# Tech Center News...

WARREN, MICHIGAN

**VOL. 39 NO.33** 

**Covers the Tech Center and the Immediate Area** 

**APRIL 20, 2015** 



Jim Kiefer

## GMs Kiefer – "Build a Strong Relationship with Suppliers"

by Jim Stickford

When it comes to GM's global supply chain, there's a new sheriff in town.

Steve Kiefer GM vice president of Global Purchasing and Supply Chain, spoke to the media on April 14 and discussed how GM has changed the way the company interacts with suppliers.

Kiefer said that he joined GM 32 years ago as an engineer and eventually took assignments in Europe and Japan in the component side of things.

"When I was in Japan GM sold its components business," Kiefer said. "I like to say that I didn't leave GM, GM left me.'

When Kiefer rejoined GM in September of 2013, he was company senior vice president and president of Delphi's Powertrain Systems at Delphi.

'By being a supplier to all the OEMs, I learned a lot about the suppliers and how they interact with different manufacturers," Kiefer said. "When Mary Barra

asked me to come back to GM, I his message - build strong relahesitated but when I saw the four Ps - Portfolio, People, Powertrains and purchasing.'

Kiefer also liked Barra's message of building strong relationships with suppliers. He acknowledged in the past that GM didn't always have the best relationships with its suppliers. He noted that in 2005, a supplier survey of the best and worst automotive OEMs, GM was at the bottom of the list.

Barra's message, Kiefer said, is

tionships with suppliers. And one of the ways GM is doing that is by working with suppliers in the initial design process so that the suppliers can offer their expertise ahead of time. This is instead of designing a part or system, then bringing the suppliers in and telling them "make this part this way.'

"We will emphasize total cost, both present and future," Kiefer

**CONTINUED ON PAGE 3** 

### **Bankruptcy Shields GM from Ignition Suits**

by TOM KRISHER **Associated Press** 

DETROIT (AP) - A federal judge ruled April 15 that a 2009 bankruptcy order shields General Motors from billions of dollars in death and injury claims tied to defective ignition switches in older small cars.

But Judge Robert Gerber in New York, who handled GM's government-funded bankruptcy case six years ago, also ruled that plaintiffs who claim a loss in the value of their cars can still sue General Motors Co., but only for company actions that happened after it left bankruptcy in

The ruling is at least a partial

victory for GM, with one plaintiffs' attorney saying it shields the company from \$7 billion to \$10 billion in potential legal liabilities. But it also leaves open the possibility of costly claims for decreased values of cars.

In 2009, Gerber allowed "new GM" to emerge from bankruptcy protection free from liabilities of the company before bankruptcy. But the plaintiffs recently argued that GM misled the court six years ago because it knew about but failed to disclose the ignition switch problem. The switches, which can slip out of the run position and cause cars to stall unexpectedly, are now linked to at least 84 deaths.

Lawyers for plaintiffs in more

than 140 lawsuits had argued that their clients never got a chance to dispute the bankruptcy order and were never notified of the bankruptcy because GM concealed the defective switch-

But the new GM contended that when it bought assets from old GM, the new company got them "free and clear" of liabilities before the bankruptcy.

Texas attorney Robert Hilliard, who represents multiple wrongful death and injury plaintiffs in lawsuits against GM, said the ruling cuts off court options for victims in crashes that happened before GM left bankruptcy pro-

**CONTINUED ON PAGE 3** 



### Hand-Built Camaro Benefits Disabled War Veterans

Chevrolet sold the first 2015 Campbell, U.S. vice president of COPO Camaro race car to raise money for Achilles Freedom Team of Wounded Veterans, which helps wounded veterans participate in marathons and share their success within a supportive community including their families.

The hand-built car carries serial number 2015COPO001. It was sold on April 18, at the Barrett-Jackson Palm Beach auction. with 100 percent of the winning bid going to Achilles Freedom Team of Wounded Veterans, said GM spokesman Jim Brumfield.

Achilles Freedom Team of Wounded Veterans, Brumfield said, is a non-profit organization that helps disabled athletes, including veterans, gain access to races, equipment, and training dedicated to improve their physical abilities.

"This sale gives the highest bidder the opportunity to buy the first of only 69 factory-assembled 2015 COPO Camaro race cars, the final year of the fifthgeneration Camaro," said Jim

Performance Vehicles and Motorsports. "Chevrolet is excited to offer this milestone Camaro to help a very worthy organization.

Chevrolet introduced 2015 COPO Camaro No. 001 last fall at the SEMA Show in Las Vegas, and it has been featured in Chevrolet Performance advertising and other marketing initiatives, Campbell said. Its distinctive look includes an Abalone White exterior with matte gray and orange accents, and bold "15" graphics. Power comes from a 350-cubic-inch LSX-based racing engine topped with a Whipple 2.9L supercharger, which is NHRA-rated at 555 horsepower.

The engine is backed by a three-speed automatic racing transmission - a powertrain combination good for reaching a quarter mile in the mid-eight sec-

Each COPO Camaro is built by hand starting with production

**CONTINUED ON PAGE 3** 

### Michelin Design Contest – Mobility for All'

by Jim Stickford

Michelin celebrated its 2016 Design Challenge contest at the Detroit Athletic Club on April 15, by having three expert designers talk about just what this year's theme is - Mobility for All, Designing for the Next Frontier - actually means to today's automotive designers.

The Michelin Design Challenge is a yearly event that got its start in 2001 to celebrate, promote, publicize and give visibility to original creative thinking and innovation in vehicle design. Entries are judged by a jury comprised of top designers. Winners for the 2016 contest will have their work displayed at the 2016 North American International Auto Show. Their names will be announced this fall.

Automotive Press Association and the speakers included Alexander Klatt, an associate professor of design at the Center for Creative Studies; Jason Wilbur, manager, Advanced Design Studio for Honda; and Ben Ebel, design coordinator, OE Activities for Michelin North America. Ebel is also co-chair of this year's Michelin Challenge Design contest.

The panel was moderated by Jason Stein, editor and publisher of Automotive News.

Ebel began the panel discussion by saying that access to mobility means different things in different parts of the world.

"Providing access to mobility in the emerging world means knowing that they have different mobility needs than our own," Ebel said. "That means getting to know those parts of the world. If we don't plan ahead and just can get to market.



From left, Alexander Klatt, Jason Wilbure and Ben Ebel.

continue to do what we've been doing for the past century, the results will be sub-optimal.'

Wilbur said that he got a dose The DAC event was held by the of how critical smart ways to create mobility can really help a community. He said that on his first day working for Honda, he drove 23 miles from Pasadena to Torrance, Calif. That commute was about an hour.

"We have to look at mobility and how it affects people," Wilbur said "I know there are better options out there, and any good idea is worth pursuing right now. So the question is what comes next?"

Klatt said that many of his students are from India and China and they didn't grow up in a household that had cars. For them, mobility might have meant something different, like being able to go to where the water was, or getting crops to the marketplace. Ebel noted in some places in the emerging world up to 30 percent of the food grown by local farmers spoils before it

Wilbur said that part of the challenge of his job is coming up with mobility solutions that think

CONTINUED ON PAGE 9

## Ford Designs Reach Beyond Automobiles

Car design has advanced greatly in the past few years. And to show just what Ford's designers can do, Ford is showcasing the innovation and creativity of its global design studios at the world's leading furniture and design expo. Taking their inspiration from the all-new Ford GT supercar, Ford designers created a racing sailboat, guitar, foosball table and several other objects for display at Salone del Mobile in Milan, Italy, held April 14 - 19.

"We have an incredible amount of talent in our global design studios," said Moray Callum, Ford Motor Company vice president for design. "Salone del Mobile is the perfect forum to share some of that creativity, while also offering our designers an opportunity to get exposure to new ideas that will inspire future Ford design."

The display demonstrates that the interior design philosophy for Ford's all-new supercar can be applied to a range of nonautomotive creations.

The guiding principles behind the interior design philosophy for the all-new Ford GT are:

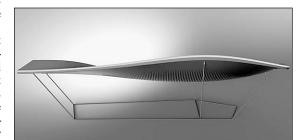
Clarity of intent – highlight-

ing focused areas of functionali-

• Innovation - pushing the boundaries of innovation to develop new designs and keep changing the way the world moves.

• Connection – establishing a connection with the driver

**CONTINUED ON PAGE 4** 



Chaise Lounge by Ford Design

### **Tech Center News**

31201 Chicago Road South Warren, Michigan 48093

586-939-6800

Contact us: Info@TechCenterNews.com

Deadline: Thursday 5:00 p.m. for the next edition of Monday

William Springer II, publisher Lisa A. Torretta, operations Jim Stickford, news

Tech Center News is a trademark of Springer Publishing Co., Inc.

www.TechCenterNews.com

### Chrysler Renews Broadway, Show Chrysler Vehicles

Nederlander Detroit has renewed its relationship with the Chrysler brand to sponsor the all-new 2015-2016 Broadway in Detroit season.

This will be the fifth consecutive theatre season that the automaker will sponsor, showcasing another hot line-up for both Chrysler and Broadway in Detroit, said Nederlander spokeswoman Brendy Barr. As part of this sponsorship, the latest Chrysler vehicles will be on display at the theatre.

The 2015-2016 Broadway In Detroit Subscription Season sponsored by Chrysler kicks-off with "Dirty Dancing – The Classic Story On Stage," at the Fisher Theatre, October 2015, followed by: "Disney's Newsies," at the Detroit Opera House, December "Rodgers & Hammerstein's Cinderella," at the Detroit Opera House, February 2016; "Matilda The Musical," *TIME* Magazine's number one Show of the Year and winner of 50 international awards including four Tony Awards, at the Fisher Theatre, March 2016; the contemporary new musical "If/Then," at the Fisher Theatre, April 2016; and, a new production of "The Sound of Music," at the Fisher Theatre, May 2016.

Please note that all show dates may be subject to change, Barr said.

As always, Broadway In Detroit offers extra shows off-subscription and the 2015-2016 Season features some big hits, Barr said. "Jersev Boys," the Tony, Grammy and Olivier Award winning Best Musical about Frankie Valli and The Four Seasons, at the Fisher Theatre, November 2015; "Chicago," at the Fisher Theatre, February 2016; and "Love Letters," starring Ryan O'Neal and Ali MacGraw, at the Fisher Theatre, April 2016. Season ticket subscribers will have the first opportunity to purchase these extra shows prior to public

"Chrysler is proud and excited to renew its commitment to support the performing arts in Detroit by sponsoring the 2015-2016 Broadway in Detroit season," said Pieter Hogeveen, marketing manager of Fiat Chrysler's Great Lakes Business Center. "Broadway in Detroit is a great partner, and by helping them bring world class entertainment to the city we can ensure the region's viability and future growth."

"Broadway in Detroit is bringing an exciting new season with something of interest to veteran theatregoers, as well as parents looking for a new family entertainment experience," said Ray Harris, chief operating officer of Nederlander Detroit. Chrysler's continued commitment as our official sponsor that enables us to bring the hottest Broadway shows to the Motor City, and we're looking forward to another great collaboration."

For more information about Broadway in Detroit 2014-15 subscription tickets, please visit www.BroadwayInDetroit.com.

## New Terrain Arrives As Popularity of SUVs Reaches Peak

Distinguished by a new, more contemporary front-end appearance, the 2016 GMC Terrain and Terrain Denali were introduced at the recent New York International Auto Show.

The 2016 Terrain lineup features new front and rear fascias, new grille designs, a power dome hood, light-emitting diode (LED) daytime running lamps and additional updates. Side Blind Zone Alert and Rear Cross Traffic Alert are offered on SLE and SLT models for the first time.

Terrain is a popular choice in the growing compact SUV segment, introducing drivers to GMC's professional grade design and features," said Duncan Aldred, vice president of GMC Sales and Marketing. "The changes for 2016 provide consumers with even more reasons to consider Terrain as it continues to be a smart choice for customers seeking versatility, style and technology.

The compact SUV market leapt 17.4 percent in 2014 to account for 15.7 percent of the total U.S. market, overtaking midsize cars for the first time as the auto industry's largest vehicle segment.

Terrain had its best year ever in 2014 with 105,016 sold. The momentum continues this year, as Terrain enjoyed its best-ever January and February sales, Vazquez said.

The New York region is the national leader for compact SUV sales, with more than 200,000 retail units sold last year. It is also second-highest selling region for Terrain, behind Detroit, Vazquez

The complete list of revisions for the 2016 Terrain lineup includes:

- · New front and rear fascias with C-shaped lower chrome trim that accentuates the Terrain's wide stance.
- New, chrome-accented grille designs for SLE, SLT and Denali including specific tri-segment grille texture on Denali.
- New power dome hood de-
- New LED daytime running lamps on uplevel models.
- New 18-inch aluminum wheel design offered on non-Denali models.
- 19-inch New aluminum wheel design offered on Denali.
- Revised instrument panel interior with the GM-exclusive



2016 Terrain-Denalli

"center stack" with new storage shelf and updated control graph-

- Revised model lineup: SL, SLE (SLE-1 and SLE-2), SLT and Denali.
- Premium cloth seat fabric now standard on SL and SLE models.
- New Saddle Up leather interior available on SLT.
- New Light Titanium/Jet Black interior combination offered on Denali.
- Front passenger eight-way power-adjustable seat offered on SLT (previously available only on Denali).
- New, chrome-trimmed transmission shifter.
- Available Side Blind Zone Alert and Rear Cross Traffic Alert safety features on SLE and SLT (previous available only on De-
- New White Frost Tricoat and Crimson Red Tintcoat premium exterior colors.

Bold design tops many customers' reasons for purchasing the GMC Terrain, Vazquez said, and the updated 2016 models retain the distinctive proportion that attracts first-time buyers to the brand with a greater focus on precision and attention to detail.

"The updates for the 2016 Terrain make one of the strongest designs in the compact SUV market even more compelling," said Helen Emsley, executive director, Global GMC Design. "They create a more contemporized appearance rooted in GMC's professional grade precision."

The 2016 Terrain seats five, with all-wheel drive offered on SLE, SLT and Denali models. Its MultiFlex sliding rear seat - offers 31.6 cubic feet of cargo space behind the rear seat and 63.9 cubic feet with the rear seat folded.

The standard Ecotec 2.4L direct-injected engine delivers an EPA-estimated 32 mpg on the highway (FWD models). A directinjected 3.6L V6 is available and delivers best-in-class 301 horsepower and 272 lb-ft of torque. The V6 engine also enables a trailering capacity of up to 3,500

Available GMC IntelliLink offers OnStar with 4G LTE connectivity and built-in Wi-Fi hotspot. It provides a mobile hub for drivers and passengers to stay connected. The hotspot is on whenever the car is on and comes with a three-month/3GB data trial (whichever comes first).

Terrain also offers a programmable power liftgate (standard on Denali, available on SLT), with a memory function that stops the liftgate at a chosen height to help shorter drivers or accommodate low garage heights.

In addition to available Side Blind Zone Alert and Rear Cross Traffic Alert safety features, Terrain offers Rear Park Assist, Forward Collision Alert and Lane Departure Warning as part of comprehensive safety packages.

And the Terrain Denali offers unique exterior and interior appointments, exclusive wheels and design cues to set it apart from competitors. Dual-flow dampers are exclusive to the Terrain Denali's suspension system, providing a smoother ride and improved handling by controlling suspension dampening across a broader range of driving conditions.

The 2016 Terrain goes on sale this fall. Pricing will be announced later.

The Terrain was introduced as a 2010 model in 2009 and is GMC's second-best selling vehicle, after Sierra.

Sales increased 5.5 percent in 2014 to 105,016 - its best year ever. In 2015, Terrain had its best January and February sales ever and the Terrain currently holds 5 percent of the U.S. compact SUV market.

The Terrain is GMC's conquest leader, at nearly 50 percent, Vazquez said, and it has GMC's highest percentage of female buyers - 44 percent. The Terrain's exterior styling is the number one reason for purchase among female buyers



### **FEV Shows off New Battery**

FEV North America, Inc. (FEV), an Aubrn Hills-based developer of vehicle systems and advanced powertrain technologies, announced that it will be displaying a liquid-cooled, high performance battery that showcases the company's expertise in the area of hybrid powertrains and Electric Vehicle battery management. The battery is being held this week at the 2015 SAE World Congress, April 21 - 23 at Cobo Center in downtown Detroit.

Designed for use in PHEV applications, the FEV battery features an innovative cooling concept and a modular design that provides high power output, robustness and safety, and comprises battery modules, pack, and the battery management system, said FEV North America spokesman Andreas Albers.

During operation, the battery pack provides 200 kW of peak power and 80 kW of continuous power with a stored energy content of 10.4 kWh.

The pack, which uses pouch cells, has a weight of approximately 130 kg, and a volume of 80L, Albers said.

The modules within the battery pack are liquid-cooled Li-Ion cells, each with nominal energy content of 1.3 kWh providing energy density of 205 Wh/L and power density of 1,500 W/L for

each module.

Each module weighs 13.5 kg and has a volume of 6.5L.

A novel feature of the battery design, Albers said, is that no coolant passes between the cells, thus preventing any leakage inside the battery housing.

The result is a liquid-cooled, high performance battery intended for PHEV applications.



### EXECUTIVE STYLE CONDO FOR LEASE *MOUND/13 MILE RD • WARREN*

2000 sq/ft, 2 bed, office/den, walk in closet, 2 full and 2 half baths, attached 2 car garage. finished basement with full kitchen, all appliances including washer/dryer, vaulted ceilings, window treatments, deck.



\$1895.00/month. Call Steve: 586 703 3510



## GMs Kiefer – "Build a Strong Relationship with Suppliers"

CONTINUED FROM PAGE 1

said. "We want a waste free value stream. I am emphasizing this because this is not about a profit transfer from suppliers to GM. It's about reducing costs.'

He cited as an example of this method was gas fuel injectors GM purchased for its Gen 5 V8 engines. GM had a scrap problem. Too many of the parts they were buying were defective.

So, Kiefer said, the company worked with suppliers and let use a cold form valve seat method of production instead of metal injection molding to make the parts.

Kiefer said, GM had overmanaged the production process and insisted on one way of doing things. By listening to suppliers and letting them produce the part their way, GM was able to get higher quality parts and that saved \$15 million.

"It's not just about taking price out of product," Kiefer said.

Working with suppliers, Kiefer said, has sometime meant getting suppliers to work together and consolidate operations for the good of GM. He admitted that was rare, but it represents a new way of thinking.

Kiefer also said that reducing cost doesn't always mean reducing the cost of production. It also means paying attention to logistics. Finding the best places to actually manufacture parts. He wants to avoid a situation where a tsunami in Japan that shuts a couple of plants can cause a worldwide shortage of parts.

Another part of reducing costs is through the use of modularity, Kiefer said. This allows GM to take advantage of economies of scale through modular designs throughout different platforms.

Kiefer said that one way he listens to suppliers is through a special council of 12, consisting suppliers and service providers. He can run ideas past them and, in turn, receive their

advice on manufacturing.

At a recent dinner honoring GM's best suppliers, he asked 80 companies for advice on how to better improve the supply chain and to improve products.

'We've heard from just about 80 of them," Kiefer said. "We've received a lot of answers, many of them things we didn't consider. I was a supplier for 20 years and remember many times thinking 'if only GM, or VW or Daimler did X, they could save so much money.' We're asking for those ideas.

Right now GM is also looking at longer contracts with suppliers,

Kiefer said. Instead of, say, a fiveyear contract for one product cycle, suppliers can get a contract to last two product cycles.

That's important because in the next 18 to 24 months GM will be giving out contracts worth hundreds of billions of dollars. The company is adopting a lot of new technology and that provides suppliers with new and profitable opportunities.

One of the questions asked of Kiefer was how do new companies break in. If GM is working more closely with its current suppliers, doesn't that, in effect, lock new suppliers out?

Kiefer said that can be a problem, but technology is changing so rapidly that GM will have to seek out new suppliers, such as Apple and Google. The company is always on the look out for new suppliers who can help them.

Another question was how is GM coping with supplier capacity strain. Kiefer said that was a problem. The current popularity of trucks and SUVs has put a real strain on supplier capacity. GM has helped in several ways, including helping with acquisitions of capital, overtime compensation and concessions on 24/7 op-

### **Bankruptcy Shields GM from Ignition Suits**

**CONTINUED FROM PAGE 1** 

tection in July of 2009.

"Hundreds of victims and their families will go to bed tonight forever deprived of justice," he said. "GM, bathing in billions, may now turn its back on the dead and injured, worry free."

Most of the cars with faulty switches were sold before new General Motors left bankruptcy protection, and many of the automobile crashes happened before the new General Motors was

GM said April 15 that the judge ruled properly that claims based on the conduct of old GM are barred, and that the judge's order "doesn't establish any liability against GM, and the plaintiffs must prove the merits of their claims.'

However, Seattle attorney Steve Berman, one of the lead lawyers for those claiming that GM's actions on the ignition switches caused their car values to drop, said the ruling clears the way for his clients to sue the new

"We believe that new GM's misconduct was in fact present in the sale of millions of defective vehicles - a truth that we believe

586-825-0068

new GM knew and chose to conceal," he said.

Berman also said they will appeal Gerber's ruling that bars claims against new GM for misconduct by old GM.

Gerber wrote in his 138-page opinion that at least 24 people who worked for old GM knew about the ignition switch problem, and the company at the time had enough information to be required by federal law to issue a recall. But he wrote that there's no indication that GM's bankruptcy attorneys had any knowledge of the problem.

GM is still liable for legal claims from crashes caused by the switches after it emerged from bankruptcy. The company also has set aside at least \$400

SPRING SPECIAL!

**MAINTENANCE SPECIAL** 

Includes: • Full Service Oil Change & Filter
• Lube & Top Off All Fluids
• Semi Synthetic Blend (5W30) up to 5 qts.

FREE Tire Rotation • FREE 27 Pt. Inspection FREE Brake Inspection (Drums Extra)

- Including Dexos Approved Oil Shop Charges And Disposal Extra. Most Cars.
at Ad At The Time Of Service. Cannot Be Combin

A/C RECHARGE

Includes: • Up To 1lb Freon • Check For Leaks Pressure Test System • Add Dye

**FREE BRAKE** 

INSPECTION

Includes Front or Rear Pads, Rotors & Labor

e Restrictions May Apply. Prices Subject To Change. Most Call For Details, Must Present Ad At The Time Of Service.

\$35<sup>95</sup> Full Service

Synthetic Oil Change



GM fixed ignition assembly parts

million and hired attorney Kenneth Feinberg to compensate those killed or injured in crashes - no matter when they happened. So far Feinberg has determined that families of at least 84 people who died and another 157 injured people should be compensated.

### COPO Camaro Helps Disabled War Veterans

CONTINUED FROM PAGE 1

hardware, including the same body in white used for production models, Campbell said. They're designed to dominate NHRA Stock Eliminator drag racing. The COPO Camaro takes its name and production quota from Central Office Production Order, a process used in the 1960s for fleet managers to order unusual combinations of options.

The COPO Camaro race car is fitted with an NHRA-approved roll cage and other safety equipment, along with racing chassis and suspension components including a unique solid rear axle system in place of a regular-production Camaro's independent rear axle. Brumfield said that Achilles Freedom Team of Wounded Veterans has chapters and members in more 65 locations around the world.

Within this community, program participants gain measurable physical strength and build confidence, Brumfield said. The Freedom Team of Wounded Veterans was created as an extension of the Achilles process adapted to the specific needs of wounded members of the U.S. military. Program participants receive training and use of specialized adaptive devices, such as hand-crank wheelchairs with a goal to participate in mainstream marathons.









### Ford Designs Reach Beyond Automobiles

**CONTINUED FROM PAGE 1** 

through more compact, more intuitive technology.

Ford GT serves as a technology showcase for top EcoBoost performance, aerodynamics and lightweight carbon fiber construction.

Over the past few years, we have gained incredible momentum with our designs," said Callum. "Now, we need to evolve what we have achieved to continue to deliver exciting and fresh solutions. The interior design of the Ford GT builds on existing DNA and pushes it forward."

Other objects Ford's global designers created include a suspended light, a Wi-Fi speaker and two different interpretations for lounge furniture. Each object applies a similar design solution to form a recognizable portfolio.

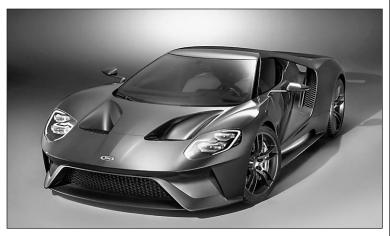
Ford is working with architect Attilio Stocchi, in collaboration with Federlegno Arredo Eventi, on an innovative experience at Salone del Mobile - "FAVILLA, Every Light a Voice," which also takes inspiration from the new Ford GT supercar.

The immersive installation unfolds inside two large boxes. The

amid a dazzling, reflective show much like the interior of a geode. The second box is curated by Ford's in-house animation studio to offer visitors a unique, engaging product experience that showcases how Ford design shapes both form and function.

Ford is also hosting a panel discussion on design trends at Salone del Mobile. In the 2015 Trend Report, Ford Motor Company's annual look at consumer trends shaping mobility and other areas, experts point to the give and take of privacy as a trade-off between the information consumers are willing to share and the benefits they receive. The discussion will focus on the importance of understanding and interpreting the boundaries of personal space to deliver the best customer experience - in both the physical and digital arenas.

The Ford exhibition is on display at the Ford Design Lounge, pavilion 13 of Fiera Milano exhibition hall. The panel discussion also takes place at Fiera Milano. "FAVILLA, Every Light a Voice" is open to the public in Piazza San Fedele.



first examines the science of light The New Ford GT's style inspires designs outside the auto industry.

## Federal-Mogul Hires New Exec for HR

Daniel Ninivaggi, chief execu- in talent management and human tive officer, Federal-Mogul Motor- resources Holdings Corporation, appointed Anthony (Tony) Papa to the position of Senior Vice President, Global Human Resources (HR) for Federal-Mogul Motorparts, effective immediately.

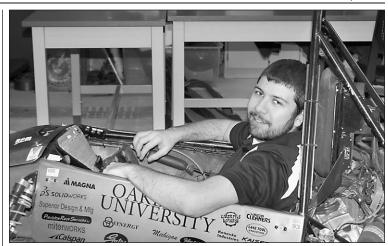
"Tony has significant global human resources experience in to that, he spent several years the automotive sector, as well as with Gates Corporation in vari-

strategy developparts, a division of Federal-Mogul ment," said Ninivaggi. "He will be a valuable asset to us as we continue to execute our global growth strategy.'

Most recently, Papa was global vice president of Human Resources and HSE for Meridian Lightweight Technologies. Prior

ous roles of increasing responsibility including vice president, Human Resources, Europe (Brussels, Belgium), and as global vice president, Human Resources, Strategy, Gates Power Transmis-

Papa earned bachelor degrees in political science and honors public administration (HR concentration) from the University of Windsor in Windsor, Ontario, Canada. He is a member of several worldwide HR organizations.



Brandon Taseksi

### **SAE Rewards Oakland U** Student with Scholarhip

motive Engineers (SAE) is more than just holding events like this week's World Congress in downtown Detroit.

The organization also tries to support and nurture the next generation of automotive engineering talent.

To that end, Brandon Taseski, mechanical engineering student and president of the Oakland University Society of Automotive Engineers (SAE) student chapter, earned recognition and scholarship funds from the American Society of Body Engineers (ASBE) Foundation

Taseski was nominated for his academic capability in engineering design and demonstrated leadership as an Oakland University student, said OU spokesman Eric Reikowski. This recognition includes a \$500 scholarship from the ASBE Foundation. He was nominated by Mechanical Engineering departmental chair and SAE team faculty adviser Brian Sangeorzan, Ph.D., and Amy Butler, executive director of OU Inc,

The job of the Society of Auto- a SmartZone Business Accelera-

"The award is for a combination of design engineering and leadership," Sangeorzan said. "Brandon has certainly participated in some component design on our car, but more importantly he has done a great job to orchestrate all the SAE team activities, bring in new members and oversee the construction of the 2015 car.'

To qualify for the award, Taseski met the following require-

- Major in body design, design engineering, or a closely related discipline.
- Sophomore standing, having completed at least 30 credit hours.
- Minimum of 3.0 GPA or equivalent.
- Written recommendation from a faculty member.
- Exceptional potential in design and demonstrated leadership ability.

"Brandon has exhibited not only accomplishments in his academic progress at the university, but he has also stepped up and become a leader for the student organization, Formula which competes on an international basis," Butler said. "His commitment to the Formula SAE team demonstrates how business, planning, and organizational leadership are valuable assets with the engineering educational experience."

Taseski said it's a great feeling to be recognized for the time and work spent in the classroom and with the SAE team.

"Balancing time between classes, homework, internship, the Formula team, and sleep is not an easy task, but I feel it's all worth it in the end," Taseski said. "The duties of team president are far greater than I originally anticipated.

"The title of president is more of an umbrella term for project manager, team captain, PR representative, and event organizer. With a bit of luck and support from the team itself, I've been able to handle all of these responsibilities.'

As part of the Formula SAE team, Taseski has taken part in the OU Involvement Fair, Engineering and Computer Science Day, the Grand Opening of the Engineering Center, SECS Student Organization Fair, the North American International Auto Show, Autorama at Cobo Center, the Woodward Dream Cruise and

The ASBE Foundation was established in 2002 as a nonprofit foundation "to provide means for any individual to achieve education in all phases of vehicle design; to encourage secondary education students to consider and pursue careers in vehicle design; to keep the vehicle design workforce abreast of the changes in technology; to fund research in areas that are related to vehicle design; and to fund vehicle design related curricula development."

# Warren Urgent Care

8am-10pm • 7 Days a week • 365 Days a Year

"Bringing Quality Urgent Care To Your Neighborhood"

"We Care"

### **URGENT CARE FOR ACCIDENTS AND INJURY ADULT & PEDIATRIC ILLNESS**

Digital X-Rays, EKG and Lab Work, On-Site Lab Service, Strep, Mono, Pregnancy & Urine Testing, Vaccinations, Sports & School Physicals, Occupational Medicine, Work-Related Injuries, Pre-Hire Physicals (BAT & Urine Screening)

SPECIAL ON SPORTS PHYSICAL \$25.00 State-of-the-Art Facility

586-276-8200 31700 Van Dyke • Warren, MI 48093

On Van Dyke Rd., between 13 & 14 Mile in St. John's Windemere Park

OTHER CONVENIENT LOCATIONS

313-387-8700

Woodland Urgent Care N. East Macomb Urgent Care 586-868-2600





## Learn How To Get The Most From Your Retirement Savings



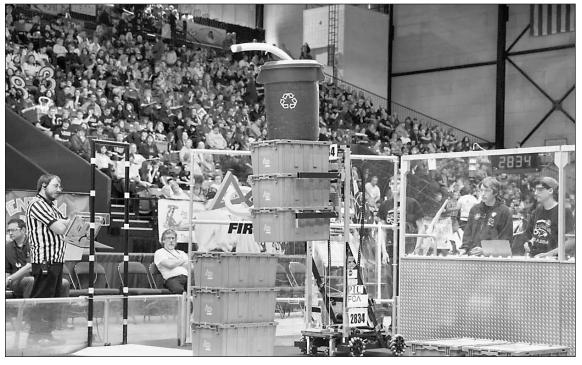
Two Ways to Receive Your Free Kit

By Phone

**Download Now** 

Call (810) 593-1624

KaydanWealthPresents.com



A ref judges students as they "rush to recycle" at FIRST Robotics contest.

## Majority of Faulty Ignitions Repaired – GM

By TOM KRISHER AP Auto Writer

DETROIT (AP) – About 14 months after General Motors started recalling more than 2 million small cars with faulty ignition switches worldwide, the company says it has repaired about 70 percent of the vehicles that are still on the road.

The figures, which the company says are current as of April 9, show that the switch replacements are now running at about the same pace as the average recall in the U.S. for a similar time frame.

GM has fixed 1.6 million of the roughly 2.3 million recalled cars worldwide that are registered and still in use, spokesman Alan Adler said April 10. In the U.S., the completion rate is almost 71 percent. The average completion rate 1 1/2 years after a recall begins is 75 percent, according to the U.S. National Highway Traffic Safety Administration.

GM started recalling the cars in February of last year, and acknowledged that it knew of the deadly problem for more than a decade, yet waited years to take recall action. The switches can slip out of the run position and cause the engines to stall, knocking out air bags and power steering and brakes. This has led to crashes that caused at least 80 deaths and nearly 150 injuries in the U.S. alone.

GM was fined \$35 million by the government for delays in reporting the problem as required by law.

In the months after the recalls began, GM was criticized by customers and members of Congress for a low completion rate, which the company blamed on a lack of parts. The switches, in cars such as the 2005 to 2010 Chevrolet Cobalt, were not being produced at the time in large numbers, so parts supplier Del-

## **Macomb County Has Health Tests**

The Macomb County Health Department Hearing and Vision Program is conducting free hearing and vision screenings for incoming kindergarteners at various locations/dates through May, said county spokeswoman Jodie Sarsfield.

"If your child has not been screened in preschool, call 586-412-5945 for an appointment and screening locations," Sarsfield said. "Screenings are done by appointment only."

Sarfield urges parents to take advantage of this free service now so their children will be prepared for entrance into kindergarten prior to the first day of school, as mandated by the Michigan Public Health Code (Act 368 of 1978).

phi Corp. had to crank up assembly lines. It took several months for the switches to start arriving in great numbers at dealerships, which weren't fully supplied until October.

GM then used telephone calls from dealers, Facebook messages and personal letters from CEO Mary Barra in an effort to get people to take their cars to dealers for repairs.

Also April 10, GM drew some rare praise from new NHTSA Administrator Mark Rosekind. At a speech in New York, Rosekind lauded the company for putting in place procedures to make sure dealers don't sell new cars unless recall repairs have been made.

Such sales of new cars would violate federal laws, but used cars can legally be sold with open recalls.

After a Chevrolet dealer near Philadelphia was fined \$50,000 last fall by NHTSA for selling new vehicles without making recall fixes, GM checked its dealer network and made changes in its computer inventory to prevent the problem from happening again, Rosekind said.

Now the systems notify dealers if they have a car on their lot

with an unrepaired recall and tell them how much General Motors will pay to get the problem fixed, he said.

The system also won't let dealers submit requests for company rebates and other incentives until the recall work is done, he said.

"All other manufacturers and dealers should embrace the proactive approach that GM is taking," Rosekind said.

In March, ABC News bought a new pickup truck with unfixed recall repairs from a New Jersey Chevrolet dealer, even though reporters were told by the salesman that the truck had no recalls.

Company spokeswoman Ryndee Carney said GM's system that blocks incentives is being put in place this month.

It would prevent dealers from selling cars and trucks that need recall repairs, she said. Incentives can sometimes be in the thousands of dollars, so it makes no sense for dealers to sell vehicles without them.

"Until you go in and let us know you completed the recall repair, you won't be able to see if that vehicle qualifies for any sales incentives," Carney said.

### FIRST Robotics Students Stack the Odds in Contest

by Jim Stickford

The FIRST Robotics Competition combines the excitement of a varsity sport with hands-on training in science and technology to help high school students discover how rewarding a career in engineering or technology can be.

Remote-controlled robots, piloted by students and cheered on by thousands of screaming fans, go head-to-head in short games on the floor of a sports arena, battling it out to earn points during a two-minute round, said FIRST in Michigan president Gail Alpert. The state championship was held in the DeltaPlex arean in Grand Rapids on April. 11.

Students on FIRST teams learn from and play with the "pros" – professional engineers who donate their time to work side-by-side with students to help design and build the sophisticated competition robots, Alpert said.

This gives FIRST students an insider's view of a career in science, engineering and technology not possible in a normal classroom. Alpert said the championship was well attended.

"There were 102 schools participating," Alpert said. "Each team consists of three schools that work together to complete the course as it sets out FIRST in Michigan."

This year the course was titled "Recycle Rush," Alpert said. The contest was broken down into a few different parts. The teams were required to stack as many plastic bins, up to six, as they could. The was the first part.

The teams then had to place a trash can on top of the stack of bins, Alpert said. To top off the contest, teams would then attempt to place "litter" into the trash can. In this case it was a styrofoam "noodle."

"Those are the long tubes that kids use to stay afloat in pools when they're learning how to swim," Alpert said. "Each team was given points for how successful they were in completing each phase of the contest."

This year's winning team's three schools were Northville High School, Bedford High School of Monroe County and Central High School of Traverse City.

Alpert said that among the people acknowleding the event was Michigan Gov. Rick Snyder, who sent out a tweet on April 11, stating "very proud of all our students who competed today!"

The winners, Alpert said, will be going to St. Louis to compete in the world championship event, which takes place April 22 - 25.

"We like to say that this is a contest in which every participant can become a 'pro,'" Alpert said. "There's always room and a need for more engineers."

### BMW and Nissan Issue Recalls for Faulty Fuel Pump

DETROIT (AP) – Nissan and BMW are recalling more than 94,000 vehicles because the fuel pumps can fail and cause stalling.

The recalls cover 76,000 Nissan Rogues from the 2014 model year and another 18,000 BMW 2, 3 and 4 series models from 2014 and some 4 series cars from 2015.

Both automakers say in documents posted on April 10 by government safety regulators that improper nickel plating inside the pump can cause the fuel pumps to fail.

That can cause engines to stall and increase the risk of a crash. Both companies used pumps made by the same supplier, Robert Bosch.

Nissan will notify owners in May and BMW will start in late April.

Both will replace pumps for free.

The problem with the fuel pumps was discovered through complaints and warranty claims from customers.

Neither manufacturer reported any crashes or injuries.



### COUPONS VALID AT LOCATIONS LISTED

**EMPLOYMENT OPPORTUNITIES CALL 586-904-1206** 

- ROSEVILLE -SUBWAY/WALMART

28804 Gratiot • 12 & Gratiot • 586-773-1682

- WARREN -

31690 Mound Rd • 13 & Mound • 586-939-1000 26627 Hoover Rd • 11 & Hoover • 586-754-8205 30820 Hoover Rd • 13 & Hoover • 586-573-7829

29144 Ryan Rd • 12 & Ryan • 586-573-8000 28950 Van Dyke Ave • 12 & Van Dyke • 586-558-3882 DRIVE THRU SERVICE • OPEN 24 HOURS

32620 Van Dyke Ave • South of 14 Mile • 586-795-0000 SUBWAY/MEIJER 29505 Mound Road • 12 Mile & Mound • 586-558-0100

SUBWAY/WALMART 29176 Van Dyke • Warren, MI 48093 • 586-393-1008

- ROYAL OAK -SUBWAY/MEIJER

SUBWAY/MEMER 5150 Coolidge Hwy • South of 15 Mile • 248-677-3899 — TROY — SUBWAY/OAKLAND MALL

498 14 Mile Rd • 248-307-1271 1939 W. Maple Rd • West of Crooks • 248-435-2846 SUBWAYANAI MART

SUBWAY/WALMART 2001 W. Maple Rd • West of Crooks • 248-435-2431

- STERLING HEIGHTS -

37876 Van Dyke • 16 1/2 Mile • 586-795-8368 SUBWAY/WALMART • OPEN 24 HOURS 33201 Van Dyke • 14 & Van Dyke • 586-274-4319

SUBWAY/MEIJER

36600 Van Dyke 4ve • 586-795-1605 38357 Dodge Park • at Plumbrook • 586-264-5300 40058 Van Dyke • 18 Mile & Van Dyke • 586-939-4500

SUBWAY CHRYSLER
Inside Chrysler Stampling • 35777 Van Dyke • 586-795-0205

OPEN 24 HOURS
7960 Metro Parkway • near \\ \frac{1}{2} nDyke • 586-268-0800

SUBWAY CHRYSLER Inside Chrysler SHAP • 38111 Van Dyke • 586-268-6900 — **SHELBY** –

8173 23 Mile Rd • 23 & Van Dyke • 586-739-4100 SUBWAY/WALMART

51450 Shelby Pkwy • 23 & Van Dyke X-Way • 586-254-8140

- WASHINGTON TOWNSHIP -

DRIVE THRU SERVICE 13160 32 Mile Road • 32 & Van Dyke X-Way • 586-281-6359 - **ROMEO** -

66603 Van Dyke • South of 31 Mile • 586-752-6500

03 VAIT DYNE \* 30UUT 01 31 IVIIIE \* 300-732-0300

99¢ BLIZZARD

TREAT

With the Purchase of a Blizzard

of Equal or Greater Value

With Coupon. Expires 4/30/15. /alid at 26633 Hoover Road Only.

OFF

ANY CAKE



LIGHT SMOOTHI

ARTIC RUSH

### After Testing Vehicles on Dearborn Track, Ford Rebuilt an Area Where Cattle Grazed

by Jim Stickford

When it comes to proving grounds, Ford Motor Company was "late" to the game.

Michigan Proving Ground near Romeo wasn't built until 1954, company historian Robert Kreipke said. But that wasn't Ford's first test location.

The first site was the Ford Dearborn Proving Grounds (now known as the Dearborn Development Center) on Oakwood Boulevard.

Since then, of course, the Dearborn automaker has operated several proving grounds worldwide, including ones in Arizona, Minnesota, Florida, Brazil, England, Belgium, Australia, Manitoba and Mexico.

The facility in Dearborn, Kreipke said, got its start in the 1940s, just after the end of World War II.

'The Ford airport in Dearborn ceased operation in 1947," Kreipke said. "At that point, Ford engineers tested vehicles on local

"Because styling was becoming so important, it was decided that more security was needed and demand for a closed test facility was warranted.

"The old airport was selected as a location for a test track. The

the hangar became a service

In 1951, a serpentine wall was erected around a large portion of the track, Kreipke said. The wall was believed to be the largest serpentine wall in the world only one brick thick.

"The wall has strength but it crumbles if hit by a vehicle," Kreipke said. "The track has a low-speed track and a highspeed track, plus miles of special surface roads.

"Two hills are also utilized, plus a wind tunnel, cold room and a product review center. Competitive vehicles are tested extensively along with Ford products.

"In any given year, the test drivers will travel more than six million miles. Dearborn track is on a 360-acre piece of property."

According to Kreipke, Ford began construction of its Michigan Proving Ground on what was considered a cattle ranch.

"In 1928, automotive executive at GM, Edward F. Fisher established a farm near Romeo, which he called Hi-Point, because the largest point of land in southeast Michigan was there," Kreipke

"Mr. Fisher built a large man-

runways became test roads and sion and raised one of the world's most famous herds of Hereford Cattle. The estate was sold in 1954 and Ford began construction on the largest privately financed earth-moving project in Michigan history."

Kreipke said four million cubic yards of earth were rearranged on the 3,880-acre site to build the Michigan Proving Ground near Romeo. By 1956, the grounds were ready. The highspeed track required 200,000 square yards of nine-inch-thick concrete, which is 60 feet wide by five miles long.

He said the curves are banked to a maximum of 60 percent grade with a rise up to more than 11-1/2 feet on the outside from the inside.

Durability roads were also installed. Buildings were constructed for operation and garages were built, Kreipke said.

The curves on the high-speed track were designed to handle 140 mph to 180 mph, unlike public road testing.

Another important point, said Kreipke, is that the Michigan Proving Ground is able to give engineers the same surface road conditions each time a test is

Gasoline supply stations also



A 1957 aerial view of the Romeo Proving Ground.

are on the premises, he said, and the track has the latest safety equipment available. The project was completed in 1957.

In 1964, Ford began construction of what would become known as the Lommel Proving Ground in Lommel, Belgium.

According to the official Ford history of the site, "The main purpose of a proving ground is to move the vehicle testing from the public roads to a controlled and safe testing environment. In that respect, the proving ground needs to simulate a wide range of road types and events, all correlated with the customers' usage of the vehicle.

"From 1965 to date, all vehicles developed by Ford of Europe have been tested and validated at Ford Lommel Proving Ground (LPG).

Construction of Ford Lommel

Proving Ground (LPG) started in 1964. In September 1965, the site became operational. In 1970, the start signal was given for the construction of the second phase of Ford LPG. More land was bought to extend the site and new major tracks were built.

From 1975 till 1998, gradually more facilities were added, driven by changing traffic and road conditions, the introduction of new vehicle technologies triggers and new market and legal requirements.

Since the year 1999, 23 million Euro were invested in additional state-of-the-art testing facilities for the Lommel facility. A lot of focus was put on the priorities of the Ford brand.

Currently, Ford LPG contains 80 kilometers of test tracks supplemented by additional modern test rigs.

## **Catch the Tech Center News** when you're on the go.

Warren, Michigan Newspaper TechCenterNews.com @Springer Publishing Co., Inc.

ARCHIVE

## Tech Center News..

Information Page

**DECEMBER 8, 2014** 

contact News Dept

Open This Week's Edition or click on image at right >>>

Published Weekly for the Tech Center and the Immediate Area

**CLICK TO PRINTABLE PDF** for examples of small ads in actual size with prices

Advertising Rates contact Ad Dept

### return to TOP OF PAGE

SITE IS UPDATED ON THE WEEKEND FOR MONDAY, IN TIME FOR THE CURRENT BUSINESS WEEK.



## The 640 pixel nome page fits most of today's mobile device screen resolutions.

And because of our classic tabloid format, the scrollable pdf edition fits most tablets, and is viewable on a smartphone when needed.

TechCenterNews.com



Viper fans can create their own unique version of the vehicle.

### Personalize Your Own Viper

Dodge has developed a system close tour of all 16 available trim that just might be the ultimate automotive do-it-yourself project.

For enthusiasts ready to buy as well those who just want to dream, Dodge brand has launched its new Dodge Viper GTC Customizer, available at www.driveSRT.com/Viper.

The Viper GTC Customizer offers Viper lovers of all stripes the chance to design their personalized version of the only handbuilt performance supercar, said Chrysler spokesman Dan Reid.

This is done using computer programs that allow users to develop their own virtual-reality vision of the Dodge Viper, Reid

"This is a sophisticated program that Dodge has been working on for a while," Reid said. "You can go to a Dodge dealer and create your Viper there using their equipment, but it's also possible for the real technophile, after working with his Dodge dealer, to set up his home computer so that he can design his Viper using his own equipment."

Reid said that Dodge also has a Concierge Service that can help people use the system in the most productive way. To learn more, visit, visit the SRT.com

Web site. Users have more than 25 million build combinations to create their one-of-a-kind Snake from the ground up. With 8,000 exterior color options, 24,000 custom stripe colors, 11 wheel options, 16 interior trims and seven aero packages, three brake packages and four suspension options there are more than 25 million ways for buyers to customize their one-of-a-kind Dodge Viper, Reid said. Users can "sit" in the virtual cockpit and take an upoptions.

To help buyers confirm their color choice, Dodge will provide a complimentary Viper speed form replica so they can confirm their color selections before their Viper is built.

Once the design of the "perfect" Viper is complete, users can place the vehicle in their own lifestyle environments virtually to preview how their custom Viper GTC will look in the real world, Reid said.

Users also can share their custom supercar designs with family and friends. Images may be downloaded in various resolutions to share on social media or used as wallpaper on phones, tablets or computers.

A PDF file of the image, complete with all technical information selected, can be downloaded - an especially useful tool for those ready to purchase, Reid said. Designers can also share their custom Viper on the GTC Inspiration Gallery for other enthusiasts to appreciate and en-

The 2015 Dodge Viper features a starting U.S. Manufacturer's Suggested Retail Price (MSRP) of \$84,995. For a starting U.S. MSRP of \$94,995, the new 2015 custom Viper GTC model features all the content of the new GT model and adds the ability to customize a '1 of 1' design from 25 million possible build combinations, a personalized instrument panel badge, Concierge Service and Viper Ambassador Owner's Portal with exclusive sharable content to track the build of the car.

The new 1-of-1 customization program is available exclusively for customer orders (not for dealer stock), Reid said.



SPECIAL SAVINGS FOR GM EMPLOYEES ONLY. (NOT AVAILABLE FOR CONTRACT EMPLOYEES) COME IN TO REGISTER TO WIN ONE OF FIVE BASEBALL SEASON TICKET PACKAGES\*\*



24 Mo. Demo Lease

4G LTE WI-FI HOTSPOT, REAR CAMERA. REMOTE START, 18" ALUMINUM WHEELS, INTELLILINK RADIO, BLUETOOTH, SATELLITE RADIO. 10 AIR BAGS. **DUAL-ZONE AUTOMATIC** CLIMATE CONTROL, ONSTAR W/ JRN BY TURN NAVIGATION & MUCH MORE.



24 Mo. Demo Lease

4G LTE WI-FI HOTSPOT, HEATED LEATHER SEATS. 259 HP TURBO ENGINE REAR CAMERA. INTELLILINK RADIO, BLUETOOTH, SATELLITE RADIO, POWER SEAT, 18" ALLOY WHEELS. ONSTAR W/ URN BY TURN NAVIGATION



39 Mo. Demo Lease

CLIMATE CONTROL, UNIVERSAL HOME REMOTE, USB PORT. SATELLITE RADIO, POWER SEAT, SATELLITE RADIO, 8" ALUMINUM WHEELS & MUCH MORE.



24 Mo. Demo Lease

7 PASSENGER SEATING, REMOTE START, REAR CAMERA, REAR PARK ASSIST, POWER LIFTGATE, TRI-ZONE AUTOMATIC CLIMATE CONTROL, INTELLILINK RADIO. SATELLITE RADIO, BLUETOOTH, POWER SEATS, **HEATED MIRRORS** & MUCH MORE.

## SLT LEATHER



F6120148 24 Mo. Demo Lease

DUAL SUNROOF, HEATED LEATHER SEATS, 7 PASSENGER SEATING, REMOTE START, DUAL-ZONE AUTOMATIC CLIMATE CONTROL, 19" ALUMINUM WHEELS, POWER LIFTGATE, REAR CAMERA, REAR PARK ASSIST, SATELLITE RADIO, BLUETOOTH, INTELLILINK RADIO, ONSTAR W/TURN BY TURN NAVIGATION, & MUCH MORE

24 Mo. Demo Lease

## SLT - LEATHER, SUNROOF, DVD & NAV

HEATED LEATHER SEATS, 2'nd ROW BUCKET SEATS, POWER SUNROOF, IN-DASH NAVIGATION SYSTEM, 20" POLISHED ALUMINUM WHEELS, INTELLILINK RADIO REAR SEAT DVD PLAYER, REAR CAMERA, FRONT & REAR PARK ASSIST, POWER LIFTGATE, REMOTE START, **ONSTAR** & MUCH MORE.

FR203510 39 Mo. Demo Lease

Tech Center employees only. Must show employee badge. Includes up to 5 quarts of Dexos oil. Good through 5/16/2015.

### 17677 Mack Ave.

between Cadieux and Moross Roads **GROSSE POINTE - DETROIT** 

www.laethemgm.com

itle, plate, CVR and doc fee. ACQUISITION FEE AND DESTINATION ARE INCLUDED IN PAYMENTS. Leases include 10,000 miles per year. Advertised payments based on Tier 1 credit approval. Must qualify for security deposit waiver. Prices include Buick/GMC lease loyalty (see dealer for eligibility requirements). Pricing for Michigan residents guidect to GM program changes. Pictures may not represent actual vehicle. Vehicles subject to prior sale. Payments good through 04/30/2015 unless manufacturer changes programs. \*\* Grand prize V 1 winner will receive a gift basket and a 41 game season ticket package for 2. First prize V 1 winner will receive a 12 game season ticket package for 2. First prize V 1 winner will receive a 27 game season ticket package for 2. Contest entry is made by filling out entry blank in person at Ray Laethem Buick GMC located at 17677 Mack Avenue in Detroit, MI. No photocopied, faxed, mailed or emailed entries will be accepted. Odds of winning depend on total number of entries. By years of age or older to enter. One entry person. One winner per household. No purchase necessary to enter. Employees of Ray Laethem Motor Village and their immediate families are not eligible. Contest ends at 9:00 PM on May 4, 2015. Drawing to be held at Ray Laethem Buick GMC on May 5, 2015 at 5:00 PM. Winner need not be

## Wally Edgar **2014 CLEARANCE SALE** 2014 IMPALA MSRP \$27,730 **2014 SPARK** 2014 SONIC 5 DR. MSRP \$19,250 FIND NEWROADS" / LOCATED RIGHT OFF I-75 ON M-24 CHEVROLET W/F Wally Edgar JAY CHAISER x117 Fax: 248-391-0189 Cell: 248-821-8026 1-866-906-0279 3805 LAPEER RD., LAKE ORION jchaiser@wallyedgar.com Located right off I-75 on M-24, 2 minutes N. of the Palace of Auburn Hills SALES HOURS: MONDAY - THURSDAY 8 AM - 8 PM • FRIDAY 8 AM - 6 PM SATURDAY 9 AM - 3 PM • SUNDAY CLOSED All sale prices based on GM Employee pricing plus tax, title, plate and doc. fees due at signing with all rebates including USAA private offer assigned to dealer Due to advertising deadlines, prices subject to change. See dealer for details

### **Chevy Continues Delivery Truck Tradition**

Chevrolet makes more than just cars for the American driving public.

Ever since vendors have peddled produce to passers-by on the streets of busy cities, Chevrolet has provided vehicles that allows them to reach their customers, said GM spokesman Robert Wheeler.

Beginning in 1936, Chevrolet sold the Chevrolet Canopy Pick-up – a vehicle based on the popular FB-series half-ton pickup truck. Owners could upfit these vehicles with an optional canvas canopy top and side-drop curtains.

During its first model year, Chevrolet saw truck registrations top 200,000 units for the first time in company history.

Thirteen years later, the Chevrolet Canopy Express was unveiled, Wheeler said. It was one of 345,000 Chevy Trucks built in 1949. Both the 3100 Series (half-ton) and 3800 Series (1-ton) included variants of the Express model.

The 3800 was heavier duty and sported a low rear tailgate and waterproof roll-up curtains, allowing sellers easier access and better protection for their products.

"Before super markets became commonplace, vendors brought produce and baked goods to the buying public in city neighborhoods and the suburbs that were beginning to sprout up across the country at that time," said Greg Wallace, manager, General Motors Heritage Center. "The Canopy Express body type was suited for any job that needed easy access to the bed of a truck."

Both vehicles were forerunners of the all-new Chevrolet City Express, Wheeler said, a smaller, maneuverable cargo van that, like its predecessors, gives com-



1939 Chevrolet Half Ton Canopy Express



2015 Chevrolet City Express

panies like Vital Media Security and Smokey D's BBQ the same selling power their entrepreneurial brethren enjoyed nearly 80 years ago.

"To this day, small business owners need to remain nimble in a crowded business environment and still be able to reach their customers in a timely manner," said Ed Peper, vice president, GM Fleet and Commercial. "As we're already seeing with some of our small business customers, the City Express, with its cargo hauling flexibility and efficient fuel economy, allows them to do just that"

## **GM Whips Up Tasty Colors For the New Chevy Spark**

What do toasted marshmallows and Kalamata olives have in common? It's not what you think. They're, in addition to being snacks, actually the formal names of two new colors for the 2016 Chevrolet Spark.

"The first generation Spark's colors allowed us to explore some fun, creative names," said Dora Nowicki, marketing manager for the 2016 Spark. "We had an opportunity to continue this trend with the new Spark. When it came time to name new colors for the 2016 model, we brought color samples to the table and challenged our launch team to let their creativity run wild."

Although Nowicki's team may have had a tasty campfire s'more or a freshly-made tapenade in mind while brainstorming names for the Spark's newest hues, the Chevrolet Color & Trim design team didn't necessarily think with their stomachs when creating the colors themselves.

In fact, the Color & Trim design team continually keeps its finger on the pulse of emerging trends in fashion, architecture, product design and other fields in order to create a color palette that keeps the new Spark both fun and fresh.

Take Toasted Marshmallow, for example. "We've seen a resurgence in creamy colors, much like warm white, soft neutrals or even a latte-like hue," said Kathy Sirvio, senior design manager of Chevrolet's Color & Trim studio. "We've even seen this trend grow within the electronics industry. Warmer tones, like light gold, rose gold, bronze and copper, have also grown increasingly popular. Our team felt Toasted Marshmallow's warmth brings a sophistication and maturity to Spark, while a hint of metallic flake allows the car to maintain its expressive form language.'

If you find Kalamata to be a rich color, it's for a good reason. "Purple has a deep history in conveying royalty and wealth," Sirvio said. "We've seen trends rising within this color space in fashion, product design and

home furnishings, but it's still very new and fresh in the automotive realm. On Spark, it gives customers a color that is still rich and expressive but not quite as vibrant as other paint options, like the bright Lime Green or the new Splash Blue."

Like Toasted Marshmallow, Kalamata is well suited to showing off the 2016 Spark's dynamic design language. "This color is dramatic on Spark's form and will help create deep pockets with bright highlights when viewed in the sun," said Sirvio.

While both colors mark a progression towards richer, mature colors, they follow in the footsteps of other Spark colors, allowing buyers to find the color that truly reflects their personal style.

"Spark customers are expressive, style-conscious and fun-loving," said Sirvio.

"They're active, social, enjoy new experiences and are always connected – and above all, they expect their car to represent their personality."

### **Lower Fuel Prices Reduce EV Cost**

DETROIT (AP) – General Motors is the latest automaker to drop the price of an electric car in the face of slow sales.

GM is cutting \$1,650 off the price of the electric Chevrolet Spark. The new starting price is \$25,995. Chevrolet is also offering a 39-month lease for \$139 per month.

The Spark EV is currently sold only in California and Oregon. It goes on sale in Maryland this summer. GM says state and federal tax credits and additional incentives drop the starting price to \$14,995. Electric cars have struggled in the U.S market, particularly since gas prices dropped. Nissan, Ford and Mitsubishi have all lowered electric car prices over the last two

years. The cheapest EV on the market is the Mitsubishi i-MiEV, starting at \$22,995.



8:30 am - 6:30 pm

We guarantee the lowest price or it's free! ③ We guarantee the lowest price or it's free!

JEFF CAUL AT JCAUL@BUFFWHELAN.COM

STK #7508-14 YOU SAVE \$10,000

### 2016 Michelin Design Contest Theme - "Mobility for All"

CONTINUED FROM PAGE 1

through all the consequences that it might produce.

"A successful mobility design solution is really a system and not a product," Wilbur said. "For example, what if we have autonomous cars? Are highways reduced to two lanes each way? One for cars and one for transport vehicles? What happens to all that former freeway land? In Los Angele real estate goes for millions per acre."

Klatt said that he has another scenario. He noted that in China, often a family member will leave the country and get a factory job in a big city. That person will live in a very small living space and have a very stressful job.

Every three months that person might want to leave the city and visit his or her family. But since so many factory workers will want to do that, huge traffic problems are created.

What if, Klatt said, instead building some sort of mobility system, a chamber is built that will allow people to virtually interact with their family. They would be able to see their families more often than they could visit home, and it would keep many people off already overcrowded roads.

Ebel said that part of the solution to the question of mobility will be companies coming together to share ideas and resources. He also said that is a trend he's seeing more of with universities as well.

'We have to look at emerging markets and find out what they want and how to serve them,' Wilbur said.

Ebel said that is the tricky part. He noted in India OEMs made the mistake of trying to sell people cars using the idea that they were buying cheap transportation. But many in India found out that when they bought an inexpensive car, their neigh-

bors said it was too bad that they could only afford the least expensive vehicle.

Ebel said the mistake was selling cost instead of selling the notion that they inexpensive vehicles provided great value. They could do so much for so little.

Klatt agreed, citing another example. He said that today's cars are just too sophisticated for people to tinker with like people did in the 1950s. If a car has a problem, it has to be taken to a mechanic. In India, he discovered that scooters that were simple to repair at someone's home fit the needs of most consumers best. They couldn't take their scooters to a mechanic, so they had to fix them themselves. Klatt learned in that context, simpler was better

"Mobility for everyone doesn't necessarily mean that everyone in the world has a car," Wilbur said. "What it really means is giving people access to what they need to live, and even sometimes what they desire. I love riding dirt bikes and do it for fun. But I don't need a dirt bike to get to and from work."

All three panelists agreed that coming up with new mobility solutions means looking at things from a different angle. That means hiring people with different perspectives.

Ebel said one problem OEMs have, is that people who have worked for them for a while tend to have a narrow vision and tend to look at problems from a single perspective.

It's the people willing to look at mobility issues from different perspectives that will find the solutions to today's problems, Wilbur said.

The most exciting thing now is transformation of mobility from now to the future," Wilbur said. "From the human factor alone, we face a lot of challenge. The question is how will be handle this change when it hap-

## **Ford Engine Plants to Get** \$2.5 Billion in Upgrades

To help meet demand for its lineup of fuel-efficient engines Ford will invest \$2.5 billion in two new facilities to build a new generation of engines and transmissions in the states of Chihuahua and Guanjuato.

The investment, which comes during the celebration of Ford's 90th anniversary in that country, will bring 3,800 direct new jobs plus additional indirect jobs to Mexico, said Ford spokeswoman Julieta Melendez.

Ford officials maded the in-April 17. during a ceremony with Mexican President Enrique Peña Nieto and other members of the country's Federal Government.

"Ford is making a significant commitment to our business in Mexico with investment in two new facilities, while aiming to make our vehicles even more fuel-efficient with a new generation of engines and transmissions our team in Mexico will build," said Joe Hinrichs, president of The Americas. "These new engines and transmissions will help deliver even better driving experiences and fuel economy gains for customers around the world."

The new engine facility is being built within Ford's Chihuahua Engine Plant, where the company will produce a new gasoline-powered engine. This \$1.1 billion investment and 1,300 new jobs will allow Ford to export engines to the U.S., Canada, South America and the Asia-Pacific region, supporting the company's growing small car lineup.

An additional \$200 million dollar investment as well as the creation of 500 more new jobs is tied to the expansion of Ford's current I-4 and Diesel engines production in Chihuahua. As a result of these investments, the Ford Engine Plant in Chihuahua will become the biggest engine plant in Mexico. Hinrichs said.

In addition, Ford is building a new transmission plant within the premises of transmission supplier and longtime partner Getrag, which is based in the City vestment announcement on of Irapuato in the State of Guanajuato. This \$1.2 billion investment brings approximately 2,000 new jobs. This new plant – Ford's first transmission facility in Mexico - will produce two all-new automatic transmissions for key products primarily in South America, Europe, Asia Pacific and North American markets.

> "Today's announcement is an important milestone in Ford's 90year history in Mexico," said Gabriel Lopez, Ford of Mexico's president and CEO. "Currently within Ford, Mexico is the fourth vehicle producer, the fourth largest engine producer and is the second largest nation supplying Ford's global manufacturing facilities. We look forward to delivering even more great products, including new engines and now transmissions, to serve Ford customers around the world."

> Ford has 11,300 employees in Mexico. The Ford Fiesta, Fusion and Lincoln MKZ as well as the hybrid versions of both are manufactured in Mexico.





10K MILES PER YEAR

DEAL #51286





• Remote Vehicle Entry! • Rear Vision Camera! • OnStar w/4G LTE w/built-in Wi-Fi hotspot!

 Tilt and Telescopic Steering Column! • 17" Aluminum Wheels! · 32 MPG on the Highway! Stock#F22470

NO SECURITY
The Best Price
DEPOSIT REQUIRED.
TAX, TITLE AND
PLATE FEES EXTRA!

 OnStar with 4G LTE with built-in Wi-Fi hotspot!
 Power Driver's Seat! • AM/FM/XM Radio w/CD! • 16" Aluminum Wheels! Rear Window Defogger! Remote Keyless Entry • 38 MPG on the Highway! Stock#F22017 NO 1ST PAYMENT OR SECURITY DEPOSIT REQUIRED. TAX, TITLE AND PLATE FEES EXTRA! PERIOD! was \$20,920 Sale Price \$16,990\* **36 MONTH LEASE:** 

ONE WEEK ONLY!...\$3500 GUARANTEED Minimum for Your 2005 or Newer Trade-In!\*







## WE DO HOUSE CALLS OR COME SEE US... Before You Trade-In or Sell Your Car Buyer & Seller of Clean Vehicles Since 1975! You'll Get Your Tax Break Plus 100's if not 1,000's More 248.332.8326 1153 Baldwin Rd • Pontiac • www.jimdouglasautosales.com

## 2016 Camaro Chassis Stiffer, 200 lbs. Lighter

by Jim Stickford

The engineering team spent nine million hours of computational time honing the driving experience of the new 2016 Chevrolet Camaro before the first prototype turned a wheel. The structural modeling led to the Gen 6 Camaro being 28 percent stiffer than the current model.

"The modeling abilities of computer-aided engineering are advancing at incredible rates," said Jim Karlavage, Camaro program engineering manager. "Today, we can accurately model opportunities to add torsional strength without adding unnecessary mass. The result is a lighter, stiffer structure that benefits every aspect of the driving experience.'

The more rigid body structure allowed the engineers to more

precisely calibrate the steering and suspension systems because they didn't have to compensate for chassis flex. The lighter structure also enabled the size and mass of elements such as the wheels, tires and brakes to be scaled accordingly.

"If you think about it," said GM spokesman Monte Doran, "the whole job of the suspension is to control the wheel motions up and down. That affects everything from being able to turn to how the well the car absorbs pot hole stress."

The bottom line, Doran said, the stiffer one can make the chassis structure, the better the handling and comfort is for the driver.

'The structural weight savings are compounded by opportunities to reduce un-sprung weight," said Karlavage. "The result is a

more nimble driving experience that rewards the driver with satisfying feelings of responsiveness and control.'

"Our engineering team put an enormous amount into designing the new Camaro chassis structure," Doran said. "Those nine million hours give a sense of the work they put it to reduce the chassis weight - the engineers call it mass reduction - while stiffening the structure. That was what they had to do, and that was the magic they achieved."

Doran said the engineering team got much more sophisticated in the use of computer modeling to design the new Camaro.

The prime advantage is that it allows engineers to makes changes for "free," Doran said. Basically they get to "build" a car inside a computer. If they decide to make a change to the vehicle, they can. And all without having to actually construct a prototype. These computer design techniques save both money and time, and give engineers the opportunity to really refine designs before actually going to the prototype phase of the design process.

"The end result," Doran said, "is that we were able to stiffen the chassis while removing 200 pounds of weight from the new Camaro. And that was just through using a computer. That's iust amazing.

Chevrolet will introduce the all-new, 2016 Camaro on Saturday, May 16, during a special public event at Detroit's Belle Isle

### **DENSO** to Grow **Operations in** North America

In an effort to help grow DEN-SO's global heavy duty business, the company is expanding its North American research and development capabilities to include heavy duty and commercial vehicles. DENSO established a cross-functional team of market research, product engineering, and researchers that will focus on bringing-to-market products that improve fuel efficiency, expand connectivity and safety, and promote electrification of commercial vehicles. Staff will be located in Southfield and San Diego, California to support with this effort.

"North America has a strong leadership base for heavy duty technology and DENSO believes there is an opportunity to diversify our business base in this market segment," said Patrick Powell, DENSO International Director. "In the not-so-distant future, new fuel economy and greenhouse gas regulations will drive change into the heavy duty area. And the market will continue to transition into higher levels of connectivity. DENSO is well positioned to successfully support these technologies.'

With an increased focus on heavy duty research and development in North America, DEN-SO sees this as an important step forward in developing heavy duty products in the region. In addition, as fuel economy and emissions regulations in the U.S. are more advanced, DENSO expects its North American operations to lead its global heavy duty efforts.

DENSO Corporation is a global automotive supplier of advanced technology, systems and components in the areas of thermal, powertrain control, electronics and information and safety. Tthe company has more than 200 subsidiaries and affiliates in 38 countries and regions (including Japan) and employs nearly 140,000 people, and its North American headquarters is in Southfield.

### "WE'LL GIVE YOU A \$3,500 MINIMUM FOR YOUR 2003 OR NEWER TRADE-IN"



**PURCHASE** 

\$18,657







NEW S





### SPRING PULL AHEAD IS BACK- SEE DEALER **FOR**





















MICHIGAN'S LARGEST
•SERVICE DEPT. •PARTS •BODY SHOP 866-452-1547 26125 Van Dyke @ 101/2 Mile Center Line, MI 48015

**Quick Oil Change EXPRESS LUBE OIL FILTER 1395** Up to 5 qts.

Fluid Level,

Brake & Alignment Check Included.

We use Genuine GM Oil & Filter No additional or hidden charges. Out the door pricing.

Open Mondays & Thursdays until 8:30pm Excludes synthetic, Diesel & Med. Duty Trucks.
Most GM cars & trucks. One coupon per customer. Must
present coupon with order. Plus tax. Expires 4-30-15.

sday & Friday 6:30am-6:00pm • Shuttle at 6:30am - Pick-up Both Ways • All Day starting at 6:30a



### SERVICE HOURS: Monday & Thursday 6:30am-9:00p





See us for your GM employee purchases. 1-877-451-7707 26125 Van Dyke at 101/2 Mile Rd.

FIND NEW ROADS

Visit our website: edrinke.com



Tues., Wed., & Fri. 8:30am-6pm

CHEVROLET /





26125 Van Dyke at 101/2 Mile Rd.

Visit our website: edrinke.com SHOWROOM HOURS: Mon. & Thurs. 8:30am-9:00pm; Tues., Wed., & Fri. 8:30am-6:00pm

All prices and payments include GM rebales. Pictures may not represent actual vehicle. Prices subject to change per GM incertives. Prices and payments inclusive of active GM employee discount (unless otherwise station). All leases are 10,000 miles per year with approved 5 fire credit wid 5999 down (unline) of their web ready. May than be assee longly and corraguest. Mast have closing comparelly elses actives contain unless that the size of year and accordance of their state of the 30 or never model weblack. Price and payments are plus tax, tills, plate be will acquisition the up front, refundable security deposit regular don certain vehicles—1 to be determined by lender, employee discount to everyor well of or certain models. "SS200 that dis in sided on 2003 or never vehicles will cert TSM risks in drivable condition."

Now looking for experienced salespeople to join our team!





### Cadillac's New ELR Green **Model Gives Performance**

Cadillac today announced the the quality of the ride. ELR electrified luxury coupe will offer a host of upgrades for the 2016 model year, including boosts in acceleration, driving performance and connectivity.

Major product upgrades include a more than 25 percent boost in power and torque, faster acceleration that improves 0-60 mph by 1.5 seconds, higher top speed, retuned chassis and steering for better handling, more responsive brakes and a new Performance equipment package, said GM spokesman David Caldwell.

"ELR's combination of leading technology with stunningly attractive design is unlike any other coupe in the luxury segment," said Cadillac President Johan de Nysschen. "The upgraded ELR offers enhanced driving performance for buyers seeking uncompromising luxury and exquisite craftsmanship with electrification technology. It is unique in the luxury category, in that it completely eliminates conventional concerns over driving range, which has been the Achilles' heel of other competitors in the luxury segment."

The 2016 ELR has the first application of extended-range electric vehicle technology by a fullline luxury automotive brand, will start at \$58,495 net pricing after U.S. federal tax credits.

The 2016 ELR's steering and suspension upgrades include:

- Revised calibration of the HiPer Strut front suspension.
- Increased front spring rates and a stiffer rear axle.
- Stiffer bushings for the front lower control arms, cradle mounts and Watts link in the rear suspension, for more precise control with no loss in

- Revised calibrations for the Continuous Damping Control system.
- New steering calibration tuned to complement the revised chassis and suspension systems.
- Revised brake hardware and system calibration for improved application feel.

All 2016 ELRs contain software upgrades to the battery system improving power and acceleration, with EV range growing on the base model.

Additionally, the 2016 ELR has a modified Sport mode that enables the propulsion system to combine engine and electric motor power to take the ELR from 0-60 in 6.4 seconds, a 1.5 second improvement from the current model

ELR continues to offer Regen on Demand, Caldwell said. Slightly enhanced for the 2016 model to improve deceleration, Regen on Demand allows the driver to temporarily regenerate energy from the ELR's momentum into electricity and store in the battery pack for later use.

Regen on Demand is engaged steering-wheel paddles adapted from traditional performance cars.

The ELR offers a full driving range of up to 330 miles, combining pure electric driving and an efficient, range-extending 1.4L gasoline-powered engine-generator. It's a combination that means most daily commutes will require zero gasoline with zero tailpipe emissions.

Longer trips are free from electric-vehicle range anxiety because the ELR's technology enables the long-distance travel similar to vehicles powered only by gasoline.



OPEN MON & THURS, UNTIL 8PM & SATURDAY 10AM - 4PM Showroom Hours: Mon. & Thurs. 8:30 a.m.-8 p.m. • Tue., Wed., & Fri. 8:30 a.m.-6 p.m. • Sat. 10 a.m.-4 p.m. 8333 EAST 11 MILE ROAD • I-696 & VAN DYKE • 888-548-8939

2015 ATS 2.0L TURBO AWD SEDAN - STANDARD COLLECTION



2015 SRX FWD STANDARD COLLECTION



EMPLOYEE \$299

39 MONTH/10K PER YEAR

2015 ATS 2.0L TURBO AWD **COUPE - STANDARD COLLECTION**  EMPLOYEE \$31

24 MONTH/10K PER YEAR

2015 CTS 2.0L TURBO STANDARD COLLECTION



EMPLOYEE \$399

51 AVAILABLE

EMPLOYEE \$3

39 MONTH/10K PER YEAR

11 AVAILABLE

**2015 XTS FWD** 



36 MONTH/10K PER YEAR 2015 ESCALADE AWD

LUXURY COLLECTION



16 AVAILABLE

36 MONTH/10K PER YEAR

EMPLOYEE \$

36 MONTH/10K PER YEAR

Visit our website: www.PrestigeCadillac.com for all our specials

\* Tax, title, license and dealer fees extra. No security deposit required. 30,000 miles with approved lease. Mileage charge of \$.25 per mile over 30,000 miles. Lessee pays for excess wear and tear charges. All applicable rebates to dealer. Photo may not represent actual vehicle. ATS Coupe/Sedan, SRX & XTS must show proof of current GM Lease. CTS must show proof of ownership or lease of 2003 or newer Cadillac CTX. MRSP's: ATS \$38,240, ATS Coupe \$41,440, CTS \$48,340, XTS \$45,595, Escalade \$82,245, SRX \$38,600. Due at signing ATS \$1,809, ATS Coupe \$2,219, CTS \$3,119, XTS \$2,679, Escalade \$4,869, SRX \$339. See dealer for details. Take delivery by 4/30/2015.



### **Exclusive Service Offers and Coupons:** OPEN SATURDAY 9:00AM-2:00PM

Service Hours: Mon-Fri 7:30am-6:00pm

INSPECTION

Certified Service

dexos OIL CHANGE

FREE 27 multi-point inspection Most GM cars & light trucks. Includes 5 Qts of Dexos 1 oil & AC Delco oil filter. \*Plus Tax. Expires 4-30-15

Certified Service

MAIL-IN REBATE (DEBIT CARD)\*\*

ON A SET OF FOURTIRES From these select brands:
BRIDGESTONE • CONTINENTAL • GOODYEAR

Expires 5-31-15

HANKOOK • PIRELLI Certified Service

\*\*See dealer for details and rebate form, which must be postmarked by 6/30/15. Allow 6 to 8 weeks for delivery of debit card.

Convenient Customer Shuttle

- Early Bird Check-in
- Loaners available
- Convenient Business Hours
- Same Day Service
- Factory Trained Service Advisors
- ASE Certified Technicians
- Online Express Checkout
- Mobile App Service
- Complimentary Loaner Car
- GM Quality Parts





1-888-665-5438

**BRUCE LITVIN** 

40 YEARS OF QUALITY SERVICE

CELL # 1-586-405-5175

blitvin@lunghamer.com



 SLE Value Pkg Power Seat . Cruise 8" Touch Screen Radio with Intellilink

Deep Tinted Glass te Start Rear Vision Camera HD Trailer Package

 6.0L Engine HD Trailer Pkg
 Keyless Entry Pwr Windows **GM EMPLOYEE & FAMILY PRICE** 

**EVERYONE PRICE** 

 Power Seat • Cruise with Intellilink Deep Tinted Glass Remote Start Rear Vision Came

 HD Trailer Package Locking Differentia m Wheels

STARTING AT

**ONLY \$1499 DOWN** 

**MON & THURS** TUES, WED & FRI ..... 8:00AM-6:00PM SATURDAY.

8:00AM-9:00PM 10:00AM-3:00PM

**OPEN LAST 2** SATURDAYS OF THE MONTH!

SERVICE HOURS TUES, WED & FRI

MON & THURS SATURDAY...

7:00AM-7:00PM 7:00AM-6:00PM 8:00AM-12:00PM

JIM CAUSLEY BUICK GMC

ause You Can't o Better Than... com







**Duo See Some Racing Success** Cadillac Racing drivers Johnny O'Connell and Andy Pilgrim finished the second race of the Pirelli World Challenge St. Pe-

Cadillac Racing

March 29. Pilgrim had the pole for the race start. He experienced some wheel spin from the standing start and watched as five competitors raced by him into Turn One. No sooner did the race start than it was stopped on lap three for a track blocking incident. At this point in the race Pilgrim and teammate O'Connell were classified in positions sixth and eighth. O'Connell in sixth. When the 50-minute race restarted with 19-minutes remaining the Cadillac duo settled into their positions and circulated the 1.4-mile, 14-turn St. Pete temporary street circuit as part of the FIA GT3 parade of cars.

On lap 19 Audi driver Mike Skeen and Nissan driver J.D. Davison got together and that vaulted O'Connell into fifth and Pilgrim into sixth, which is where they crossed the finish

"Even if I got paid by the lap I earned every dollar today,' O'Connell said. "The Cadillac Racing guys have done a great job tweaking and tuning on the ATS-V.R. It was a hard race. You have every guy pushing each other so hard.

"Some have a pretty high level of aggression and we used that to our advantage today. We are working hard on this new car. You have a relationship with your car. You really have to get to know her. We are still in the dating period heading to the honeymoon. I have a few rub marks on the left side."

### Freudenber-NOK **Develops New** Bio-based Rubber

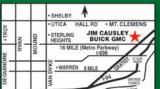
With the ever-increasing emissions standards and push for sustainability solutions, Freudenberg-NOK Sealing Technologies has developed an ethylene propylene diene monomer (EPDM) rubber compound from a polymer produced from sugarcane-based feedstock.

The bio-renewable rubber, for which development began in 2012, said Freudenberg-NOK spokesman Kevin Soisson, is made from a polymer that is manuractured via a process that begins with the sugarcane plant. A sugarcane-produced ethanol is converted into ethylene which forms a substantial portion of the base polymer.

"We had been working with polymer suppliers for ways to reduce our carbon footprint but the polymer offerings lacked the specific characteristics we needed for our advanced manufacturing processes," said Joe Walker, global director, Advanced Materials Development. "So we initiated a project to research the area. and we were able to develop a material that can be used in our next generation injection molding process."

The company has focused much of their next generation manufacturing technology on a single cavity, net shape injection molding process which has resulted in reduced waste and energy demand and overall improved manufacturing control, yielding improved quality.

This concept is becoming a staple at Freudenberg-NOK. The advent of eco-friendly EPDM rubber is a natural fit for the machines. In addition to these properties, the sugarcane base allows the material to be 45 percent biorenewable.







1-800-96