

## Run Flat Tires *By Dick Koebbe*

All the Z4's come equipped with run flat tires. That can be both a blessing or a curse. It's a blessing when you have a flat out on the interstate, the rain is pouring down and you are late for an important meeting. You can proceed to your destination at speeds of 55 miles per hour for up to 125 miles, performing nearly as well as an inflated tire without feeling a lot of difference in the handling. How do you even know that you have a flat then? Z4's are equipped with tire-pressure monitors with a warning light that alerts you in the instrument panel. Now comes the curse. They are not recommended to be repaired even if the puncture is simply a nail, and they are expensive, costing as much as \$350.00 per tire to replace.

Purchasing a new run flat tire is not always easy. Some dealers stock a few, but most will have to order one in, particularly if you wish to match the rest of your tires. That would not be good if you are traveling away from home. I recently called my two local BMW dealers and one had two in stock to fit my Z, and the other none. If you are so unfortunate as to have a flat; it is recommended that you shop around. Replacement costs for the identical tire can vary as much as \$100 from tire shop to tire shop. My BMW store quoted \$270. If you have the time to order on line, you can save a bunch. Check out "Tire Rack" as well as others on your computer search engine. A 17" Bridgestone for my Z4 was \$169 plus freight. They can ship one to you in a day or two, and most tire shops can mount them. The mounting charge for a run flat can vary between \$15 to \$45.

Run flat tires are not new. In 1993, Chevy Corvette was the first production vehicle to be equipped with run flats. Today, sixteen car models come standard with them. To name a few, besides the Z4, Mini Cooper, Toyota Sienna, Dodge Viper, Caddy XLR, Infinity Q45, Lexus SC230, Honda Odyssey, and even the Rolls Royce Phantom.

So how do they work? Currently there are two run flat type systems: "self supporting" and the Michelins "PAX" system. Self-supporting run flats, which have superstrong sidewalls capable of supporting an un-inflated tire, are the most commonly used by tire makers, including BF\_Goodrich, Bridgestone, Dunlop, Firestone, Goodyear, Kumho, Michelin, Pirelli and Yokohama. My Z4 came with Bridgestones. Michelin's PAX system uses all inner ring (instead of stiff sidewalls) to support the tire in the event of lost air pressure, allowing the vehicle to travel at 55 mph for up to 125 miles. A specially designed bead prevents the deflated tire from separating from the wheel even when going through autocross style maneuvers. In addition to sparing drivers the inconvenience and dangers of flat tires, PAX tires create less rolling resistance than radials, resulting in better fuel economy.

If you are considering retrofitting run flats for your Z3 or any other car, keep in mind that they will probably require special rims (check with your dealer) and you will have to add a pressure sensing system which will run you from \$250 to \$300. On the down side, converting will probably result in a harsher ride, more tire and road noise, and possibly give the car different tracking. New cars offered with run flat tires have suspensions designed to accommodate the run flat tires different characteristics. On the upside, they eliminate the need for a spare, resulting in reduced car weight, more trunk room, and above all are very safe, virtually eliminating any life threatening blowouts.