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A 2013 Silverado being tested at Milford Proving Grounds.

Chevy Trucks Prove Grit in Rugged, All-Weather Tests

When it comes to trucks, durability counts.

That's why each of the Silverados in Chevrolet dealerships benefits from 12.5 million miles of durability testing before the first customer ever receives the keys, said Tom Wilkinson, spokesman for Chevrolet Trucks.

From the scorching hot desert of Yuma, Ariz., to the sub-zero cold temperatures of Kapuskasing, Ontario, and the outdoor torture tests of General Motors' Milford Proving Ground, the new full-size trucks completed more than 4 million miles of combined

vehicle durability testing.

In addition, a fleet of test vehicles racked up 8.2 million miles of real-world mileage, Wilkinson said.

"It takes refinement and testing to build the strength that our customers expect and rely on from their trucks," said Phillip Hubler, vehicle system engineer. "Our philosophy with the 2014 trucks was to improve what needed to be improved and leave alone what was already considered world-class."

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1973 Buick Century Regal Coupe

Buick Celebrates 40 Years Of 'Kingly' Regal Models

Things change so quickly. It seems like only yesterday that Buick Regal was launched as the only mid-sized car in the U.S. with a standard V6 engine that provided V8 performance.

But the addition of the Regal nameplate to the Buick family goes back 40 years.

Introduced in 1973, the Century Regal, as it was originally called, served as an upmarket model in the Century line and one of GM's first "personal luxury" cars, said Buick spokesperson Katie Bjork.

Designed with sporty suspension characteristics and luxuries aimed primarily at the driver, the 1973 Regal coupe sold 91,557 units, helping Buick surpass its 1955 all-time sales record.

Launched with a standard 350-cubic-inch V8 engine, the Regal would soon carve a niche as a powertrain innovator, Bjork said. Among one of the first to react to the initial Arab oil embargo, the 1975 Buick Regal was the only mid-size vehicle in the United States to forgo a standard V8 engine in favor of a V6.

"The Buick team was on the leading edge and reacted to the

need of more fuel-efficient engines," said General Motors Heritage Center manager Greg Wallace. "Engineers worked around the clock to get the V6 program up and running in a fraction of the time it typically took, while making sure to retain Buick's reputation for reliability."

Just a few years later, beginning with the 1978 Regal, Buick would lead a vanguard in turbocharging for better fuel economy. This expertise would later be used in creating Regals that would be recognized as some of the most powerful and significant cars of the 1980s, Bjork said.

Throughout four decades, and now in its fifth generation, the Regal, Bjork said, carries on its sweeping design, dynamic driving experience and powertrain leadership.

Today's Regal is equipped with its most-powerful standard engine, a 2.0L turbocharged four-cylinder producing 259 horsepower and 295 lb.-ft. of torque. To help make the most of traction in all driving conditions, it is also available with an advanced

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GM, Honda Share Research on Fuel Cells

Developing new power systems for cars is expensive, which is why GM is teaming up with Honda on a project to develop a practical hydrogen fuel cell that's affordable to everyday drivers.

"GM has been working on developing a hydrogen fuel cell for the past several years," said company spokesman Daniel Flores. "We put more than 100 cars powered by hydrogen fuel cells on the road in 2007. The vehicles were Equinoxes and were driven by ordinary people. This was called 'Project: Driveway.'"

The drivers, Flores said, were, for the most part, ordinary people and they used the vehicles to get around in their regular, everyday lives. He said most of them were based in Southern California because the infrastructure there made it possible for people to drive in an ordinary manner.

Simply put, he said, Southern California has enough stations that can fuel hydrogen-powered cars to make the experiment viable.

In fact, Flores said, one of GM's fuel cell research vehicles recently passed a milestone for a hydrogen-powered vehicle – topping 100,000 miles of real-world driving. By using renewable hydrogen, this vehicle has saved 5,260 gallons of gasoline, he said, adding that at \$3.50 per gallon,

that's more than \$18,000 in fuel cost savings.

To date, GM's fuel cell test fleet has accumulated nearly 3 million miles, more than any other automaker, Flores said. By GM's calculations, the fleet has saved 157,894 gallons of gasoline – more than \$552,631 in avoided fuel costs.

During Project Driveway, the 100,000-mile Fuel Cell Equinox operated as a fleet vehicle at Walt Disney Company's studio in Burbank, Calif., said Flores. After Project Driveway, it became an engineering development vehicle driven by as many as 10 GM engineers.

Todd Goldstein, from GM's Advanced Technology Demonstration Program, was behind the

wheel of the fuel cell vehicle when its odometer reached 100,000 miles, Flores said. The senior project engineer routinely drives the vehicle between the Los Angeles suburb of Torrance and outlying communities of Oxnard, Santa Clarita, Victorville, Palm Springs and San Diego.

"The Fuel Cell Equinox is an attention-getter everywhere I go," Goldstein said. "The people who ask me about it are very enthusiastic about the technology."

Flores said GM is an acknowledged leader in fuel cell technology.

According to Clean Energy Patent Growth Index, GM ranked number one in total fuel cell

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GM's test vehicle topped 100,000 'real' miles with a hydrogen fuel cell.

BorgWarner on Pace for Another Award

BorgWarner's Eco-Launch solenoid valve has been named a finalist for the prestigious 2014 *Automotive News* PACE Awards in the product category.

"BorgWarner thrives on innovation. Our new Eco-Launch solenoid valve technology improves fuel economy and performance, delivering smooth operation for drivers and quick-to-market solutions for automakers," said James R. Verrier, BorgWarner's president and chief executive officer. "Once again, we are honored to be among this year's dis-

tinguished PACE Award finalists."

The Eco-Launch technology helps stop/start systems improve fuel economy with smoother launches during restarts, Verrier said.

BorgWarner's Eco-Launch solenoid valve technology offers improved performance at significantly lower cost than alternative systems and allows automakers to easily expand stop/start capability across their vehicle fleets, said Verrier.

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Eco-Launch solenoid valve

GM Foundation Donates \$150K to MADD

The General Motors Foundation has donated \$150,000 to Mothers Against Drunk Driving.

The donation was made "to expand prevention education initiatives and provide support services to victims of drunk driving crashes and their families," said GM Foundation spokesperson Maria Mainville.

In 2011, drunk driving killed more than 9,800 people and injured approximately 315,000. To aid in recovery, MADD provides services to one victim every 8.6 minutes at no charge. Last year alone, 61,000 people received help from the organization.

"Keeping drivers and passengers safe in and around vehicles is a top priority for our company and this grant is another example of our dedication to vehicle safety in every form," said Michael Robinson, GM vice president of Sustainability and Global Regulatory Affairs.

"Until we reach the point where impaired driving and related tragedies are eliminated, we'll continue to support MADD's

commitment to addressing the problem."

Since 1995, the GM Foundation has donated grants totaling nearly \$3.9 million to support MADD's drunk-driving prevention and victim recovery work, and to raise awareness on the impor-

tance of having a designated driver, Mainville said.

In addition to funding victims' services like counseling, medical, and legal support, a portion of the GM Foundation grant will be

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MADD CEO Debbie Weir and GM Foundation's Michael Robinson

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