non-toxic, though you may still want to let your dealer know that the stuff's in there when you're having a tire changed.

Dealer-installed Ride-On typically costs \$10 to \$15 per tire. That cost should be lower when the company begins bottling the product for con-



sumer motorcycle installation—probably about the time you are reading this. In the meantime, Inovex says that one of its current 8-ounce bottles

will treat a typical motorcycle tire. This is worth considering. Inovex Industries Inc., 45681 Oakbrook Court, Unit 102, Sterling, Virginia 20166; (888) 374-3366, www.ride-

on.com. Larry Grodsky