



Look Jones, I know speed improves efficiency, but we have a problem

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Motorcycle CONSUMER NEWS

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PERIODICALS MAIL

TireGard pressure monitoring system

SINCE SEPTEMBER 1, 2007, NHTSA has required that every new car sold must be equipped with tire pressure monitors to improve safety in braking, handling and hydroplaning situations and prevent blowouts due to overloading, as well as maintain optimum gas mileage.

Motorcycles don't have the same requirement, but if accurate pressures are so important on cars, they are doubly important on bikes, which have to manage with much smaller contact patches while leaning through turns in every kind of road and weather condition.

BMW was the first company to make tire pressure monitors available to motorcyclists, and various aftermarket systems have also been produced, but we've never been entirely satisfied with the way they work. False alarms are one problem. As a bike climbs mountains, and atmospheric pressure drops, the monitors will signal unsafe elevated pressure. Also, factory monitors are programmed for OEM pressure recommendations and can't be adjusted if riders prefer to adjust pressures slightly lower to add contact area and improve handling feel.

Previous editions of these devices were also large and heavy, and the thought of fitting a blocky pressure sender to the inside of a wheel with a six-foot hose clamp makes those of us concerned about unsprung weight's effect on the suspension think twice about the net advantage of such designs.

The new TireGard system from Big Bike Parts has finally answered our reservations with micro-miniaturization. Utilizing a small key fob with an LCD display, the device receives regular



signals from special valve stem caps equipped with pressure sensors. There's no need for tire dismounting, either.

The details: Each pressure cap weighs 13.5 grams, or almost one-half ounce (for reference, the cheap plastic valve cap is .9g, and a steel-and-rubber model is 3.1g). This is very light, but not insignificant, so we'd recommend a half-ounce weight be placed across from the stem to eliminate any imbalance. Also, to handle the additional weight, the company recommends metal valve stems rather than flexible rubber for long-term durability. The sensors are powered by CR1632 3V lithium batteries that are claimed to last for two years before replacement. The fob is powered by a 1.5V AAA cell that should last approximately 6 months. The fob will automatically power down if it doesn't receive signals from the pressure sensors for 20 minutes, and it can also be easily turned on and off manually. An anti-theft feature for the pressure caps is also provided in the form locks that prevent the senders' removal (although that also means you can't add pressure to the tires either without loosening the lock's allen screws).

Both tire pressures (plus or minus 1 psi) and the tires' internal temperatures can be displayed in your choice of units. We verified the senders' accuracy by comparing them with several gauges.

To adjust your own standard, lowest and highest pressures and internal temperatures, you simply hold the "set" button down for three seconds and the fob will scroll through its setting menu. It takes less than a minute to program. Note: Because the sender units read pressure by depressing the valve core, they must be installed tightly. Soapy water is suggested as a test.

When it's On, front and rear pressure are shown in the display, and any alarms are accompanied by both chirps and buzzing, so you won't miss the signals. (The sound alert also has a mute button.)

Have you ever wondered how much your tires increase pressure during your commute, or how much the internal temperatures change with cold morning pavement as opposed to hot afternoon asphalt, or how much more the rear tire's pressure changes due to acceleration? A glance at the fob will tell you. It's not only handy, but fascinating information you never knew before. Plus the fob has a backlight for nighttime use.

If you're tired of getting down on your knees with your gauge and trying not to lose pressure with your measuring efforts, the TireGard system may be the solution you've been searching for. The MSRP is \$199, which is very reasonable.

—Dave Searle

Big Bike Parts—TireGard TPMS 2-wheel, part #13-315; 2300 Pioneer Ave., Rice Lake, WI 54868; 715-234-3336; www.bigbikeparts.com