Detroit Auto Scene®

"FIRST IN THE HEART OF DETROIT"

VOL. 82 NO. 14

ESTABLISHED 1933 AS NEW CENTER NEWS AND 1983 AS OAKLAND TECH NEWS

APRIL 14, 2014

GM's New 8-Speed Transmission Debuts in 2015 Stingray

Call it an example of great times that rival the best dual- of the few sports cars to offer the things coming in small packages.

An eight-speed paddle-shift automatic transmission will be offered in the Chevrolet Corvette Stingray for 2015.

The new tranny will enhance the performance and efficiency of the 2014 North American Car Tom Read.

Designed and built by GM, the

clutch designs, Read said.

The new, GM-designed 8L90 eight-speed is expected to contribute up to 5 percent greater efficiency, when compared with the previous six-speed automatic, Read said.

EPA fuel economy test results of the Year, said GM spokesman are pending and will be announced later.

The new transmission also new transmission delivers shift makes the Corvette Stingray one

choice of a conventional manual transmission or an eight-speed automatic.

"Corvette Stingray's new eightspeed automatic delivers the comfort and drivability of a true automatic transmission, as well as lightning-fast shifts and the manual control that enhance the performance-driving experience," said Bill Goodrich, assistant chief engineer for eightspeed automatic transmissions. "It was designed to enhance the Stingray's driving experience, with performance on par with dual-clutch designs, but without

sacrificing refinement."

The available 8L90 transmission is based on the same eightspeed automatic that will be offered on the supercharged 2015 Corvette Z06, but this one has unique clutch and torque converter specifications matched to



2015 Corvette's 8-speed automatic

the torque capacity of the Stingray's LT1 6.2L naturally aspi-

CONTINUED ON PAGE 7

SAE Mid-Michigan To Cover Safety

The Mid-Michigan section of SAE International meets at 6 p.m. Monday, April 28, in the Holiday Inn, 5353 Gateway Center, Flint.

GM Technical Specialist Todd Mackintosh, chairman of the SAE task force, "Hybrid and EV Recommendations for First and Second Responders," will address the group.

CONTINUED ON PAGE 5



2014 Ram Power Wagon

Ram Truck Unveils Its New 2014 Model of Power Wagon

Show last week, the new 2014 Ram Power Wagon is billed as "continuing the brand's quest to build the best pickups," said Ram spokesman Nick Cappa.

Adding to the fact that the Ram 1500 EcoDiesel delivers the industry's best fuel economy at 28 mpg, he said, it shows that

Introduced at the Denver Auto Ram is making trucks that "stand out from the crowd."

The Power Wagon truck was "built to master the most rigorous off-road trails," said Cappa, "and is based on the Ram 2500 Heavy Duty 4x4 Crew Cab, but features a number of off-road-

CONTINUED ON PAGE 6



WELCOME TO SAE 2014 WORLD CONGRESS

GM Will Invest \$449 Million In Hamtramck, Brownstown

by Jim Stickford

The increase in manufacturing in and around Detroit was the main topic of discussion April 8 at the Automotive Press Association luncheon held at the Detroit Athletic Club.

The three speakers - GM Vice President of North American Manufacturing Gerald Johnson, Michigan Gov. Rick Snyder and Detroit Mayor Michael Duggan talked about positive factors in the area.

"General Motors is committed to building award-winning products and developing technologies in America, which helps to grow our economy from a resurgent auto industry," Johnson and includes \$384 million at De-

In preparation for the next gen-

eration of electric vehicles and advanced battery technologies, he said, General Motors will invest \$449 million to upgrade manufacturing processes at Detroit-Hamtramck Assembly and Brownstown Battery Assembly

"General Motors is committed to building award-winning products and developing technologies in America, which helps to grow our economy from a resurgent auto industry," he said.

"These investments will help the next-generation Chevrolet Volt build on its position as the leader in electrified propulsion."

The investment is the largest to date at both facilities, he said,

CONTINUED ON PAGE 9



From left, GM's Gerald Johnson, Gov. Rick Snyder, Detroit Mayor Michael Duggan at APA luncheon

Manual's Popularity Overseas Aids Chrysler's Expertise Here

by Jim Stickford

The automatic transmission has conquered the American market, but for Chrysler, the marketplace is more than North America.

"A point of interest," said Michael Kirk, director of Manual Transmission, Driveline & Axle Engineering for Chrysler. "While in the U.S. most cars - more than 90 percent – are automatics, customers in the majority of the world still drive using manual transmissions."

Kirk was at the SAE World Congress in Detroit last week. He was glad to talk about manual trans-

There are several reasons for the popularity of them outside the U.S., Kirk said.

First is the cost of fuel. Gas is more expensive outside the U.S. and manual transmissions get better mileage.

Second, he said, manual transmissions are less expensive and in many markets emerging middle-class car buyers are looking for entry-level vehicles at the best price.

That means manual transmission is the way to go for most of these buyers.

"I don't think the Big Three in general, and Chrysler in particu-

CONTINUED ON PAGE 5



Ford's laser sensor

Ford, U-M Still Researching To Perfect Driverless Cars

by Jim Stickford

Many believe that autonomous driving will play a big role in the future of the auto industry - including Ford.

The automaker last week showed off some of the autonomous driving technology that it is developing with the University of Michigan at the 2014 SAE World Congress in Detroit.

U-M researcher Johannes Strom explained about the school's "Next Generation Vehicle" project to people visiting Ford's SAE display.

"We're working with Ford to develop an autonomous driving platform," Strom said. "We actu-

ally buy the laser sensors from a supplier. These sensors collect two million points of data per second around the test car. We call it a point cloud. This data is meant to accomplish a number of things."

First, he said, it is supposed to track the location of surrounding vehicles, and also is used in lane detection and vehicle safety.

"These data points can be used to build a safety system for the car by allowing it to perceive its environment," Strom said. "The road, other vehicles. But we're years away from true autonomous driving.

CONTINUED ON PAGE 4

Detroit Auto Scene

31201 Chicago Road South Warren, Michigan 48093

586-939-6800

Contact us: Info@DetroitAutoScene.com

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

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

Detroit Auto Scene is a registered trademark of Springer Publishing Co.

www.DetroitAutoScene.com

Ford Recalls 435K Vehicles with Seat And Frame Issues

DETROIT (AP) – Ford is recalling nearly 435,000 cars and SUVs in the U.S. and Canada to fix rusting frame parts or faulty seats.

The biggest of the two recalls covers nearly 386,000 Ford Escapes from the 2001 through 2004 model years. Ford says the subframes can rust, allowing a control arm to separate and hamper steering control. Ford is aware of one crash but no injuries linked to the problem.

The SUVs were originally sold or registered in 20 states and Washington, D.C., where salt is used to clear snow and ice from roads. Six Canadian provinces also are included.

Dealers will install a reinforcement brace to fix the problem.

The Escapes covered by the recall were built 1999-2003, and 2003-04, Ford said in a statement issued April 7.

The second recall covers 49,000 Ford Fusion, Lincoln MKZ, Ford Escape and C-MAX vehicles from 2013 and 2014.

Dealers will replace seat back frames that weren't welded properly. No crashes or injuries have been reported from the problem, Ford said.

OEMs Should Use Social Media for All Generations

Social media plays a critical role in driving consumer purchase and service decisions across all generational groups in the automotive marketplace, according to the J.D. Power "2014 Social Media Benchmark Study – Auto" released April 10.

"Auto manufacturers that focus just on reaching Millennials through social media are missing a tremendous opportunity, as social media is a channel that reaches all generations of consumers," said Arianne Walker, senior director, automotive media & marketing at J.D. Power.

"Today, for the first time, we have an in-depth understanding of what helps drive satisfaction in social media interactions across generations, and not just among consumers who are highly engaged in social media, but also those who are more casually engaged with a brand through this channel. It is important to provide a satisfying social media experience for all consumers because it helps drive current and future business."

The study, now in its second year, measures the overall consumer experience in engaging with companies through their social media platforms for both marketing and servicing needs across 30 U.S. automotive brands. Marketing engagements include connecting with consumers to build brand awareness and affinity as well as communicating about products and promotions. Servicing engagements include answering specific consumer questions or resolving problems.

GM Places Two Engineers on Paid Leave in Ignition Recall

DETROIT (AP) – General Motors has placed two engineers on paid leave as an outside attorney investigates why the company took more than a decade to recall millions of small cars for an ignition switch problem.

The action was taken after a briefing from former U.S. Attorney Anton Valukas, whom GM has hired to figure out why the company was so slow to recall the cars.

GM says at least 13 people have been killed in crashes linked to the problem, but family members of those who died say the death toll is much higher.

GM spokesman Greg Martin would not identify the engineers.

CEO Mary Barra called the move an interim step as the company tries to find out what happened, according to the statement issued by the company.

GM is recalling 2.6 million compact cars worldwide, including the Chevrolet Cobalt and Saturn Ion, to replace the switches.

During congressional hearings on the matter last week, Sen. Claire McCaskill accused one GM engineer of a cover-up. Ray De-Giorgio, the lead switch engineer on the Cobalt, said in a deposition last year for a lawsuit against GM that he never approved a change to the ignition switch.

But McCaskill produced a doc-

ument from GM's switch supplier that showed DeGiorgio signed off on a replacement, but with the same part number.

Failing to do something like change a part number makes the part harder to track.

"There is no reason to keep the same part number unless you're trying to hide the fact that you've got a defective switch out there that in fact ended up killing a number of people on our highways," the Democrat McCaskill said on a Sunday television news show.

During the hearings, Barra called the failure to change the part number "unacceptable." She said at the time that the company has not fired any employees in connection with the recall. But she said if inappropriate decisions were made, GM will take action, including firing those involved.

GM would not make DeGiorgio available for an interview. He did not return telephone messages left by The Associated Press.⁹

TRW System Designed to Keep Drivers Safe and Seated

TRW Automotive Holdings Corp. is producing its second-generation Active Control Retractor system (ACR2), which is being used in the 2014 Cadillac CTS

This is the first launch of this advanced seat belt technology in North America, said TRW spokesperson John Wilkerson. The system combines active and passive approaches to offer enhanced safety, comfort and convenience to vehicle occupants.

Uwe Class, senior manager of mechatronic systems for TRW's Occupant Safety Systems, said "ACR2 is designed to use braking and stability control sensor information to recognize critical situations before a potential accident.

"It reacts by helping to secure the driver and passenger by removing seat belt slack – so the occupant position is improved in advance of an impending crash.

"The system also offers additional convenience features such as slack removal after the belt is buckled."

Additionally, the ACR2 provides dynamic driving support, developed to help keep the driver in a more stable position in the seat during highly dynamic situations and during rapid deceleration. This feature is an advanced version of TRW's proprietary situation management algorithm.

"The ACR2 situation management algorithm continuously processes signals from the vehicle's relevant dynamic systems such as ABS, electronic stability control, radar or camera systems," continued Class.

"The algorithm evaluates events such as braking, sliding or vehicle angle, and if a critical situation is



TRW's ACR2 for 2014 Cadillac CTS

identified, the ACR system pretensions the seat belt, helping place the occupant in a better position for a potential crash and acting as a warning to the driver that an accident may occur. Should the accident be avoided, the system automatically resets itself via the reversible actuator."

Peter Lake, TRW Automotive's executive vice president of Sales and Business Development, said, "We are pleased to bring this important safety advancement to the North American market through close collaboration with General Motors.

"The latest-generation ACR2 system represents enhanced safety and convenience features at a more affordable cost."

TRW was first to market with an active seat belt system in 2002, said TRW spokesman John Wilkerson, and has continued to work to integrate the Active Control Retractor system with other advanced comfort and safety systems, including drowsy driver warning functions and interaction with radar-enabled automatic emergency braking technology.

Several Issues Cause Toyota To Recall 6.39M Vehicles

TOKYO (AP) – Toyota Motor Corp. is recalling 6.39 million vehicles globally for a variety of problems spanning nearly 30 models in Japan, the U.S., Europe and other places.

No injuries or crashes have been reported related to the recalls announced April 9. But two reports of fires are linked to one of the problems, a defective engine starter that can keep the motor running.

Some vehicles were recalled for more than one problem. The total rises to 6.76 million if vehicles with multiple recalls are counted for each recall.

The recall is for 27 Toyota models, the Pontiac Vibe and the Subaru Trezia, produced from April 2004 through August 2013.

The Pontiac Vibe, which is a General Motors Co. model, is also involved because Toyota and GM made cars at the same plant in California and the recalled model is the same as the Toyota Matrix.

It was recalled for a problem with a spiral cable attached to an air bag. It is unrelated to a separate GM recall over ignition switches linked to at least 13 deaths.

Subaru is partly owned by Toyota, and the model was the same as the Toyota Ractis.

For the recall, Toyota also reported problems with seat rails, the bracket holding the steering column in place, the windshield-wiper motor and a cable attached to the air-bag module.

The recalls affect a large range of models, including the Corolla, RAV4, Matrix, Yaris, Highlander, and Tacoma.

By region, the latest recall affects 2.3 million vehicles in North America, 1.09 million vehicles in Japan and 810,000 vehicles in Europe.

Other regions affected by the recall include Africa, South America and the Middle East.

Toyota was embroiled in a massive recall crisis in the U.S. starting in late 2009 and continuing through 2010, covering a wide range of problems including faulty floor mats, sticky gas pedals and defective brakes. In response, it has become quicker to issue recalls.

Last month, the Japanese automaker reached a settlement with the U.S. Justice Department to pay a \$1.2 billion penalty for hiding information about defects in its cars.

It earlier paid fines of more than \$66 million for delays in reporting unintended acceleration problems.

The National Highway Traffic Safety Administration never found defects in electronics or software in Toyota cars, which had been targeted as a possible cause.

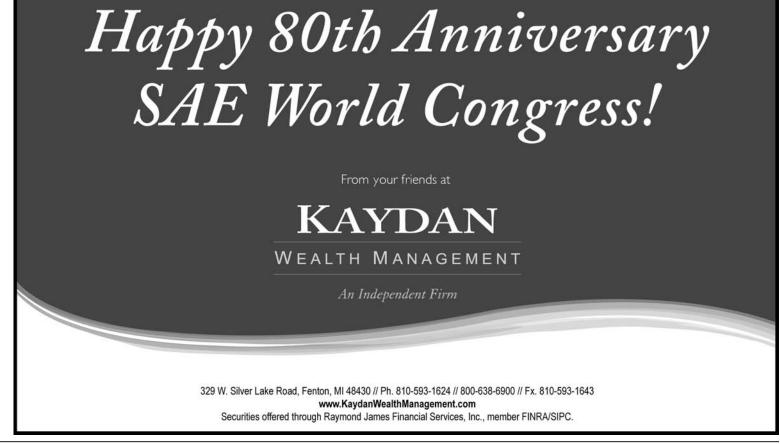
The focus in the U.S. auto industry has recently shifted to another major recall problem, this time with defective ignitions in compact cars made by GM.

VW Stops Selling 25,000 Models

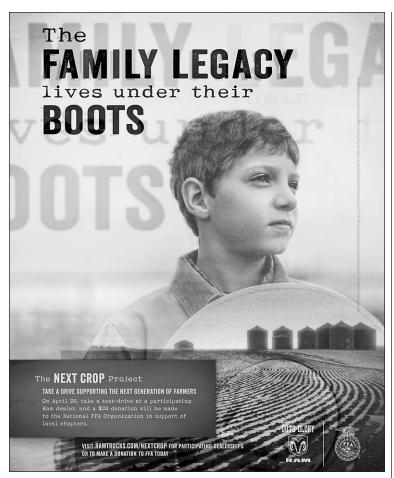
DETROIT (AP) – Volkswagen is telling U.S. dealers to stop selling its most popular cars until transmission fluid leaks can be fixed.

The order covers about 25,000 Jetta, Passat, Beetle and Beetle convertible models equipped with 1.8-liter, four-cylinder engines and automatic transmissions, spokesman Scott Vazin said. They were built after Feb. 1.

An "O-ring" that links a transmission fluid line to a cooler can fail and cause leaks, potentially causing a fire. Vazin said no fires or crashes have been reported.



"FIRST IN THE HEART OF DETROIT SINCE 1933" **APRIL 14. 2014**



Ram Truck ad continues to support America's farmers.

Ram Brand to Donate \$20 To FFA for Each Test Drive

Ram has picked up where it www.RamTrucks.com/NextCrop. left off last year.

After the success of the Ram "Farmer" Super Bowl commercial in 2013, the Ram Truck brand declared it to be the "year of the farmer" and last October made a \$1 million donation to the Future Farmers of America at the 2013 National FFA Convention & Expo in Louisville, Ky.

But Ram didn't stop there, said Ram spokesperson Eileen Wun-

The Ram Truck brand is extending its support of America's farming industry with "The Next Crop Project," a celebration of and investment in - the "next crop" of farmers and future leaders in the agriculture industry.

More than 100 Ram Truck dealers nationwide will partner with local chapters of the National FFA Organization Saturday, April 26, in a national day of test drives at participating dealerships. Ram will make a \$20 donation to FFA for each test drive, Wunderlich said.

Ram's donations will support local FFA chapter leadership programs in participating dealer communities.

"'The Next Crop Project' is a great way for the Ram brand to continue our support of the FFA and to further increase awareness as to the importance of farming in our country," said Ram Truck Brand President Reid Bigland.

"The uniquely American 'farmer spirit' is also consistent with our Ram values of courage, dignity and setting examples through hard work."

For participating dealers visit



"The Next Crop Project" test drive campaign is designed to further the attention that Ram brought to the importance of America's farmers with its "Farmer" video that aired during the 2013 Super Bowl broadcast, by turning the focus even more directly on the future leaders of agriculture, Bigland said.

Ram donated \$1 million to the FFA after views of the "Farmer" video reached a 10-million-view milestone in less than a week.

Ram is supporting "The Next Crop Project" campaign with a 30-second television spot that debuted April 6 during the "49th Academy of Country Music Awards" broadcast on CBS, and with additional print and digital advertising, Wunderlich

The National FFA Organization is a national youth organization of 579.678 student members as part of 7,570 local FFA chapters in all 50 states, Puerto Rico and the Virgin Islands, Wunderlich

The FFA mission is to make a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural educa-

313-387-8700

Equinox, Terrain Earn IIHS Safety Award

The Chevrolet Equinox and GMC Terrain with available forward collision alert technology earned 2014 Top Safety Pick-plus ratings from the Insurance Institute for Highway Safety.

The two vehicles were the only midsize SUVs of nine evaluated to earn Good ratings in the institute's small overlap front crash test, said GM spokesperson Jennifer Ecclestone.

The Equinox and Terrain join the 2014 Chevrolet Malibu midsize sedan in earning the institute's highest safety rating.

The test, in which 25 percent of a vehicle's front end on the driver side strikes a 5-foot-high rigid barrier at 40 mph, is designed to replicate what happens when the front corner of a vehicle strikes another vehicle or an object like a tree or a utility pole, Ecclestone said.

"Having the only two midsize SUVs that earned the Top Safety Pick Plus designation," said Gay

Global Safety Strategy and Vehicle Programs, "speaks to GM's focus on improving our vehicles by offering advanced crash avoidance technologies that can help avoid a crash, and by enhancing vehicle structure and occupant protection if a crash occurs.

"We are very pleased that the IIHS has recognized the safety of both the Chevrolet Equinox and GMC Terrain with this prestigious rating."

Equinox and Terrain previously were named Top Safety Picks, Ecclestone said.

The criteria for 2014 Top Safetv Pick-plus status was revised to include vehicles offering a frontal crash protection system meeting IIHS requirements, as well as achieving a Good rating - IIHS' highest classification - in four of five crash tests, and no less than an Acceptable rating in the fifth

The 2014 Equinox and Terrain

Kent, director of General Motors received Good ratings in all five crash tests.

> The available forward collision alert technology on Equinox and Terrain uses a camera to detect when a driver is at risk of hitting the vehicle ahead, and delivers visual and audible alerts, Ecclestone said. It is part of a safety package that also includes lane departure warning and rear park

The package is available on Equinox 2LT trim and standard on the LTZ model. On Terrain, it's available on SLE-2 and SLT-1 trims, and standard on SLT-2 and Terrain Denali models.

Along with forward collision alert, Equinox and Terrain are equipped with six standard air bags, including dual frontal air bags, head curtain side air bags and pelvic/thorax seat-mounted side air bags - as well as an available rear-vision camera that helps drivers identify objects behind the vehicle, Ecclestone said.

EPA Recognizes GM for Energy Efficiency

For the second consecutive year, the U.S. Environmental Protection Agency has honored General Motors with a 2014 ENERGY STAR Partner of the Year - Sustained Excellence Award.

The award was presented for continued leadership in protecting the environment through "superior energy management."

The U.S. EPA also recognized GM's efforts to raise consumer awareness of climate change and presented the company with a 2014 ENERGY STAR Partner of the Year - Climate Communications Award.

GM shares energy efficiency best practices within its own operations, as well as with suppliers, partners and customers by amplifying the important, positive effects that energy-efficient behaviors can have on the environment, said GM spokesperson Sharon Basel.

"As the world faces sustainability challenges, we strive to be part of the solution - from designing more efficient vehicles to transforming how they're built to reduce environmental impact," said Mike Robinson, vice president of GM Sustainability and Global Regulatory Affairs.

"There is a strong business case to be made for integrating energy-efficient practices at all of our global facilities."

GM is committed to reducing carbon intensity at its facilities 20 percent by 2020, Robinson

Since 2010, the company has reduced energy intensity in the U.S. by 11 percent.

In the last year, Basel said, GM

- Reduced 158,000 tons of greenhouse gas emissions from energy efficiency and fuel switching projects, the equivalent of powering 22,000 U.S. homes for a
- Converted two coal-fired boilers to natural gas at its Wentzville, Mo., assembly plant, for carbon reduction of 57,000

That's equivalent to the carbon sequestered by 1.5 million

- Invested \$24 million at Orion, Mich., and Ft. Wayne, Ind., assembly plants to increase landfill gas use and avoid 23,000 tons of CO2 emissions annually;
- Engaged logistics suppliers in carbon reductions and change of delivery and shipping routes to cut CO2 emissions by 62,000 tons - the equivalent of energy

used by more than 5,600 U.S. homes in a year;

· Added nine new and 22 repeat achievers to the list of facilities that met the U.S. EPA ENER-GY STAR Challenge for Industry contributing \$72 million to total program savings and reducing energy use by 23 percent.

"General Motors has earned EPA's highest ENERGY STAR award - the 2014 Partner of the Year – Sustained Excellence Award - because of its unwavering commitment to helping consumers become increasingly more energy-efficient," said EPA Deputy Administrator Bob Perciasepe.

Through 2013, with help from ENERGY STAR, American families and businesses have saved \$297 billion on utility bills and prevented more than 2.1 billion metric tons of greenhouse gas emissions, said Basel.





586-868-2600



This '70 Mustang was photographed next to its World War II namesake, the P-51 Mustang fighter plane.

Mustang Cruises Through Five Decades

by Jim Stickford

As Michael W.R. Davis wrote in his book about the history of the Ford Mustang, success has many fathers.

In the case of the Mustang, he should know - he was there at the beginning.

Davis worked for Ford for more than two decades in the Dearborn automaker's public relations department. In the introduction of his book, he writes about how his boss, Walter Murphy, said that Lee Iacocca was saying bad things about the Cardinal, a small car made in the States and Europe.

Iacocca told Murphy that Ford needed a new kind of car to grab the consumer. It was no accident that the Ford Mustang was introduced to the public a couple of years later, Davis said.

When writing the book, titled, "Images of America: Mustang and the Pony Car Revolution," Davis went back further than 1962.

He traced the history of small, affordable and sporty cars back to the 1920s to give context to the development of the Mustang. He also wrote about vehicles



- Delicious Soups & Salads
- Submarine Sandwiches
- Best Italian Food Items!
- Large Choice of Cheeses 35197 Dodge Pk. N. of 15

586-979-0828



A press release photo of this '65 Mustang ties the vehicle with the horse.

developed by Chrysler and GM in response to the Mustang.

Davis said that his research showed the success of the Mustang was somewhat of a surprise.

'The information I saw showed that Ford expected to sell under 100,000 vehicles a year," Davis said. "That figure was the basis of the plan in which the company went forward.

"The Mustang was first made in the Rouge facility, but they had to ramp up production so plants in New Jersey and California started making the Mustang."

Davis said his book presents the development of the Mustang through pictures and captions. That's a skill he learned in his old newspaper days.

He was helped in his research by the Detroit Public Library's "excellent" automotive history archives.

He also was able to contact former colleagues at Ford for information. One entity he didn't work with was Ford itself.

"They wanted me to be li-

censed with them," Davis said, "so they could get a share of the proceeds. I told my publisher, Arcadia Publishing, that being licensed with Ford wouldn't give me access to the dealer body and that I also didn't want to imply that Ford had control of the project and that I didn't want my work vetted by their lawyers."

Fortunately for Davis, his connections with groups like Ford Retired Engineering Executives (FREE) put him in contact with some of the people who worked on the original Mustang.

Unfortunately, Davis said, many of the people who were there at the beginning are no longer with us.

But he was able to talk to a lot of people who have worked on more recent vintages of the Mus-

When my friends learned that I was writing a book about the Mustang, they were very helpful in providing materials for me to use," Davis said.

"I was also able to go to my

ROSEVILLE

Subway/Oakland Mall 498 14 Mile Rd

1939 W. Maple Rd

Subway/Walmart 2001 W. Maple Rd

SHELBY

Subway/Walmart NOW OPEN 24 HOURS 51450 Shelby Pkwy 23 & Van Dyke X-Way

WASHINGTON TWP.

NOW OPEN DRIVE THRU 13160 32 Mile Road

32 & Van Dyke X-Way

West of Crooks 248-435-2846

248-435-2431

8178 23 Mile Rd 23 & Van Dyke 586-739-4100

586-254-8140

Subway/Walmart 28804 Gratiot 12 & Gratiot 586-773-1682

Henry Ford II poses with a Mustang at the 1964 New York World's Fair. own private archives and do copy was sometimes difficult." some research.

And, he was able to talk to the car guys who go to Steve Pasteiner's store on Woodward in Birmingham every Saturday. "Steve's place used to be called

Auto Zone Hobbies," Davis said. "Every Saturday, a bunch of car guys who work or have worked in the industry get together for coffee and donuts and talk about cars. They know a lot about the history of the industry and they were also very helpful to me."

Davis's biggest challenge was tracking down pictures he knew were taken back in the 1960s. "It

was difficult trying to find some of these photos," Davis said. "I knew they were taken, but

trying to find someone who had a

Davis was also frustrated because he wanted to include photos of Mustangs that appeared in the movies. But getting the rights to those photos would have cost money.

"I know \$800 doesn't sound like a lot," Davis said. "But for a book like this, paying that amount per photo would have killed the project."

Davis was proud of some of the pictures he was able to track down, including a shot of a World War II P-51 Mustang fighter plane next to a Mustang car.

Davis said the book is on sale to the public as of April 7. It's an easy read that gives a pictorial history of one of the cars that made Detroit vehicles great.

Ford, U-M Researching Driverless Cars

CONTINUED FROM PAGE 1

"U-M is interested in collaborating with Ford because there are a number of research questions about autonomous driving that need to be addressed. We're not at autonomous driving yet, but this is the kind of research that will get us there."

Gaurav Pandey, a research scientist at Ford, said that getting to autonomous driving, at this stage, isn't a matter of developing the technology.

more about making it more robust," Pandey said. "By that, I mean more reliable and accurate. An autonomous driving system has to work all the time. Getting 95 percent isn't good enough.'

Strom said the system they brought to the SAE World Congress has been taken for a spin on the Ford test track. It worked by using 32 lasers placed in the four spinning containers, which send out light beams that "map" out the surrounding area.

This information, in turn, is used to give the vehicles hardware a sense of the environment, and this information is used to direct the autonomous car.

"We use the test track because, legally, we're not allowed to take "The tech is there, but now it's the test car out on the road," Pandey said.

"When I get asked what my biggest surprise is in testing this system, I say every day is a surprise. This is an ongoing project and there are lots of questions that still have to be answered."



31690 Mound Rd 13 & Mound 586-939-1000 26627 Hoover Rd 11 & Hoover 586-754-8205 30820 Hoover Rd 586-573-7829 29144 Ryan Rd 12 & Ryan 586-573-8000

28950 Van Dyke Ave 12 & Van Dyke 586-558-3882

Drive Thru Service: NOW 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

STERLING HGTS.

37876 Van Dyke at 16 1/2 Mile 40058 Van Dyke 18 Mile & Van Dyke 586-939-4500 586-795-8368

SubwayChrysler Insid 35777 Van Dyke Chrys Subway/Walmart NOW OPEN 24 HOURS 33201 Van Dyke 14 & Van Dyke 586-274-4319 586-795-0205

Subway/Meijer 36600 Van Dyke Ave

38357 Dodge Park at Plumbrook

586-795-1606

586-264-5300

NOW OPEN 24 HOURS 7960 Metro Parkway Van Dyke & Metro Pkwy 586-268-0800 SubwayChrysler 38111 Van Dyke 586-268-6900 Inside Chrysle SHAP

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

eat fresh



Manual Transmission Popularity in Foreign Markets Aids Chrysler's Expertise at Home

CONTINUED FROM PAGE 1

lar, are at a disadvantage," Kirk said.

Through Fiat, the company makes and sells vehicles with manual transmissions on three continents - South America, Europe and Asia

In South America, it's almost 100 percent manual transmission." And this expertise in foreign

markets has an upside in the domestic market, Kirk said.

"Here in the U.S., there's still a market for manual transmissions in vehicles like the Dart, which is our entry-level vehicle in the U.S.," Kirk said.

"Also, our performance customers who drive vehicles like the Challenger often prefer to have a manual transmission. They like its performance and mileage as well.'

Kirk said that what's funny is that he and his crew often spend a lot of time training interns and summer employees on how to drive a stick.

Even his own wife, Kirk said, drives a Jeep Grand Cherokee that comes with an automatic transmission.

'She likes the convenience of the automatic transmission." Kirk said. "She says in this day and age, why drive with a stick? She just likes the automatic trans-

But Kirk said that he and his

GKN Driveline Will **Invest \$100 Million** In Carolina Plant

GKN Driveline, which has its North American headquarters in Auburn Hills, will expand its Newton, N.C., facility.

The company plans to create more than 200 new jobs in the plant by the end of 2018 and invest more than \$100 million in location. GKN said spokesperson Alex Sherbow.

The expansion will help GKN Driveline better serve customers in the region and beyond, with improvements not only in what we do, but how we do it," said Robert Willig, president, GKN Driveline Americas.

'We remain committed to producing the highest quality products and providing innovations that help advance the automotive industry."

Using the grant funds, GKN Driveline will increase the manufacturing floor space by more than 25 percent to accommodate additional business volume in geared components.

GKN Driveline Newton employs more than 700 people, supporting machining and assembly of high-precision products for demanding AWD applications.

SAE Mid-Michigan To Cover Safety

CONTINUED FROM PAGE 1

Mackintosh, who holds a Master of Energy Systems Engineering degree from the University of Michigan, will discuss "Advanced Propulsion and First Responder Needs."

Mackintosh will cover the subject of electrified vehicles involved in unplanned events such as mechanical breakdown, collision, and vehicle fire scenarios that can present new hazards associated with the stored energy in the vehicle's Rechargeable Energy Storage System.

These hazards include potential for chemical, electrical, and thermal exposure and injury for members of the emergency responder said section community, spokesperson Patrick Bisson.

Call 810-635-7948 for tickets

fellow engineers at Chrysler are AWD away," Kirk said. also excited about the all new 200 and its disconnectable driv-

"This new driveline gives a driver all-wheel drive (AWD) when needed," Kirk said. "But in situations where the weather is nice, the car can go using two-wheel drive (2WD) automatically.

Not everyone needs AWD all the time, Kirk said. What makes the Chrysler system so great is that there are no buttons to push and the system's transition is so smooth, the driver shouldn't notice any difference between AWD and 2WD and how the vehicle handles.

"If you have AWD and you aren't using it, you're literally dragging it along. So you get drag loss, and that affects mileage.

"We developed our new AWD system for the 2014 Jeep Cherokee and it has been adapted for the

"We're the first company to use this technology in the 200's market niche. Add to that the nine-speed automatic transmission, and we have a vehicle that we're quite proud of.'

And that's one of the reasons Kirk was at the SAE Congress. Chrysler believes in the 200 and Kirk said it's important to get the



Mike Kirk shows off the 200's disconnectable driveline.

"We're out there telling the public every day about the 200,' Kirk said. "And it's important be-

unpredictable."

"But the weather isn't always bad and drivers don't always

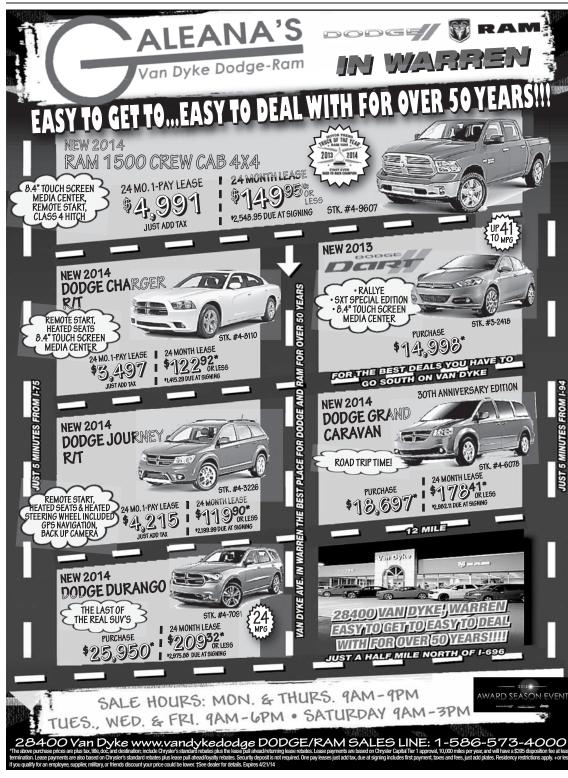


S.

Richmond

Main St.

DriveEnvy-com





If you don't see it, I'll get it! Ask for Bob Cornwell Jr. - Sales Manager

Ram Truck Debuts Its New 2014 Model of Power Wagon

CONTINUED FROM PAGE 1

specific engineering enhancements, including a unique suspension with more than two inches of lift, locking differentials and a 12,000-pound winch to give the truck a significant advantage over all production pickups."

Reid Bigland, Ram Truck Brand president, said, "Capability is top of mind with heavy-duty pickup truck customers. Ram trucks are expected to work every day without breaking a sweat.

"The 2014 Ram Power Wagon fills a need for those who travel into extreme terrain for rescue or recreation, while delivering onroad civility and the towing capability expected from a heavy-duty truck."

The 2014 Ram Power Wagon's engineering uses a new frame, suspension and top-of-segment off-road technology and equipment complemented by the new, best-in-class 410 horsepower, 6.4liter HEMI V8 engine, Cappa said.

"The Ram Power Wagon's heritage dates back to 1945," said Mike Cairns, director of Ram Truck Engineering. "It holds a special place in the lineup as an example of engineering innovation and off-road capability.

"It may look similar to a Ram 2500 Heavy Duty, but under the skin is a unique story, giving the Power Wagon its best-in-class offroad pickup competence."

Simply put, Cappa said, the truck is built for people who want a heavy-duty truck. It is "without a doubt the off-roadcapable pickup on the road.

"And it says a lot about the Ram Power Wagon that we have the heritage of making the first mass-produced civilian pickup truck with four-wheel drive,' Cappa said.

The Power Wagon nameplate was produced from 1945 through 1980. Early trucks were based on the Weapons Carrier (WC) series of Dodge three-quarter-ton military-use trucks built during World War II, Cappa said.

The Power Wagon went on to become a well-known civilian vehicle and continued the lineage of Dodge four-wheel-drive trucks from the 1930s, proving basic four-wheel-drive design concepts and representing a significant predecessor to the many fourwheel-drive trucks in modern use today. The iconic truck was reintroduced in 2005 and now exists as an independent model under Ram Truck Brand.

"After World War II, GIs returning home wrote to Dodge and road capability.

asked, 'Where can we get a truck like the ones we used in the war?" Cappa said.

"Dodge responded by building the Power Wagon. Virtually unchanged from its introduction in 1945, Power Wagons first appeared on the civilian market in 1946 as the model WDX.

"The truck was similar in design to the three-quarter-ton military weapons carrier, with a 126inch wheelbase and closed cab. The model designations changed over the years, but the Power Wagon was offered only as a oneton truck through 1968.

The original Power Wagon featured a 230-cubic-inch flathead six engine, a two-speed transfer case, a four-speed transmission with a power take-off opening, which would send power to the front and back of the truck for operating auxiliary equipment and big 9.00/16-8 ply tires on 16x6-inch five-stud wheels.

A pickup box was designed that measured 8 x 4.5 feet. Dodge factory-built this four-wheeldrive truck more than a year-anda-half before the Willys 4T and 10 years before other manufacturers began producing 4x4 trucks, making it the first mass-produced civilian 4x4 truck, Cappa said. The 1947 WDX featured amenities that included electric wipers, a single driver's sun visor and armrest, dome light, a heater and a 10,000-lb. winch.

In 1957, Dodge introduced another line of four-wheel-drive trucks, also known as Power Wagons, with the model designations W100, W200, W300 and W500.

More conventional in styling, these Power Wagons were available with different engines, including V8s, Cappa said.

The body transitioned in 1972 through 1980 with a number of identifiable grilles and paint schemes. Utility and function was not challenged by the few competitors in the segment, said Cappa. The towing, payload, and snow plowing capacity of the Power Wagon equipped with "Dana 60" 8-lug axles was the king of durability, said Cappa.

After the 1980 model year, the Power Wagon went out of production with the introduction of the Dodge Ram. The four-wheeldrive models of the Dodge Ram were sold under the Ram" nameplate through 1993.

The Power Wagon nameplate was reintroduced in 2005, where. Cappa said, it continues to hold the top spot in pickup truck off-

From Billie Holiday to Lady Gaga, Museum Honors Rock 'n' Roll Ladies

created an exhibition that explores the powerful role women have played in the world of rock and roll music.

Called, "Women Who Rock: Vision, Passion, Power," the exhibit starts May 17 and goes through Aug. 24.

Created by the Rock and Roll Hall of Fame and Museum, this exhibition features the first, the best, and the celebrated - and sometimes the lesser-knowns – whose innovation advanced the progress of rock and roll, said Melissa Foster, Media and Film Relations manager for The Henry Ford.

Putting the spotlight on 70 artists and featuring more than 250 artifacts, the interactive exhibition features original handwritten lyrics, stage outfits, concert posters and videos from artists like Billie Holiday, Aretha Franklin, Janis Joplin, Patti Smith, Madonna and Lady Gaga, Foster said.

The exhibition is designed to weave a powerful and engaging narrative that demonstrates how

The Henry Ford Museum has women have been engines of creation and change in popular music, from the early years of the 20th century to the present, Foster said.

Notable artifacts include Lady Gaga's meat dress, Wanda Jackson's acoustic guitar, Joan Jett's leather jacket, Bessie Smith's "Oh Daddy Blues" sheet music and more.

To celebrate the opening of the new exhibit, Henry Ford Museum will host a "Women Who Rock: Vision, Passion, Power" preview on May 15, hosted by original MTV VJ Nina Blackwood, Foster said.

The party will feature music, food and the chance to see the exhibit before it opens to the public. Tickets for the preview go on sale April 9 at \$125 per person.

Admission to the exhibition is free for members. Nonmember tickets are \$17 adults, \$15 seniors (62 and up), \$12.50 youth (5-12) and free for children ages 4 and under. For more information, 313-982-6001 or www.thehenryford.org.

GM Intros Windshield Wiper Self-Start Technology in Encore

talks about the weather, but no one does anything about it.

Well, GM has done something about it, with Buick's new automatic windshield wiper technolo-

"We've all experienced that startling moment when a passing vehicle splashes a flood of water onto your windshield and, suddenly. your visibility is seriously compromised," said Buick spokesperson Lauren Indiveri.

"Instinctively, you start to reach for the windshield wiper stalk, but the wipers have already begun to swoop. Relieved, you wonder, 'How does my Buick know the windshield needs to be cleared?

Vehicles like the Buick Encore small luxury crossover can be equipped with the convenience of Rainsense wipers, which when activated, can automatically turn on the wipers when rain or water is detected on the windshield, Indiveri said.

Using a rain sensor positioned behind the rearview mirror, a signal sent to the vehicle's computer triggers the wipers when water is detected.

But the technology goes bethe windshield.

"There is a multi-stage process and testing procedure that we must to go through with the Encore, for example, in order to integrate the Rainsense function,' said Matt Piazza, General Motors' global design engineer for rain sensor technology.

"Each vehicle is unique and there are a lot of factors like windshield pitch, rain intensity, vehicle speed, and light conditions that all have to be accounted for and validated.'

The rain sensor itself is about the size of a wristwatch. Piazza said. It is actually a light sensor

As the saving goes, everyone that uses infrared light beams invisible to the human eye to detect water through light refraction when droplets contact the windshield.

> Using advanced software, the sensor takes a reading once every 40 milliseconds, or in about the time it takes a humming bird to complete a flap of its wings, Piazza said. The sensor measures droplet size and frequency and sends a signal that determines how slow or fast the wipers move.

Unlike the traditional "intermittent" wiper settings, adjustment of the Encore's wipers with Rainsense adjusts the sensitivity of the sensor rather than changing the time between wipes.

The speed at which the Encore is traveling also is a critical factor in determining the wipe frequency.

Rainsense also works in the dark, Indiveri said. While the human eye perceives total darkness, a raindrop still refracts some amount of light.

The programming of the rain sensor changes sensitivity in darkness to trigger more wipes, reducing windshield glare.

While in theory, it may seem yond simply sticking a sensor on like a simple system, assimilating Rainsense technology into each vehicle requires countless hours of testing where Piazza and team work alongside the sensor supplier, HELLA Electronics.

> Integration into the Encore begins with a so-called "bench test," where the sensor is tested to validate its relationship with the software. On the bench, Piazza and team confirm a signal receipt when triggered.

From there, it's onto the complex task of mounting the sensor to the windshield. Placement is key and the best location is behind the rearview mirror, which is prime real estate for other



GM engineer Matt Piazza runs rain sensor integration test on Encore.

electronics, including a camera for the Encore's available Lane Departure Warning feature, Indiveri said.

This requires use of a smaller sensor mounted to the windshield at a 25- to 30-degree an-

After mounting, the Encore enters HELLA's rain chamber where a series of tests with artificial rain enables engineers to tweak the software, Indiveri said. Light, droplet size, and droplet frequency are all factors in testing the

Real-world testing comes next,

where engineers validate the calibration and functionality by collecting data with a video overlay in natural rain leading to final adiustments.

"The advanced technology of Rainsense wipers are another added level of luxury and convenience for Buick Encore drivers," Piazza said.

"It constantly monitors the windshield, so that's one less thing on the driver's mind, allowing them to concentrate on the road ahead.

"Once you experience it, you won't want a vehicle without it."

Library Speaker to Cover Speedway

The Warren Public Library will be hosting Steve Wolski, who will talk about the history of the Speedway Motor City Thursday, May 1, at 6 p.m. in the Warren Civic Center branch of the library.

The Motor City Speedway began in 1932 and was located at the corner of Eight Mile and Schoenherr in what was then Warren Town-

It finally closed in 1959. During

its 27-year run, the track was used for midget car racing, modified stock car racing and motorcycle racing.

Wolski used to go to the track with his father and began researching its history back in the 1990s, after he and his brother attended a vintage car race. The event evoked memories of his youth and sparked an interest in learning the history of the track he used to visit.

GM's New 8-Speed Transmission Debuts in 'Vette

CONTINUED FROM PAGE 1

rated engine, Goodrich said.

For performance driving, the transmission offers full manual control via steering wheel paddles, Read said.

A new transmission-control system and unique algorithms, said Read, deliver shift performance that rivals the dualclutch/semi-automatic transmissions found in many supercars. The difference, he said, is with the smoothness and refinement that comes with a conventional automatic fitted with a torque converter.

The transmission controller analyzes and executes commands 160 times per second.

And wide-open throttle upshifts are executed up to eighthundredths of a quicker than those of the dualclutch transmission offered in the Porsche 911, Goodrich said.

Smaller steps between gears, compared with the previous sixspeed automatic, keep the engine within the sweet spot of the rpm band, said Read.

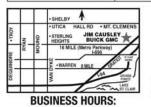
The smaller steps make the most of the car's horsepower and torque, which, in turn, optimizes performance and efficien-

With four gearsets and five clutches, creative packaging enables the new eight-speed automatic to fit the same space as the previous six-speed automatic, Goodrich said.

Design features that reduce friction contribute to the expected 5 percent greater efficien-

The 8L90 is built at GM's Toledo transmission facility in





Mon & Thurs 8:00 am-9 nm Tues. Wed & Fri 8:00am-6 pm

Sat. 10:00 am-3 pm

 $\overline{\triangleleft}$

A LOT!

DRIVE A LITTLE...SAVE



GM EMPLOYEE & FAMILY LEASE

Rear Vision Camera!











11.0T

DRIVE

A LITTLE...SAVE

Add rebates to sale price plus tax, title and plates. Residential restrictions apply. For Conquest must have '99 or newer non-GM car in household. Regal payments & prices based on Regal lease loyalty, must have a Buick Regal lease in household. Leases based 10k per yea with S or Acredit and are plus tax, title, plates and security deposit if required by lender. (LEASE ACQUISITION FEES ARE INCLUIDED IN PAYMENTS). Payments & prices subject to change per GM incentives. Picture may not represent actual vehicle. See dealer for details Buick & GMC payments and prices are quoted with Buick Loyalty or GM Lease Loyalty. All prior sales excluded. Offer ends 4/19/14 @ 3pm.



GM/BorgWarner Commitment Earns PACE's Innovation Partnership Award

General Motors, along with BorgWarner, received an Innovation Partnership Award for collaboration in a newly developed solenoid valve that is part of a stop/start system for a 2015 GM vehicle that will be announced

The accolade was handed out April 7 at the Premier Automotive Suppliers' Contribution to Excellence (PACE) Awards 20th anniversary ceremony.

"Fuel economy improvements with stop/start systems are an example of our focus that strives to put the customer at the center of everything we do,' said Steve Kiefer, vice president of GM Global Powertrain Engineering.

"Being recognized with an Innovation Partnership Award is special for General Motors as it affirms what we are determined to do - collaborate and partner successfully with the suppliers that can help improve our products."

GM Powertrain spokesperson Tom Read said receiving the partnership award highlights GM's willingness to collaborate with suppliers.

"We really appreciate the best that a world-class company like BorgWarner can do," Read said. "And it's important for us to work with such companies.

To collaborate on a project like this and to have it be so successful is proof that GM truly understands what it can accomplish with its suppliers when they work together."

The solenoid valve is a lownoise, high-flow, low-leak valve that achieves quick hydraulic pressure for smooth launches when the engine restarts, Read



From left, Steve Kiefer, BorgWarner's Robin Kendrick and judge J Ferron.

The technology helps deliver improved fuel economy and performance as part of a stop/start system.

The stop/start system automatically shuts down the engine when the car comes to a stop under certain driving conditions, such as a stoplight.

The engine will then automatically restart when the driver takes his or her foot off the brake.

The 2014 Malibu is the first vehicle in its segment with a standard engine that features fuelsaving stop/start technology, Read said.

The stop/start equipment is featured along with other technologies in the Malibu's new 2.5L intake valve lift control, or iVLC, powertrain along with direct injection, variable valve lift control and a new six-speed automatic transmission

All contribute to EPA-estimated fuel economy ratings of 25 mpg in city driving and 36 mpg on the highway – 14 percent and 6 percent improvements, respectively, over earlier models of the same vehicle.

The new technologies on the 2.5L model enable the Malibu to deliver a higher combined fuel economy rating than the base engines of several midsize sedan competitors, including the Toyota Camry, Ford Fusion, Kia Optima, Hyundai Sonata and Chrysler 200, Read said.

Additionally, BorgWarner received a PACE award for the specific work the supplier accomplished in the development on the solenoid valve that was ultimately used by GM.

"They were doubly honored," Read said

"They won an award for the actual solenoid valve, and they won an award along with GM for collaborating on the development of that valve.'

The PACE Innovation Partnership Awards, Read said, recognize automakers that excel in collaborative innovation with a sup-

Six GM Brands Called 'Best for Families'

families. At least that's what *U.S.* News & World Report says.

General Motors' brands took home six awards in the 2014 Best Cars for Families report from *U.S.* News & World Report.

Ranging from small cars to SUVs, GM's award winners have the best combination of quality, safety, features and space for families, the report stated.

The winners were:

- Chevrolet Impala: Best Large Car for Families;
- Chevrolet Tahoe: Best Large SUV for Families;
- Buick Enclave: Best 3-Row SUV for Families;
- Buick Verano: Best Upscale Small Car for Families;
- Cadillac CTS: Best Luxury
- Large Car for Families; • Cadillac ATS: Best Upscale
- Midsize Car for Families.

GM received more awards than any other automaker, and it is the second year in a row GM has the best family vehicles in six different vehicle segments, said company spokesperson Susan

The award criteria include top marks in professional automotive reviews, safety and reliability ratings, seating and cargo volume and family-friendly features, Waun said.

The U.S. News & World Report rating called the Impala a car that comes with "a high-quality interior, aggressive styling and a wealth of available features (that) make the redesigned 2014 Chevrolet Impala an undeniably modern and comfortable large

"Because it has the best combination of positive reviews, price and long-term ownership costs in its class, we named the 2014 Chevrolet Impala the Best Large Car for the Money."

U.S. News & World Report had

GM's family of cars did well for this to say about the Buick Enclave. "Reviewers like the design of the Enclave's cabin, and are pleased with the ample use of premium materials through-

> The Enclave can seat up to eight people and reviewers report that the front seats are comfortable, the second-row seats are spacious enough for three-across seating, and adults can fit in the third row if need-

> The magazine picked the Tahoe because it "trumps its rivals with a refined powertrain, comfortable ride and straightforward interior. Because it has the best combination of positive reviews, price and long-term ownership costs in its class, we named the 2014 Chevrolet Tahoe the Best Large SUV for the Mon-

The magazine chose the Buick Verano because it "delivers a cushy ride, luxurious interior finishes and a good amount of cargo space, reviewers say. For having the best combination of factors that appeal to families, we named the Verano our 2014 Best Upscale Small Car for Families.'

The Cadillac CTS was picked because "after a complete overhaul, reviewers say the 2014 Cadillac CTS sedan's extraordinary performance and luxurious, quiet cabin make it one of the best luxury large cars you can

The Cadillac ATS made the list for its "sporty handling and powerful engine options (that) make it capable of hanging with the best German sport sedans. It comes up a bit short with a small trunk and fussy tech fea-

"The Cadillac ATS is available with a range of engine choices. The base engine is a four-cylinder engine that reviewers say provides adequate power. Most test drivers recommend stepping up to the optional turbocharged four-cylinder engine or V6 if you're seeking faster accelera-

While Ford scored with its Fusion Hybrid and Chrysler with the Jeep Grand Cherokee, GM finished ahead of all automakers placing first in six of the 19 different vehicle categories that comprise U.S. News & World Report's

Mazda, the second-place finisher, had four winners, and Honda and Toyota had only one

"At GM, everything is about providing our customers with the best overall experience in the industry," said Alicia Boler-Davis, senior vice president of GM Global Customer Experience and Product Quality.

"Our cars and trucks deliver on all ingredients that create a winning formula for our cus-

Old GM Site To Become Parks System in Flint

FLINT, Mich. (AP) – Plans for the site of a former General Motors manufacturing complex in Flint known as "Chevy in the Hole" to be transformed into parkland are moving forward.

A design for the site, which is being called Chevy Commons, is being presented to the public on April 10 by the city and the Genesee County Land Bank. Officials are reviewing the plans, which include details about environmental conditions at the site along the Flint River. Plans call for trails that will connect with regional trail networks.



GM Will Invest \$449 Million In Hamtramck, Brownstown

CONTINUED FROM PAGE 1

troit-Hamtramck for new Body Shop tooling, equipment, and additional plant upgrades to build the next-generation Chevrolet Volt and two future products.

This brings GM's total investment at Detroit-Hamtramck to more than \$1 billion over the last five years.

GM's \$65 million investment at its Brownstown Battery Assembly will support the next generation of lithium-ion battery production and future battery sys-

When asked why GM was investing \$65 million at the Brownstown facility when there was excess capacity in lithium-ion battery production, Johnson said GM was just continuing a pledge made in 2007.

When GM decided to build the Volt back in 2007, it was decided that we would invest in the technology," Johnson said. "This is just a follow-up to that decision.

Gov. Snyder said, "Michigan is poised for even greater global leadership in automotive innovation. This significant investment by GM will harness the power of our state's unparalleled assets, such as its talent, world-class universities, and research and development capabilities.

"While challenges remain throughout the auto industry, this announcement shows that it is looking to the future, and the resulting technological advancements will strengthen our economy and benefit our environment. This is great news for Detroit, the region and all of Michigan."

Since 2009, GM has announced more than \$5.4 billion in U.S. facility investment for vehicle

technologies that benefit customers, Johnson said. This includes more than \$2.8 billion invested in Michigan-based facilities alone.

And this investment in Detroitbased facilities shows GM's faith in the city, Duggan said.

"When I was first elected mayor of the city, I sat down with some people at GM," Duggan said. "I thought we were going to talk global automotive strategy. I was cross-examined.

"They asked me questions about getting the street lights turned on. They asked me about urban blight. I was told that GM is here in Detroit and they want to continue to invest in the city. And getting city services to work is an important part of that."

Snyder, when asked about the UAW and the right-to-work law passed under his administration, said he doesn't consider himself as for or against unions. What he is working for, he said, is creating conditions that have companies considering setting up shop in Michigan.

He said that since he got rightto-work passed, a "screen" was removed that kept many companies from considering Michigan as a place to do business. But once companies come here, whether they go union or not is not his job.

Johnson was also asked about how many different vehicles would be made at the Detroit-Hamtramck facility.

He said there are currently five, and GM is looking at building two different vehicles at the plant that aren't currently being built there. But he would not say if GM was going to build seven or six or five vehicles there after the plant upgrades were completed.



2014 CRUZE "LT"

ECOTEC 1.4L "Turbo" Engine! • Automatic Transmission! • Power Locks & Windows! • Cruise & Tilt Wheel! AM/FM/XM Radio W/CD!

· Remote Keyless Entry! Machined-Faced Alloy Wheels! 38 MPG on the Highway! MSRP \$20.735 NO 1ST PAYMENT OR SECURITY DEPOSIT!

PERIOD! Lease for Only! Starting At \$17,534

PERIOD!

(586)-791-1010

2014 MALIBU "LT" r/24,000 Scheduled Maintenance INCLUDED!

• 2.5L DOHC VVT Engine! • Automatic Transmission! • Power Locks & Windows! • Cruise & Tilt Wheel! • AM/FM/XM Radio W/CD! • Remote Keyless Entry!

Aluminum Wheels! • 36 MPG on the Highway! MSRP \$24,435

NO 1ST PAYMENT OR SECURITY DEPOSIT! Lease for Only!

PERIOD! Starting At \$19,850

\$185 or \$15

Celebrate With GM Employee Pricing to EVERYONE on EVERYTHING

2014 EQUINOX "LS"

2 Yr/24,000 Scheduled Maintenance INCLUDED!

• 2.4L DOHC Engine! • Automatic Transmission! Power Locks & Windows!
 Cruise & Tilt Wheel!

> · Remote Keyless Entry! • 17" Aluminum Wheels!

32 MPG on the Highway! MSRP \$25 450

Lease for Only! Starting At

2014 SILVERADO "LT" 4X4 DOUBLE DOOR

• 2 Yr/24,000 Scheduled Maintenance INCLUDED! • ECOTEC 4.3L Engine! • Automatic Transmission Power Locks & Windows!
 Cruise & Tilt

• 17" Aluminum Wheels! • 4.2" Color Screen Radio! Locking Rear Differential

23 MPG on the Highway!

NO SECURITY DEPOSIT 24 Month Lease!

Starting At



MORANCHEVY.COM

NO SECURITY

The Best Price...
PERIOD!

4511 24th Ave. Fort Gratiot, MI. 48059 (810)-385-8500

2015 Cadillacs Add 4G LTE, **CUE Collection Suite of Apps**

nology, people are more connected to each other than ever. And why should it be any different for today's smart cars?

To that end, Cadillac will add enhanced in-vehicle connectivity with the addition of OnStar 4G LTE and the CUE Collection suite of applications.

The 2015 ATS Coupe will be among the first Cadillac models equipped with both advanced technologies when it goes on sale this summer, said GM spokesperson Brian Corbett.

OnStar 4G LTE is a faster and more reliable connection for invehicle applications compared with competitive 3G systems, Corbett said. A built-in connection allows passengers to access online content and information through a Wi-Fi hotspot, which can accommodate up to seven devices.

The new, faster vehicle connection also powers CUE Collection, a new in-car app marketplace that will be standard on many 2015 Cadillac vehicles with CUE infotainment, Corbett said. Accessible via an icon on the eight-inch LCD touch screen, the CUE system can organize, update or delete user-downloaded apps throughout the life of the vehicle. Expected initial apps include iHeartRadio, The Weather Channel, NPR and Slacker Radio.

Cadillac CUE is the centerpiece of the ATS Coupe's in-vehicle technologies and is available on base models and standard on and the CUE Collection will roll Luxury, Performance and Premium ATS Coupes, Corbett said.

For 2015, CUE includes new enhanced content such as a Textto-Voice feature for smartphone users with Bluetooth profile (M.A.P.), which reads incoming

Thanks to smartphone tech- texts through the car's speakers. Users can also create and save their own preset responses when

the vehicle is in Park. The Text-to-Voice feature requires a compatible smartphone with Bluetooth profile and appli-

cable text messaging features. Also new for 2015 is the addition of Siri Eyes Free for iPhone iOS 6 and iOS 7 users, Corbett

said. The system allows users to simply connect their iPhone to CUE via Bluetooth, pair with the system and use the steering wheel voice activation button to begin and end sessions with

Each enables voice-controlled connectivity to help keep phones in pockets and hands on the

Every Cadillac also comes standard with 12 months of On-Star Directions and Connections, which includes advisor-based safety, security and navigational services, Corbett said.

Cadillac owners also get On-Star RemoteLink Key Fob Services, which allows owners to lock or unlock doors, activate the horn and lights, and remotely start a properly equipped vehicle through the OnStar RemoteLink smartphone app.

The Key Fob Services are included for five years for Cadillac vehicles in the U.S. and Canada.

The elevated level of connectivity brought by OnStar 4G LTE out to the entire Cadillac model lineup throughout the second half of the 2014 calendar year on 2015 models, Corbett said.

OnStar 4G LTE data packages and pricing will be announced later this year.





LOWEST PRICES OR IT'S FREE

1.41 Ecotec Turbo 6 Speed Automatic & More. 36 Month Lease/10,000 Miles

No Security Deposit Required • No First Payment

*See dealer for details. All Rebates/Incentives have been deducted from sale price/payment and are subject to change by manufacturer replayed discount required except where noted. All leases include GM Lease Loyalty and a nent, tax, title and plate fee due at signing unless otherwise noted. Offers expire 04/30/2014.

WHERE THE DEALS MAKE THE DIFFERENCE, EVERY DAY SINCE 1970!



Ecotec 2.5L DOHC

36 Month Lease/10,000 Miles

No Security Deposit Required

6 Speed Automatic & More.

Free shuttle service to home, office or shopping.

Van Dyke • South of 18 Mile • Sterling Heights

Jeff Caul 586-274-0396 PEP QUOTES BY PHONE OR EMAIL:

CONVENIENT HOURS: Mon. & Thurs. 8:30 am - 9 pm Tues., Wed., Fri. 8:30 am - 6:30 pm

Ford Police Vehicle Sales Rise 48 Percent

In just two years, Ford has revolutionized its police vehicles by equipping many of the Police Interceptor lineup with standard all-wheel drive, more fuel-efficient EcoBoost engines, and two new body styles, said Ford spokesperson Chris Terry.

Ford police vehicle sales grew 48 percent in 2013, while industry police sales rose 22 percent, according to Polk registration data, Terry said.

The Ford Police Interceptor utility was the best-selling police vehicle in the United States in 2013, gaining 9 points of market share in 2013.

Demand for Ford police vehicles outpaced overall industry sales, which rose 22 percent last year.

The sales growth comes two years after Ford introduced two new body styles, including a utility vehicle, made all-wheel drive standard equipment across most of its lineup, and rolled out high-performance, but efficient, Eco-Boost engine options, Terry said.

"We revolutionized our police vehicle lineup with three key changes that differentiate us from the competition," said Jonathan Honeycutt, police marketing manager at Ford.

"The new utility vehicle body style meets officers' growing storage needs; standard all-wheel drive for most models is an industry-first that provides greater mobility and security; plus, expanding the range of EcoBoost engines gives law enforcement agencies more options to suit their needs.

"Together, these three ingredients are driving sales growth and market share gains for Ford."

After decades of success with its reliable Crown Victoria – a V8-powered, body-on-frame large sedan – Ford made a strategic decision to modernize its Police Interceptor with not one, but two distinct body styles: a traditional, pursuit-rated large sedan and a new, pursuit-rated utility vehicle, Honeycutt said.

"Many officers told us, 'We need more space, but we also need performance," said Honeycutt. "We knew with the amount of equipment officers now have to transport that our utility vehicle would be a hit.

"Within two years of reinventing the category with an all-new sedan and utility vehicle, we're approaching nearly 50 percent market share. It's remarkable."

In 2013, Ford's police utility vehicle represented 60 percent of all Ford Police Interceptor sales, and was the best-selling police vehicle in the country.

Another decision also has paid dividends, Terry said. In an industry-first, the company now offers standard all-wheel drive for Police Interceptor utility and sedan models on vehicles equipped with a 3.7-liter or 3.5-liter EcoBoost.

Police agencies have taken notice, Terry said. Approximately 90 percent of all Police Interceptors sold come equipped with standard all-wheel drive.

"It's a matter of officer safety, public safety and performance," Honeycutt said. "It's not just the snowbelt, not by a long shot.

"Wet pavement, dry pavement, chases that lead off-road, traction in all conditions – our all-wheel-drive technology, a system that operates full-time, can help shorten pursuits, which protects everyone involved.

"Officers immediately grasp the advantages of the technology," he added, "and the re-



The new Ford Interceptor SUV and sedan

sponse has been phenomenal."

The final piece of the automaker's reinvention of its police vehicle is its introduction of fuel-efficient, yet powerful, EcoBoost engines, Honeycutt said.

In recent Los Angeles County Sheriff Department testing at Auto Club Speedway in Fontana, Calif., Ford Police Interceptor sedan and utility vehicles were fastest in both 0-100 mph acceleration runs and average lap times for a third consecutive year, Honeycutt said.

In addition to power and pursuit capabilities, these EcoBoost engines – like the 3.5-liter and 3.7-liter non-turbo offerings – provide increased fuel economy ratings over outgoing models, helping municipalities with potential savings on fleet fuel costs, Honeycutt said.

The latest addition to Ford's police lineup – the 2.0-liter Eco-Boost Special Service Police Sedan – offers an EPA-estimated rating of 20 mpg city, 30 mpg highway and 24 mpg combined.

The 2.0-liter Special Service vehicle comes with many of the same features and technologies as the Police Interceptor sedan, such as a 75-mph rear crash test rating, two times durability testing, police-tuned suspension, police brakes, steel wheels, police interior and upfit options, Honeycutt said.

"As agencies look to replace older, V8-equipped cruisers, Ford is at the ready with highly capable, full-size police vehicles that offer great fuel efficiency for agencies around the country," said Honeycutt.

Catch <u>Detroit Auto Scene</u> when you're on the go.



The 640 pixel home page now fits your smartphone.

And thanks to our tabloid format, the scrollable print edition fits most tablets, and is manageable on a smartphone when needed.

www.DetroitAutoScene.com

updated weekends for Monday Morning



'Old Faithful' in its last days at Vari-Form

'Old Faithful' Retires from Vari-Form After 10M Units

After 23 years of service, Vari-Form, a manufacturer in pressure sequence hydroforming, has retired the company's – and the world's – first machine to hydroform an automotive structural part.

Production of instrument panel beams on this machine for Chrysler S body minivans (Dodge Caravan, Chrysler Town & Country, Plymouth Voyager) began in July 1990, said Vari-Form spokesperson Terry Nardone

Over time, the press was used to produce structural parts for several subsequent generations of these vehicles.

Dubbed "Old Faithful" by Vari-Form engineers, production peaked at over 700,000 units per year in 1996, Nardone said. During more than two decades of active use, "Old Faithful" output equaled nearly 10 million units.

"If hydroforming presses could talk, 'Old Faithful' would tell us about the evolution of hydroforming as an essential automotive technology," said Vari-Form president Stephen Dow.

"Vari-Form pioneered the application of hydroforming to automotive structural parts, and worked with a leading machine tool manufacturer to build this precedent-setting press to our specifications

specifications.

"Launching large-scale production on it in 1990 brought a new manufacturing concept to the

automotive industry.

"At the time, we had to convince carmakers of the benefits of hydroformed assemblies – better quality, reduced space and weight, lower per-unit costs, and less tooling.

"Today, millions of vehicles in North America incorporate Vari-Form hydroformed parts. Many of those were produced on 'Old Faithful.'"

Dow said the future of hydroforming technology is the future of Vari-Form.

"We're constantly pushing the envelope to design and manufacture more sophisticated parts and complex assemblies," Dow said.

"Vari-Form works daily with our OEM and supplier partners to answer the design, performance, fuel efficiency, and safety challenges facing the automotive industry."

These latest developments, Dow said, include applications of advanced materials permitting thinner walls to reduce part weight without sacrificing strength or stiffness – all produced on faster, more efficient equipment.

"Looking forward, we are constantly advancing the art and science of body structures with developments like our Hydroform-Intensive Body Structures (HIBS) initiative," Dow said.

"Now in its third phase, HIBS is redefining the way vehicle builders and their suppliers view the structure of future vehicles."

Vincentric Toasts GM Vehicles' Fleet Values

General Motors won eight Vincentric 2014 Best Fleet Value in America awards, the second consecutive year GM has topped the

That means the company leads all automakers in number of vehicles recognized since the awards program's launch in 2006, said GM spokesperson Robert Wheel-

GM's 2014 Best Fleet Value winners

- Buick Encore Four-door utility front-wheel-drive, compact premium crossover;
- Buick Enclave Convenience four-door utility frontwheel-drive, large premium crossover:
- Buick LaCrosse Frontpremium wheel-drive large sedan:
- Buick Verano Premium mid-size sedan;
- Chevrolet Spark EV 1LT electric/plug-in hybrid;
- Chevrolet Express G3500 standard wheelbase, full-size one-ton passenger van;
- GMC Sierra 2500HD Work Truck - crew cab, two-wheeldrive, long wheelbase, full-size heavy-duty 3/4-ton pickup;
- GMC Sierra 3500HD Work Truck - regular cab two-wheeldrive, long wheelbase, singlerear-wheel, full-size heavy-duty 1ton pickup.

'GM's award-winning vehicles cover a wide variety of segments, including passenger cars, vans, crossovers and trucks," said David Wurster, president of Vincentric.

"This is a testament to the

Shaeffler Earns PACE Award for Torque Converter

Schaeffler, with a development center in Troy, was named a 2014 Automotive News PACE (Premier Automotive Suppliers' Contribution to Excellence) Award winner in the product category.

The award was presented for Schaeffler's "fuel-saving and vibration-reducing torque converter for rear-wheel drive with centrifugal pendulum absorber."

Patrick Lindemann, vice president of Product Development at LuK Wooster, accepted the award on behalf of Schaeffler during an award ceremony held April 7.

'We are honored to receive this prestigious award and be recognized for our dedication to providing our customers with innovative products and technologies," said Lindemann.

"Our torque converter with its centrifugal pendulum absorber is a true testament to how we are working to create products that assist automakers as they face current and future industry requirements.'

Since downsized engines tend to vibrate more than larger ones, Schaeffler developed a pendulum, operated by centrifugal force and mounted to the torque converter, which cancels vibrations from the engine, said Schaeffler spokesperson Richard Neilson.

As a result, fuel consumption and CO2 emissions are reduced, and comfort is increased due to the reduced vibration.

The torque converter is developed at Schaeffler's LuK USA facility in Wooster, Ohio.

This is the fourth time since 2009 that Schaeffler has received the PACE Award, most recently earning the recognition for its UniAir fully variable engine valve lift system that allows engines to operate more efficiently, Neilson

Schaeffler is a global manufacturer of automotive products and systems for engines, transmissions and chassis applications.

company's ability to meet the varying needs of a widely segmented fleet industry."

In its ninth year, the Vincentric Awards are used by fleet operators to understand vehicle lifecycle costs, a key component of the purchasing process.

This is the first Best Fleet Value in America award for the Spark EV in the electric vehicle category, which Vincentric introduced last year, Wheeler said. Chevrolet's newest electric vehicle also took top honors in its class in the consumer market awards Vincentric announced earlier this year.

"We are committed to providing our commercial customers with vehicles that are not only great on the road, but great for their bottom line," said Ed Peper, U.S. vice president, GM Fleet and Commercial.

"These awards demonstrate the depth of our product lineup and the business value we provide to all customers - small and large - no matter their needs.'

To determine this year's award winners, Wheeler said Vincentric analyzed more than 3,400 vehicle configurations in 20 different lifecycle cost scenarios, using eight cost factors: depreciation, fees and taxes, financing, fuel, insurance, maintenance, opportunity cost and repairs.

Lifecycle costs were measured in all 50 states and Washington, D.C., Wheeler said. This resulted in 25 million lifecycle cost measurements used to determine the Best Fleet Value in America win-

Earlier this month, Chevrolet was named the Best Value Truck Brand in America by Vincentric, in the consumers market.

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









OPEN HOUSE EVENT

EVERYONE GETS GM EMPLOYEE PRICING OR BELOW ON EVERYTHING

PURCHASE

NEW SILVERADO PURCHASE \$29.315



PURCHASE

\$21.792*



NEW SILVERADO









PULL-AHEAD IS BACK...GET OUT OF YOUR LEASE EARLY!!!



\$167



PURCHASE

\$33,175*













PUSH, PULL, DRAG, OR DRIVE - \$3,500 GUARANTEED FOR YOUR OLD TRADE-IN!



866-452-1547 26125 Van Dyke @ 101/2 Mile Center Line, MI 48015

Quick Oil Change EXPRESS LUBE OIL FILTER 395 Up to 5 qts.

Fluid Level,

Brake & Alignment Check Included.



Open Mondays & Thursdays until 8:30pn Excludes synthetic, Diesel & Med. Duty Trucks. Most GM cars & trucks. One coupon per customer. Must present coupon with order. Plus tax. Expires 4-30-14.



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









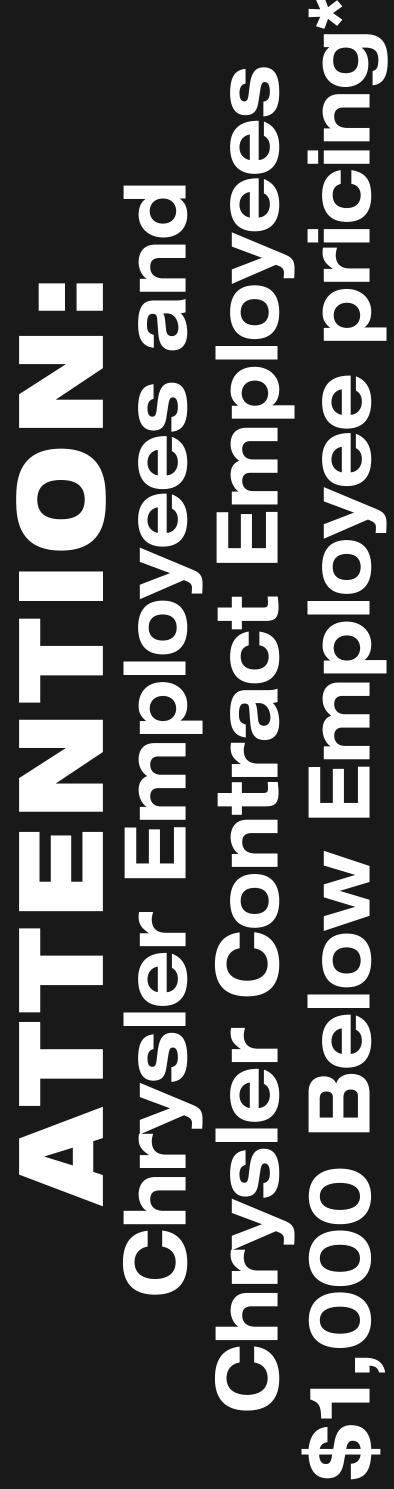


Visit our website: edrinke.com

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



Now looking for experienced salespeople to join our team!





TRADE IN **VALUE HERE**







YOUR OFFICIAL CHRYSLER JEEP • DODGE LEASE TURN-IN HEADQUARTERS



24 MO. LEASE ONLY

2014 CHRYSLER **300S AWD** \$25,498* EMPLOYEE 1 PAY 24 MONTH LEASE STARTING FROM 24 MO. LEASE

2014 RAM CREW CAB **4X4 BIG HORN**







8*mo. \$27,760°







We make car buying fun at Milosch's Palace. Please call to schedule an appointment for a demonstration drive. All rebates to dealer. Deals apply to stock units only. Must be a Chrysler employee. \$1995 down, plus destination, taxes, title, plates. Must be Chrysler Employee. \$500 Military and TDM included. Lease calculated at 10,000 miles per year. Vehicle shown not actual vehicle. WAC. See dealer for details. **Plus destination, taxes, title, plates, \$0 sec. deposit required. Includes Conquest Trade-in and must be Chrysler Employee. Programs subject to change. Expiration date is 4/30/14.

YOUR OFFICIAL CHRYSLER • JEEP • DODGE LEASE TURN-IN HEADQUARTERS



Call Toll Free:

HOURS: Mon/Thurs 8:30am-8pm Tue/Wed/Fri 8:30am-6pm

OPEN SATURDAY!

New **Saturday Hours:** Sales 10am-3pm & Service 8am-2pm



Silverbell

₩стс

Exit 81