

HOT NEW GOODYEAR ALL-SEASONS

BY JOE SAGE

TESTING AT THE BOB BONDURANT SCHOOL OF HIGH PERFORMANCE DRIVING DURING RECORD HIGH TEMPERATURES

When you get exposed to the design and engineering processes behind a new tire, it's definitely more fascinating than it may be when you are simply down on your treads and standing in the store. In fact, there is so much that goes into any new tire's development, that by the

time you've heard it all, you really start to wonder where they can go from here, as they generally seem to have solved every challenge they had in front of them.

Ten months ago, we reported to you from Washington state, where we drove mostly BMW 3 Series in the driving rain

on the Pacific Raceways track, and various sedans on an autocross circuit at the same venue, plus on the open road, testing the new Goodyear Eagle F1 Asymmetric All-Season tire. At the time (see our Sept/Oct 2012 issue), we said that this tire may have "(broken) through all that has come before," and that "by the time we were done learning about the development of (this) tire... we were hard pressed to figure what the team would tackle next, that hadn't just been solved for all time."

So, here was our chance.

This time, we drove the new Goodyear Eagle Sport All-Season in extreme heat (even for Arizona) in late May, at the Bob Bondurant School of High Performance Driving on the Gila River Indian Community outside Chandler. We drove Cadillac CTS-Vs on the track and Audi A4 quattros on a handling track. This included a signif-

icant artificially wet stretch despite the blazing sun desert conditions, as well as hot brake tests and other tight handling.

Once again, we got the feeling that the tire had been reinvented from scratch and that all goals had been met and all problems solved. We are not being cynical here. The process is truly impressive. But it did raise the question of where we were with this new tire, relative to the best-ever Eagle F1 Asymmetric All-Season last year.

That turns out to be easily explained. Both are all-season performance tires. The Eagle F1 Asymmetric All-Season is considered an ultra-high performance tire, while the Eagle Sport All-Season is more of a mid-tier tire. To the marketers, the Eagle Sport driver typically loves their vehicle (and loves to improve it), enjoys driving and is generally a fun and capable driver. The Eagle F1 Asymmetric driver is seen as far more focused, so engaged in their drive that "they may not even turn on the radio." This driver is likely to create more wear and to see less snow.

You may have already determined who you are by what you drive—fully 50 percent between the two lineups is decided simply by the sizes available, coordinated as they are with their most appropriate vehicles. You will also see far more truck fitments with the Eagle Sport All-Season.

The Eagle Sport All-Season tire replaces the venerable Eagle GT in Goodyear's lineup. The whole performance segment is on a roll, having grown over 35 percent from 2006 to 2012 (from 17 to 23 percent of total tire fitments). Three percent annual growth is predicted, ongoing, outpacing the industry's one-percent growth overall. One key reason is that original equipment manufacturers (OEMs) are now installing such tires on their cars, new, driven by demand and by the fact the original tires will last a lot longer than they used to. There are 47 sizes at launch, but this tire is also OEM-tunable, so manufacturers are able to optimize for their specific vehicle.

(Left) Our wet/dry handling course at Bondurant was run in the Audi A4 quattro sedan, the benchmark chassis for this tire's development. • (Right, top to bottom) We ran hot laps with the Goodyear Eagle Sport All-Season as well as competitive rubber in the Cadillac CTS-V sedan on the Bondurant track. • Champion racer Bob Bondurant welcomes the event. • A reminder that Goodyear Eagle is the brand of NASCAR, along with another reminder that a lot more than rubber goes into any new tire.



It is the job of Tara Foote, Goodyear's brand manager for performance tires, to analyze customer and OEM trends and requests, creating goals for the next wave of tire development, then to bring those goals to the chemists and engineers—whose creative work is just beginning.

Goals for this tire sound broad, but were assembled very specifically. They included achieving excellent performance in both dry and wet handling, with a smooth and quiet ride, plus enhanced ice and snow traction, with an industry-leading treadwear warranty and OEM compatibility.

The ensuing design and engineering process (as described in detail in our Sept/Oct 2012 issue) is more computerized



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When it's time to develop a new tire, Tara Foote, Goodyear brand manager for performance tires, analyzes the market and sends parameters to the engineers. The new Goodyear Eagle Sport All-Season tire, replacing the Eagle GT in a wide variety of fitments including mid- and upper-tier sport sedans, is the latest result. We experienced them at the Bob Bondurant School of High Performance Driving, using the Audi A4 quattro on a specially prepared wet and dry handling course and the Cadillac CTS-V on the Bondurant high-speed track.

significantly outperforming, respectively.

The new Goodyear Eagle Sport All-Season was 'comparable' in wet stopping and either 'outperformed' or 'significantly outperformed' in every other category. Areas of significantly outperforming included wet handling lateral acceleration—which we were able to verify on the Bondurant handling course—and ice stopping, which we were not. Goodyear test results had indicated the tire outperformed in both dry and wet handling lap times, dry stopping—which was dramatic during our own session—dry handling lap times, 100-foot slalom vehicle speed, dry handling lateral acceleration and evasive lane change speed.

Step back and admire the intricacy of the final result, at left. It's an integrated piece of art and science that provides the hugely important interface between your hurtling machine under influence of your own driving skills—and the pavement.

Each new tire seemingly accomplishes everything, and each seems to be better than the ultimate one that came before. The Goodyear Eagle Sport All-Season tire has a 50,000-mile warranty and is available in both V and W ratings (expanded from just V for the old Eagle GT). ■

than ever, allowing highly analyzed variables to be developed into the test product stage, before they head to the track to confirm progress on their new designs.

The Eagle Sport All-Season's design includes deep circumferential grooves for water evacuation, a significant footprint for dry surface grip, and angled lateral grooves in an asymmetric pattern for cornering grip. Grooves are wider on the inboard side than outboard to optimize load carrying on the one hand and cornering grip on the other, while achieving improved wear performance. Lateral and circumferential blades are added for the additional challenging combination of requirements for grip in both ice and snow—themselves two very different conditions—while improving ride quality, promoting long tread life and even wear, and reducing noise.

Competitive performance testing rates differentials as under 5 percent, 5-10 percent and over 10 percent. These are designated as comparable, outperforming or

