

AAA and Ford Combine On Teen Driver Safety

CONTINUED FROM PAGE 1

Institute estimates that nearly 14 percent of young drivers will be involved in a crash within your first three years of driving.

"We're hopeful that this program will put you in a position that you're less likely to sustain an injury, let alone a fatality."

At the EFHS function, teens from the school test-drove the AAA Michigan three-screen driving simulator as well as "walked the line" while wearing the Dearborn Police Department's "drunk goggles."

The special eyewear is a pair of thick, coated eye goggles that simulate the view of a person who's heavily intoxicated.

Students driving the simulators were induced to read text messages while driving, all to show what a distraction

texting and driving can be.

Attending from the Ford Driving Skills for Life training program was Jim Graham.

"It's no secret that Ford's been an innovator in safety for years – for the young people here, you probably don't realize that Ford was one of the first companies to use seat belts in cars, for example," said Graham.

"And now we're working on technology that will tell you a car is coming at you, so you can avoid a crash. There is all kinds of neat technology out there.

"However, in 2003, we decided to develop an education program to develop an education program to supplement our technology efforts, it was really focused on teen driving."

The new S4SD program is designed to supplement the earlier Ford Driving Skills for Life program.

1784 Device – the Z-Link – Aids Buick Verano Balance

DETROIT – When engineers set out to give the all-new 2012 Buick Verano the agile driving dynamics and smooth quiet ride that drivers expect of the luxury brand, they put a new twist on a technology that pre-dates the automotive industry by more than a century.

Verano, which arrives at Buick dealerships later this year, uses a Z-link design in its rear suspension to center the car's rear axle during turns to provide a more balanced driving experience.

Z-link is based on the Watt's linkage, a device invented by James Watt in 1784 to drive a steam engine piston in a straight up-and-down motion. Automotive engineers have since used Watt's linkage to prevent sideways motion between the axle and body of a vehicle. General Motors' exclusive Z-link design is a refinement of that technology.

"By using a Z-link on Verano, we were able to achieve the crisp chassis dynamics, a

smooth ride, and hushed road noise that Buick customers have come to expect," said Matt Purdy, Verano vehicle performance manager.

"Z-link and other chassis refinements implemented on Verano are expected to deliver unmatched ride quality in the luxury compact car segment."

The Z-link is carried on a small cross-member attached to the vehicle's underbody, just behind the rear wheel center line. It consists of a short, pivoting center link with a ball joint at each end, to which the lateral links from the wheels are bolted.

During cornering, the Z-link provides greater lateral stiffness that results in more positive vehicle responses to steering inputs and helps keep the rear suspension aligned with the front suspension.

When the Verano is traveling on a straight road, it allows the suspension to travel up and down freely for excellent ride comfort.

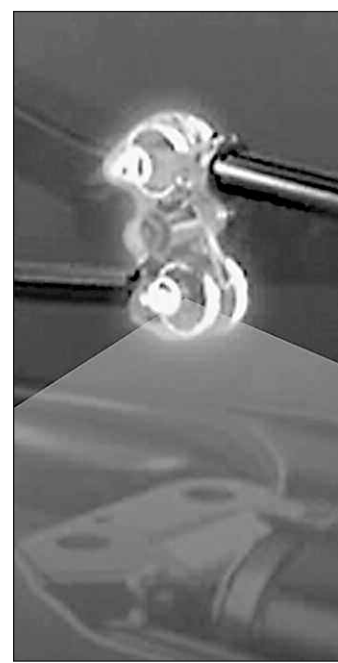


2012 Buick Verano

Verano's front suspension uses MacPherson struts that help manage road inputs, and high-strength aluminum components that help improve handling and durability and prevent vibrations while contributing to better fuel economy due to their light weight.

Verano's ride also benefits from the use of urethane cushions on the top and bottom of the springs to reduce vibrations, and a 10 percent larger twin-tube damper to increase ride control and isolate road noise.

"Verano couples these chassis technologies with remarkable acoustic refinement to deliver the quiet cabin, agile handling and superior ride



2012 Buick Verano with a Z-link on its rear suspension.

that our customers have come to expect from Buick," said Chuck Russell, Verano vehicle line director.

Hot Wheels Bases Life-Size Camaro Concept on Toy

LAS VEGAS – Fulfilling the wish of every child who has ever played with one, Chevrolet and Hot Wheels have created a life-size Hot Wheels Camaro Concept.

The car debuted at the 2011 SEMA Show – the aftermarket industry's premier display of automotive toys.

The Camaro Hot Wheels concept is inspired by the "Custom Camaro" – the dazzling Spectraflame 1:64-scale toy that was part of the original 16 Hot Wheels cars released in 1968.

The project was a collaborative effort between the General Motors Design studio in Michigan and the Hot Wheels Design studio in California. Each sketched its own ideas of a life-size Hot Wheels Camaro, compared notes and refined their visions until the concept hit the right note for each group of designers.

"The Camaro has been a mainstay in the Hot Wheels lineup since 1968," said Phil Zak, GM design director.

"Several generations of car enthusiasts grew up playing with Hot Wheels Camaros, while dreaming of driving the real thing, so this was a once-in-a-lifetime opportunity to make that dream a reality."

There was a similar buzz of excitement in the Hot Wheels studio.

"The Hot Wheels and Camaro brands have been paired together since their inception," said Felix Holst, vice president of design for the Mattel Wheels Division.

"As part of the brands historic Sweet 16, the Camaro was the first Hot Wheels car ever produced. The Spectraflame paint and redline tires of those first Hot Wheels cars have been the dreams of guys for generations, and it was thrilling to inject these elements into a Camaro for real."

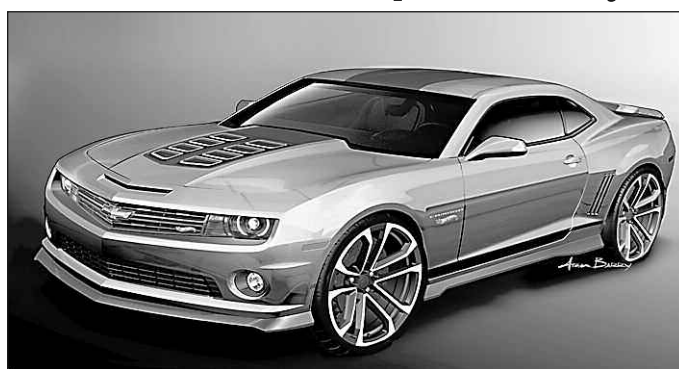
The synergistic project created a car that is instantly identifiable as a Camaro with styling cues – including flat-black graphics, red-line wheels and, of course, the dazzling metallic-green finish – that are classic Hot Wheels.

The original Hot Wheels cars debuted with their metallic Spectraflame paint finishes, and the Camaro Hot Wheels Concept features a brilliant, chrome-style finish created in a similar manner: a tinted top coat over a shiny base.

In the case of the original Hot Wheels lineup, the process involved polishing the die-cast metal vehicle bodies and applying a metallic lacquer to them. With the Camaro Hot Wheels Concept, the process was decidedly more complicated.

"We are always looking for innovative ideas and processes that push the boundaries of design – including paint finishes – and the Hot Wheels concept definitely stretched our team to the limit," said Zak. "They had to essentially invent a new way to paint the car."

The reflective finish was



Rendering of the Camaro Hot Wheels concept that was inspired by the "Custom Camaro" – the dazzling Spectraflame 1:64-scale toy that was part of the original 16 Hot Wheels cars released back in 1968. The concept car debuted at SEMA in Las Vegas.

created using Gold Touch Inc.'s Cosmichrome product, starting with the application of a primer coat on an immaculately prepared surface.

The primer coat was then sprayed with a liquid-metal solution to create the mirror-smooth, silver-chrome base coat. Afterward, the green tint was applied in several layers until the just-right color effect was achieved.

"It may sound pretty straightforward, but no one had ever tried using this process to paint a whole car," said Zak.

"The bodywork and paint team experimented with several processes before spraying the first body panel.

"There were so many variables that contributed to getting the finish perfect, from the drying time to the air pressure of the spray guns – none of which was known before this project – and the

team absolutely nailed it perfectly."

Hot Wheels will offer a collector's edition 1:64-scale model based on the full-size Concept. Purchase information is available at www.hotwheelscollectors.com, as well as the Hot Wheels and Chevrolet Camaro Facebook pages.

It will be the 18th 1:64-scale Hot Wheels Camaro model produced since 1968, all with a variety of colors and configurations. During the past 44 years, literally millions of Hot Wheels Camaro models have been produced.

The original Custom Camaro from 1968 remains one of the most valuable Hot Wheels toys among collectors.

That year, Hot Wheels produced all the Custom Camaro models with Spectraflame paint – except for one version in white enamel.

Ford Ups Ante on Fuel Economy With New Generation of Escape

CONTINUED FROM PAGE 1

bocharging, twin independent/variable camshaft timing (Ti-VCT) and direct injection to deliver the performance feel of a larger engine, makes its North American debut on the new Escape.

It is expected to deliver even higher highway fuel economy than the current Escape Hybrid, which is EPA-rated at 31 mpg highway.

The new 1.6L EcoBoost engine is also expected to deliver better fuel economy than most competitors' larger four-cylinder engines, Ford claims. Since launch, sales of the 1.6L EcoBoost in Europe in Focus and C-MAX are exceeding expectations by 40 percent.

The engine's broad, flat torque curve has been praised for its diesel-like performance (in Europe, at least, describing any engine as "diesel-like" is actually a good thing).

Greg Johnson, Ford North America Powerpack Manager, explained the technologies that are making the EcoBoost so popular worldwide for Ford, considering that the new type of engine only came to market in 2009.

"Turbocharging basically takes the waste energy that normally goes out the exhaust, and uses it to force air into the engine – significantly increasing the output of the engine," Johnson said.

"Increasing the output of

the engine lets us replace bigger engines with smaller engines (in terms of displacement), delivering fuel economy for the customer.

"Direct injection sprays the fuel directly into the combustion chamber and provides a cooling effect in the combustion chamber that lets us run higher compression ratios in our engines.

"So, for instance, in this 1.6L engine, we're running a 10:1 compression ratio – that's extremely high for a turbocharged engine.

"The high compression ratio, once again, helps us deliver improved efficiency and improved fuel economy for the customer."

Indeed, Ford says it holds 125 patents on EcoBoost technology alone.

The technology is a part of a global approach to provide affordable fuel efficiency for millions of drivers that will extend the availability of EcoBoost to 90 percent of Ford vehicles by 2013.

Generally speaking, Ford claims, EcoBoost increases overall fuel economy up to 20 percent while reducing CO2 emissions by up to 15 percent.

The Escape's new 2.0L EcoBoost, for example, will have better fuel economy than competitors' V6 engines while delivering unsurpassed performance compared with those larger V6 powertrains, according to the Dearborn automaker.

Grand Prix Returns

Event Set for June, 2012

by Gerald Scott
News Dept.

Detroit got another welcomed jolt of good news last month when it was announced during the Chevrolet Centennial celebrations that IndyCar racing would be returning to Belle Isle after a couple-year absence due to the bad economy.

What's more, Chevrolet is returning as both the name sponsor and new on-track participant.

Chevrolet last week announced a multi-year agreement with the Penske Corporation and IndyCar to bring professional motorsports to the Motor City for the first time in four years.

The first Chevrolet Detroit Belle Isle Grand Prix will be held June 1-3, 2012, at the picturesque 2.1-mile Raceway at Belle Isle Park road course.

"Chevrolet has a long, storied history in IndyCar racing," said Mark Reuss, president, GM North America.

"This year we celebrated the shared centennial of Chevrolet and the Indianapolis 500. We're excited to see that history continue with the help of Penske Corporation and IndyCar bringing back open-wheel racing to Detroit in 2012. This city is a natural for racing – it put the world on wheels and the roar of engines is something that simply belongs here."

Detroit's historic Belle Isle Park will host four races during the three-day event, including:

The Chevrolet Indy Grand Prix presented by shopautoweek.com, where Chevrolet's new twin-turbo V6 race engines will compete in the IZOD IndyCar Series.

Along with IndyCar racing there will also be the Chevrolet Detroit Sports Car Challenge where Chevrolet Daytona Prototypes and Camaros will compete in the first GRAND-AM Rolex Series race held on Belle Isle.

There will also be the Cadillac V-Series Challenge at Belle Isle, where Cadillac CTS-Vs will compete in the second Pirelli World Challenge series race held on Belle Isle.

And the Firestone Indy Light Series race, featuring the rising stars of open-wheel racing.

"Chevrolet has been instrumental in bringing motorsports back to Detroit," said Penske Corp. Chairman Roger Penske.

"The Grand Prix will draw international attention and visitors to Belle Isle – which is one of the most-scenic race venues in the United States. We believe the Chevrolet Detroit Belle Isle Grand Prix will be one of the most popular races in the IZOD IndyCar Series and will play a major role in continuing the renaissance of Detroit."

Penske added that the new Chevrolet Detroit Belle Isle Grand Prix would serve as a summer "kickoff event," coming the weekend following the Memorial Day holiday.

Also, Penske pointed out,



Announcing the return of IndyCar racing to Belle Isle in Detroit are, from left, Mark Reuss (GM), Mayor Dave Bing, Roger Penske (Penske Corp.), Randy Bernard (IndyCar) and Jim Campbell (Chevrolet Motorsports).

the Indy 500 is held Memorial Day weekend and most of those same race cars will now be gathering in Detroit just one week later.

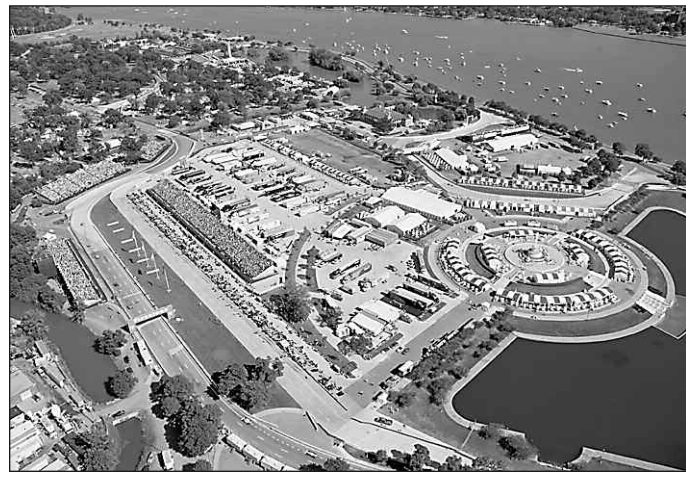
The announcement of the return of IndyCar racing to the city of Detroit came at the GM RenCen, where GM and racing officials gathered to announce the good news to an audience that included media from around the globe, all in town last week for the ongoing Chevrolet Centennial celebrations.

Note that IndyCar racing has developed a global audience over the years where

NASCAR is a domestic-only phenomenon.

The 2011 IZOD IndyCar Series, which concludes Oct. 16, includes 17 events in the United States, Canada, Brazil, and Japan, reaching an estimated television audience of 191 million people in 200 countries.

The Detroit Belle Isle Grand Prix was last held in 2007 and 2008. Based on estimates from the Detroit Metro Convention and Visitors Bureau, those two events combined attracted more than 200,000 visitors, and brought more than \$100 million to the Detroit Metro economy.



IndyCar racing will return to Detroit for the first time since 2008.