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Autonomous car's driver display with inset of car's interior.

GM Will Invest \$14M, Add 1,100 Jobs for Driverless R&D

The truly autonomous car has gotten one step closer to reality.

General Motors on April 13 said it will add more than 1,100 new jobs and invest \$14 million in a new research and development facility for Cruise Automation in San Francisco.

These investments will allow Cruise Automation to expand development of self-driving technologies that will transform personal mobility, said GM spokesman Kevin Kelly.

"Expanding our team at Cruise Automation and linking them with our global engineering talent is another important step in our work to redefine the future of personal mobility," said GM Chairman and CEO Mary Barra. "Self-driving technology holds enormous benefits to society in the form of increased safety and access to transportation. Running our autonomous vehicle

Giulia's Design a Winner – Ward's Auto

gets points for sytle.

After spending two months evaluating 31 vehicle nominees and scoring each based on materials, ergonomics, driver information, safety, comfort, fit-andfinish and aesthetics, the editors at WardsAuto named the all-new 2017 Alfa Romeo Giulia to the WardsAuto 10 Best Interiors List for 2017, said Fiat Chrysler spokesman Berj Alexanian.

"From the F1-inspired steering wheel and creamy leather seats to the matte-finish genuine walnut trim on the doors, instrument panel and stylishly arrayed center console, the Giulia does its Italian design heritage proud,"

The 2017 Alfa Romeo Giulia said Tom Murphy, senior editor of WardsAuto.

"Our editors rave about the expertly applied metallic accents, outstanding build quality, artistic lines, the intuitive control screen that blends neatly into the instrument panel and the tidy white stitching that sweeps across the soft-touch black IP and upper door trim."

Crafted by Alfa Romeo artisans at the Cassino plant in Italy, the new 2017 Giulia is a testament to Alfa Romeo's balance of engineering and emotion, creating a premium sports sedan for driving enthusiasts that is luxurious and comfortable on the inside, Alexanian said.

Built around the driver, Alfa Romeo Giulia designers focused on simplistic elegance, with an emphasis on incorporating the essential elements for performance, said Alexanian.

Inside, Giulia's craftsmanship starts with an asymmetric-styled instrument panel, featuring a driver-focused cockpit crafted with an array of available leathers with accent stitching, all featuring an embossed Alfa Romeo logo in the headrest, plus trim bezels in aluminum, wood or carbon fiber.

A Formula-1-inspired steering wheel features a thick-rim profile

CONTINUED ON PAGE 4



CONTINUED ON PAGE 2 The Alfa Romeo Giulia's interior "does its Italian design heritage proud," said WardsAuto's Tom Murphy.

Autonomous Vehicles Take Back Seat with Some Groups

by Jim Stickford

Driving a car now and driving one a century ago is not all that different, but that's going to

Representatives from J.D. Power talked about the advent of new automotive technology, how it's changing the driving experience and how different generations accept this. The discussions were held at a special Automotive Press Association lunch at the Detroit Athletic Club April 18.

Dave Sargent, vice president, Global Automotive at J.D. Power, started the discussion by saying that while the cars of today are superior in every measurable way to the cars of 100 years ago, the actual act of driving hasn't really changed.

and drive them to where they want to go in both 2017 and 1917, Sargent said. The cars are guided own them and have to find

places to park them at their homes, where they shop and where they work.

But, Sargent said, if we were to go forward only 30 years from now, the cars of that era would be totally different from the cars of today.

"We might see vehicles that are 'journey-based' in ownership," Sargent said. "There would be driverless taxis and fully autonomous vehicles on the road. There will be new powertrains and vehicle-to-vehicle communications as well as vehicle-to-infrastructure communication. There will be new players in the industry; new OEMs and new suppliers."

Sargent said that we don't know what technologies will win in this future 30 years from now, which is why OEMs are spending People get in their vehicles money on so many competing

"Some of them are going to stick," Sargent said. "And no by the driver in both eras. People manufacturer wants to be left behind."

This change caused by new technologies has required J.D. Power to look at the market in a new way, Sargent said. Instead of asking people what they want, J.D. Power decided to ask people if they would pay for technologies that are new, but exist in the marketplace right now.

"One thing we learned is that people are willing to ask for help in learning about technology that makes driving safer," Sargent said, "but are currently resistant in accepting self-driving cars."

Sargent then handed the podium off to Kristen Kolodge, executive director of Driver Interaction and Human Machine Interface at J.D. Power.

She said the 2017 J.D. Power U.S. Technology Choice Study revealed some interesting things.

"With the exception of Gen Y (born between 1977 and 1994), all other generational groups are becoming more skeptical of selfdriving technology, which poses a new challenge to car manufacturers and technology developers," Kolodge said. "In most cases, as technology concepts get closer to becoming a reality, consumer curiosity and acceptance increase. With autonomous vehicles, we see a pattern where trust drives interest in the technology

and right now, that level of trust is declining.'

Kolodge said that compared with 2016, 11 percent more Gen Z (born between 1995 and 2004) consumers and 9 percent more

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Trust in autonomous vehicles is declining, said J.D. Power's Kolodge.



Yin examines car materials made out of bamboo.

Ford Testing 'Amazing' Bamboo for Interiors

Finding new lightweight materials to build cars out of is a growing business.

For Ford, that's a literal truth.

'You've probably sat on it, built with it, and maybe even eaten it, but did you know that your car could be next to benefit from bamboo – one of the world's strongest natural materials?" asked Ford spokesman Matt Moran.

While investment in research has led to breakthroughs in new materials like super-strong carbon fiber and lightweight aluminum, nature's wonder material may have been growing all along century - Thomas Edison even and as much as three feet in a day, Moran said. Soon, some surfaces inside our vehicles could be made from a combination of bamboo and plastic to create super-hard material.

"Bamboo is amazing," said Janet Yin, a materials engineering supervisor at Ford's Nanjing Research & Engineering Centre in China. "It's strong, flexible, totally renewable, and plentiful in China and many other parts of

The benefits of bamboo have been recognized for more than a

experimented with it when making the first light bulb, Moran

In building, its tensile strength (or how much it can resist being pulled apart) is well-known, as it can rival or even better some types of metal. And, because it grows to full maturity in just two to five years - compared to up to decades for other trees - bamboo also regenerates easily.

Over the past several years, Ford has worked with suppliers

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31201 Chicago Road South Warren, Michigan 48093 586-939-6800

Contact us:

Info@DetroitAutoScene.com

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VW Will Put More EVs into China's Marketplace

SHANGHAI (AP) – Volkswagen, Europe's biggest automaker, plans to launch its first pureelectric car in China next year as Beijing steps up pressure on the industry to promote alternatives to gasoline.

The announcement last week comes on the eve of the Shanghai auto show, which showcases industry efforts to create electric models with consumer appeal. General Motors Co.'s Buick unit and Ford Motor Co. also have announced new electric vehicles for China this year.

The VW model will be the first in a range of electric vehicles in China, said Jochem Heizmann, head of VW's China unit. It is due to be produced under a new brand name with a local partner, state-owned Jianghuai Automotive Corp. This will be a new cooperation on pure battery cars. The challenging target is to come, already next year in 2018, to the market with the first car.

China has the world's most aggressive electric car goals. Communist leaders are promoting them to clean up smog-choked cities and in hopes of taking the lead in an emerging technology.

Regulators have jolted the industry with a proposal to require electrics to account for at least 8 percent of each brand's production by next year.

At the auto show, the global industry's biggest marketing event of the year, almost every global and Chinese auto brand is showing at least one electric concept vehicle, if not a market-ready model. Heizmann said VW, which vies with GM for the title of China's top-selling automaker, expects annual sales of at least 400,000 "new energy vehicles" – China's term for electric or gasoline-electric hybrids – by 2020.

Recycled Takata Air Bag Cuts Throat of Used Car Driver

by TOM KRISHER and KEN RITTER Associated Press

LAS VEGAS (AP) – A Nevada crash that nearly killed a young woman has exposed a hole in the government's efforts to get dangerous Takata air bag inflators off the road: There's nothing that prevents the devices from being taken from wrecked cars and reused.

Karina Dorado's trachea was punctured by shrapnel from an inflator in an otherwise minor crash in Las Vegas on March 3. She was rushed to a trauma center, where surgeons removed pieces that damaged her vocal cords. She is still being treated for neck injuries.

Dorado, 18, is among nearly 200 people injured or killed by the inflators, which can explode when the chemical propellant inside deteriorates. What's different about her case is how the inflator wound up in her 2002 Honda Accord in the first place.

Dorado's father, Jose, bought the car for her in March of last year so she could get to and from her job at a customer service call center, attorneys for the family said last week. The family did not know the car's history, including that it had been wrecked in Phoenix and declared a total loss by an insurance company in 2015, the attorneys said.

According to AutoCheck, a service that tracks vehicle histories, the car was given a salvage title, repaired and resold in Las Vegas last spring.

Engineers from Honda inspected Dorado's car after the crash and traced the serial number from the blown-apart inflator to a 2001 Accord, which had been covered by a recall but never had the inflator replaced.

Honda spokesman Chris Martin said the air bag in the 2001 Accord must have been removed by a salvage yard, or perhaps stolen. Somehow, it ended up at the shop that repaired the car eventually bought by the Dorados.

It's perfectly legal under federal law for air bag assemblies or other parts subject to recall to be pulled out of wrecked cars and sold by junkyards to repair shops that may not even know the danger.

No government agency monitors the transactions. In addition, no states appear to have laws against the reuse of recalled parts.

"What there should be is a program that prevents old air bags from being recycled," said

Michael Brooks, acting director of the nonprofit Center for Auto Safety.

Carfax, another auto history tracking service, said it is unknown just how many cars are sold each year with salvage titles, but they number in the thousands.

At least 16 people have been killed by Takata inflators world-wide and more than 180 injured. The problem touched off the biggest automotive recall in U.S. history, with 69 million inflators recalled.

About 100 million have been recalled globally. Takata has been fined and faces lawsuits, and it could be driven into bankruptcy.

Kent Emison, an attorney for the Dorado family, said that given the huge size of the Takata recall, millions of inflators are probably still in use and unaccounted for by authorities.

"People are not going to know until it's too late that they have a defective Takata air bag," he said.

The inflator that nearly killed Dorado was among the most dangerous made by Takata. In testing, inflators taken from older Hondas had a 50 percent chance of blowing apart, prompting the automaker and the National Highway Traffic Safety Administration to issue desperate pleas for people to get them replaced.

Unlike most other air bag makers, Takata used the chemical ammonium nitrate to create a small explosion to inflate the bags in a crash. But the chemical deteriorates over time when exposed to heat and humidity, causing it to burn too fast and blow apart a metal canister.

Attorneys for the Dorado family said they are trying to find out where Jose Dorado bought the Accord.

"It's a tragedy that shouldn't

have happened," said Billie-Marie Morrison, another family attor-

Morrison said she doesn't know if the elder Dorado checked the Accord's vehicle identification number in a government database of recalled vehicles to see if it had any unfixed recalls.

Had he checked, he would have been given a false sense of security: The NHTSA website says the car has zero outstanding recalls. Honda said that before the Phoenix wreck, the previous owners had the air bag inflator replaced twice under recalls.

The federal government has no authority over used car sales and cannot stop air bags from being resold, a NHTSA spokeswoman said.



GM to Invest \$14M for Driverless R&D

CONTINUED FROM PAGE 1

program as a start-up is giving us the speed we need to continue to stay at the forefront of development of these technologies and the market applications."

Cruise Automation and GM engineers are currently testing more than 50 Chevrolet Bolt EVs with self-driving technology on public roads in San Francisco, Scottsdale (Ariz.) and metro Detroit, Kelly said.

The new investment will include repurposing an existing facility in San Francisco that will more than double Cruise

Automation's research and development space. The Cruise Automation team plans to move into the new space by the end of the year and hire more than 1,100 new employees over the course of the next five years.

The company is excited to expand its footprint in California and continue on its rapid growth trajectory, said Kyle Vogt, CEO of Cruise Automation. As autonomous car technology matures, the company's talent needs will continue to increase. Accessing the world-class talent pool in the San Francisco Bay Area is a plus for the company, said Vogt.



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APRIL 24, 2017 "FIRST IN THE HEART OF DETROIT SINCE 1933"

GM Inventor's Rear Mirror Helps Keep GM in Forefront

by Jim Stickford

All great ideas have to get their start somewhere.

In the case of GM's Rear Camera Mirror (RCM), if one looks at it from a certain point of view, the idea can actually be traced back to 2007 when GM won the military's Urban Challenge contest, in which several different companies competed to create the best autonomous driving system for an urban environment.

One of the people who worked on GM's system is Wende Zhang. He currently works as a lead inventor in GM's Automated Driving & Active Safety Vehicle Engineering Center in the Warren Tech Center.

Back in 2007, Zhang was a senior researcher in GM's R&D Research Center in Warren. It was one of their jobs to create an autonomous driving system for the military's contest. He came to GM from Carnegie Mellon University in Pittsburgh where he earned his doctorate in electrical and computer engineering.

In 2007, winning such a prestigious award was a real boost in the confidence of GM staff. But Zhang said that as he progressed through GM, moving from R&D to advanced engineering and finally to autonomous driving, he also

that could be brought to market in a more timely fashion. In 2007. autonomous driving was still a project on the horizon.

Zhang's moving from R&D to engineering also represents a larger trend at GM - moving away from esoteric research for the sake of research to coming up with practical ideas that will vield definite economic benefits.

It was this philosophy that enabled to Zhang and his colleagues to win a 2016 GM Boss Kettering Award for their Dynamic Guideline Overlay project and another one for their Front Curb View Feature proposal.

A Boss Kettering award does more than look good on a mantlepiece. It enables GM personnel to go forward and make their proposals a reality, Zhang said. Winners have successfully pitched their ideas to management and a win means that management believes in the concept and will transfer resources - money, staff, labs and such - to make that concept a reality.

If for some reason, people working on a project can't make the project work, they move on to something else. It's a quick process that is designed to produce results.

Zhang said that developing

Mirror meant working with a variety of people in different departments. He had to work with engineers, designers, programmers, people who work on vehicle-human interface. They all had to come together to make the technology work.

Zhang said it wasn't easy placing a small camera by the rear license plate that shows in real time a 300-degree view of what's behind a vehicle. This image then has to be transmitted to a view screen the size of a standard rear view mirror that is located where the rear view mirror is traditionally placed.

This display has to be easy to see and it can't weigh too much. Zhang said the team was able to do all that and - as an industry first - have the images transmitted at a rate of 60 frames per second. A traditional movie is played at 24 frames per second and other cameras used in cars these days broadcast at a rate of 30 frames per second.

Zhang said the team was able to rework the problem to achieve the 60-frame rate display. They didn't have to do that, but they weren't satisfied with the 30frame rate speed.

But the result of all the hard work by a variety of different



Zhang with rear camera mirror (video display unit) and mini-camera.

people in different departments has been that GM is first OEM to have such technology available. The Rear Camera Mirror has already been placed in the Cadillac CT6, the Cadillac XT5 and the Chevy Bolt EV.

The technology is just tech for tech's sake. It offers drivers a superior view of what's behind them. A standard rear view mirror might give a view of 40 degrees behind a car. Its view can be blocked if there are people or packages in the back seat.

But the camera cuts that out and drivers no longer have a view that can be obstructed by people or items in the back seat.

"I recently moved," Zhang said. "Having this tech really came in handy when transporting stuff."

And should the tech fail, the view screen reverts into a regular rear view mirror.

Soon this tech will be used in other GM vehicles, said GM spokesman Alan Adler. By the year 2020, the RCM feature should be sold in many more ve-

"I got the idea for this back in my R&D days," Zhang said. "I thought about its practical applications. I enjoy writing papers, but I got excited about coming up with an idea that helps people in a practical way in real life.'

Zhang said OEMs can't sit on their tech because the competition is so strong cutting-edge tech can become yesterday's news fast. They are already working on a new RCM iteration.

Fiat Chrysler Reports on Critical Topics

Fiat Chrysler released its 2016 of 84 miles per gallon equivalent Sustainability Report at the Annual General Meeting of Shareholders on April 14.

The FCA 2016 Sustainability Report communicates to stakeholders the most relevant social, economic and environmental topics addressed by the group, and progress toward achieving long-term targets, said Fiat spokeswoman Mary Chrysler Gauthier.

The report indicates that Fiat Chrysler's global activities support the transition toward a circular economy and contribute to achieving the aims of the United Nations Sustainable Development Goals (SDGs) initiative, which is intended to address the global challenge of a collective journey to sustainable develop-

Notable Fiat Chrysler achievements include:

• Began production of the industry's first electrified minivan, the Chrysler Pacifica Hybrid, achieving a fuel economy rating

- Announced a collaboration with Google (now Waymo), to in-Waymo's self-driving tegrate technology into a fleet of Pacifica Hybrid minivans.
- · Launched the initial version of a new global family of small gasoline engines, the fuel-efficient Firefly.
- Reconfirmed European leadership on natural gas, with more than 720,000 natural gas-powered cars and commercial vehicles sold since 1997.
- Licensed more than 329,000 Flexfuel and TetraFuel vehicles in
- Invested approximately 4.2 billion euros in Research and Development activities.
- Created the Chrysler Portal Concept vehicle, a forward-thinking interpretation of a next generation of family transportation, focused toward the millennial gen-
- Reduced CO2 emissions in the company's plants by 25 per-

cent, water used by 36 percent, and waste generated by 22 percent per vehicle produced in the past 6 years.

- · Decreased work-related injuries at plants worldwide for the 10th consecutive year.
- Collected more than 2.6 million suggestions from employees on potential improvements to products and processes.
- Committed about 24 million euros to local communities around the world, with employees volunteering approximately 200,000 hours to nonprofit activities during work time.

Those interested in Learning more about Fiat Chrysler's sustainability journey should go to http://reports2016.fcagroup.com /sustainability/2016/, Gauthier

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Alfa Romeo Giulia's Design A Winner, Says Ward's Auto

CONTINUED FROM PAGE 1

that transmits the chassis' direct-steering feel and neatly groups the vehicle controls and the engine start button, Alexanian said.

Behind the steering wheel, the Giulia features a full-color 7-inch thin-film transistor (TFT) instrument cluster straddled by two large white-on-black face analog gauges

At the center of the interior, the brand's new widescreen Information and Entertainment system is available in 6.5 inches or 8.8 inches and offers an intuitive, sophisticated series of the instrument panel, Alexanian said.

Below, in the center console, the rotary controller is ergonomically located and features a simple operation of the entertainment system.

Last, the Alfa DNA selector is adjacent to the automatic shifter. enabling the driver to easily adjust the Alfa Romeo Giulia's driving behavior.

In addition to the list of standard features in the new Giulia, Alexanian said Giulia Ti adds more luxury and convenience offerings, including:

- Standard 18-inch wheels.
- Genuine wood interior accents,
- Front park sensors,
- 8.8-inch widescreen infotainment display,
- · Heated steering wheel, and

Heated front seats.

Available Sport, Lusso and Performance packages further add to the performance and style of Giulia Ti.

The Giulia Ti also offers driv-

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ing a unique collection of availfeatures that further accentuate Alfa Romeo characteristics:

- Ti Sport adds unique front and rear sport fascias, 19-inch dark 5-hole aluminum wheels, gloss black window trim surround, colored brake calipers, 12-way front power sport leather seats, including 4-way lumbar and power side bolsters, along with manual thigh extenders, sport leather steering wheel, aluminum column-mounted paddle shifters, aluminum sport pedals and footrest, and available aluminum trim interior accents.
- Ti Lusso includes Luxury features all elegantly "hidden" in Pieno Fiore Italian leather seats with cannelloni inserts, 12-way power front seats including 4way lumbar, leather-wrapped dash and upper door trim with accent stitching, genuine wood trim in dark grey oak or light walnut, luxury steering wheel and
 - Ti Performance Package adds an adaptive performance suspension, mechanical limited slip differential and aluminum column-mounted paddle shif-

With its muscular proportions and a "pure" design ethos of passion, lightness and simplistic elegance "clothing" its class-leading technical layout with near perfect 50/50 weight balance.

Inside the cabin, a variety of interior combinations are available across the Alfa Romeo Giulia model lineup.

Five different seat styles, including luxury and sport seats, plus five different interior accents, which include genuine Dark Gray Oak, Light Walnut and brushed aluminum, can also be



Manley unveiled the 2018 Grand Cherokee Trackhawk at the New York City auto show.

Jeep Unleashes Its Most Powerful SUV

Raw horsepower isn't just for new 707-horsepower Track- tons – developed using advanced muscle cars these days. At least that seems to be Fiat Chrysler's point of view. The company just unveiled the 2018 Jeep Grand Cherokee Trackhawk, an SUV with 707 horsepower.

This horsepower is courtesy of a supercharged 6.2-liter V8 engine, said Fiat Chrysler spokesman Dan Reid.

The new benchmark 707horsepower supercharged engine, Reid said, combines with an upgraded high-torque capacity TorqueFlite eight-speed automatic transmission, world-class onroad driving dynamics and new Brembo brakes to deliver a new level of performance: 0-60 miles per hour (mph) in 3.5 seconds, quarter-mile in 11.6 seconds at 116 mph, top speed of 180 mph, 60-0 mph braking distance in 114 feet and .88 g capability on the skid pad.

"Long recognized as the fullsize SUV capability leader, Jeep Grand Cherokee is now the most hawk," said Mike Manley, head of Jeep Brand - FCA Global.

The new Grand Cherokee Trackhawk delivers astounding performance numbers, backed by renowned SRT engineering that combines world-class onroad driving dynamics with luxury, refinement and an array of innovative advanced technology."

Built in Detroit at the Jefferson North Assembly Plant, the 2018 Grand Cherokee Trackhawk will arrive in Jeep showrooms in the fourth quarter of 2017.

The key to powering the 2018 Jeep Grand Cherokee Trackhawk is a supercharged 6.2-liter V-8 engine delivering 707 horsepower and 645 lb.-ft. of torque, Manley

breakthrough supercharged engine is designed and manufactured using only the strongest and most durable materials, Manley said, adding that its cast iron block features water jackets between the cylinders for optimal cooling.

A forged-steel crankshaft with induction-hardened bearing surfaces is so strong it can withstand firing pressures of nearly 1,600 psi (110 bar) - the equivalent of five family sedans standing on each piston, every two revolutions, he said. The unique, tuned specially crankshaft damper has been burst-tested to

High-strength, forged-alloy pis-

telemetry measurement - are coupled to powder-forged connecting rods with high-loadcapacity bushings and diamondlike, carbon-coated piston pins, Manley said.

Premium grade, heat-treated aluminum-alloy cylinder heads are optimized for superior thermal conductivity, he said. Sodium-cooled exhaust valves feature hollow-stem construction and special steel-alloy heads that stand up to temperatures as high as 1,652 degrees Fahrenheit (900 degrees Celsius).

The 2,380cc per revolution supercharger includes integral charge-air coolers and an integrated electronic bypass valve to regulate boost pressure to a maximum of 11.6 psi (80 kPa). The twin-screw rotors are specially coated with:

- · A proprietary formula of
- polyimide and other resins; Nanometer-sized, wear-resistant particles;
- Solid lubricants, such as PTFE (Teflon).

The coating enables tighter clearance between the rotors, Manley said, reducing internal air leakage, delivering improved compressor performance and higher efficiencies.

The coating, he said, can withstand the temperatures generated by compression, and provides superior corrosion resistance.



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Johnson Wins In Mopar Nitro At Vegas Track

The NHRA Mello Yello Drag Racing Series made its first of two 2017 trips to The Strip at Las Vegas Motor Speedway April 2, and the event ended the same way the season's first three races have: with a Mopar Hemipowered Nitro machine in the winner's circle.

Tommy Johnson Jr. drove his Make-A-Wish Dodge Charger R/T from the No. 6 qualifying position to victory in the 18th annual NHRA Nationals, defeating Swedish driver Jonnie Lindberg from the right lane on a pass of 3.933 seconds at 323.66 mph with a .059-second reaction time. Lindberg turned in a lap of 4.016 at 302.14 with a .071.

The victory is the 14th Funny Car win for Johnson (who has also had two Top Fuel victories) and the third for the Mopar Funny Cars from the Don Schumacher Racing (DSR) stable this season. Johnson, a native of Ottumwa, Iowa, previously won in Las Vegas in 2001.

Not only did Mopar take home the Funny Car victory this weekend, Dodge and Plymouth vehicles also made headlines in the Sportsman classes, with Mike Loge collecting the Super Stock event win in his SS/LA '72 Plymouth Barracuda.

Funny Car driver Johnson was not qualified after Friday's first two sessions, but after Saturday found himself in the sixth spot. He began his Sunday march to the class win by beating Dodge driver Jim Campbell in the first round before besting Robert Hight in the second after a Hight red light. Johnson next knocked out 16-time Funny Car champion John Force to reach the final against Lindberg.

Johnson's teammate and current Funny Car points leader, Matt Hagan, drove his Mopar Express Lane Dodge Charger R/T to the second round of competition in Las Vegas. He knocked out Del Worsham in the first round, then found himself matched up against another champion in the form of John Force in round two. Hagan's car dropped a cylinder, allowing Force to claim the round win.

Jack Beckman also took his Infinite Hero Dodge Charger R/T Funny Car to the second round after Cruz Pedregon redlighted in the first. Beckman then dropped a cylinder to be bested by upstart Lindberg in round

Oakland County Names Hardy as **Security Manager**

Oakland County Executive L. Brooks Patterson has appointed Thomas G. Hardesty as manager of the county's Homeland Security Division, a position he began on April 17.

Hardesty will be responsible for ensuring the county's preparedness for natural or manmade hazards, said Oakland County spokesman Bill Mullan.

back-"Thom's extensive ground in law enforcement will be an asset to our Homeland Security Division," Patterson

"I have confidence in his 30 years of experience, education, and training.'

Hardesty, who retired in 2014 as deputy director of the Auburn Hills Emergency Services Police Division, has served as the administrator for the Oakland County Medical Examiner since October of 2015.

Mullan said that Hardesty is looking forward to his new responsibilities as he transitions into the county's emergency manager position.





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Venezuela Seizes GM Assets In 'Illegal' Government Move

VALENCIA, Venezuela (AP) -General Motors announced April 20 that it is shuttering operations in Venezuela after authorities seized its only factory, a dramatic escalation of the chaos engulfing the South American nation amid days of deadly protests.

The plant in the central city of Valencia was confiscated on April 19 as anti-government protesters clashed with pro-government groups in a country battered by economic troubles including food shortages and triple-digit inflation. GM called the move an illegal judicial seizure of its assets.

The Detroit automaker said in a statement April 20 that other assets such as vehicles were taken from the plant, causing irreparable damage to the company. GM has about 2,700 workers in the country, where it's been the market leader for over 35 years. It also has 79 dealers that employ 3,900 people and its parts suppliers make up more than half of Venezuela's auto parts market, the company said.

General Motors' announcement comes as Venezuela's opposition looks to keep up pressure on President Nicolas Maduro, taking to the streets again April 20 after three people were killed and hundreds arrested in the biggest anti-government demonstrations in years.

It's not the first time the Venezuelan government has seized a foreign corporation's facilities. In July of last year, the government said it would take a factory belonging to Kimberly-Clark Corp. after the American personal care giant said it was no longer possible to manufacture due to a lack of materials.

But, the move against GM, the

United States' biggest automaker and one of its most recognizable brands, was a much more powerful statement and could lead to a further erosion of relations between the two countries. There was no immediate reaction from Washington.

The seizure came as tens of thousands of protesters demanded elections and denounced what they consider to be an increasingly dictatorial government.

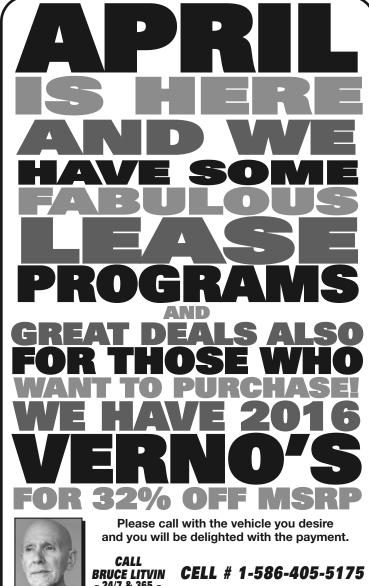
Across the country, the clashes have been intense. Pro-government militias, some of whose members were armed, were blamed for two deaths, including that of a teenager in Caracas who was heading to a soccer game with friends. Overnight, a National Guard sergeant was killed and a colonel injured when their squad was attacked with gunfire while trying to control disturbances in a city near Caracas, the chief prosecutor's office said.

The three killings bring to eight the death toll since protests began three weeks ago over the Supreme Court's decision to strip the opposition-controlled congress of its last remaining powers, a move that was later reversed amid a storm of international criticism.

"If today we were millions, tomorrow even more of us need to come out," said opposition governor and two-time presidential candidate Henrique Capriles, who last week was barred from running for office for 15 years.

The Supreme Court's decision has energized Venezuela's fractious opposition, which had been struggling to channel growing disgust with Maduro over food shortages, triple-digit inflation and rampant crime.





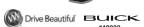


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Driverless Cars, Says Study, **Takes Back Seat with Some**

CONTINUED FROM PAGE 1

Pre-Boomers (born before 1946) say they "definitely would not" trust automated technology. However, similar to J.D. Power's 2016 study, consumers this year show great interest in collision protection and driving assistance technology.

Kolodge said six of the top 10 features that consumers were interested in before learning price points - smart headlights, camera rear-view mirrors, emergency braking and steering systems, lane change assist, camera sideview mirror and advanced windshield display - come from these categories.

"Along with collision mitigation, there are many benefits to autonomous vehicles, including allowing those who are unable to drive in today's vehicles to experience freedom of mobility," Kolodge said.

"Interestingly, though, 40 percent of Boomers do not see any benefits to self-driving vehicles. Automated driving is a new and complex concept for many consumers. They'll have to experience it firsthand to fully understand it

"As features like adaptive cruise control, automatic braking and blind-spot warning systems become mainstream, car buyers will gain more confidence in taking their hands off the steering wheel and allowing their vehicles to step in to prevent human er-

Additional findings of the 2017 study include:

- Generation gap for vehiclecontrolled functions: Younger consumers are far more comfortable with technologies that assume control of vehicle operating functions. Examples include allowing mobile devices to take control of infotainment systems; an in-vehicle artificial intelligence (AI)-based assistant: and autonomous driving and parking technologies.
- Not a matter of price: Gen Y/Gen Z purchase intent is greater than Boomers, who say they definitely/probably are interested in a feature even before they know the price.
- ullet I'm going mobile: Gen Z has the highest interest in all alter-native mobility types, including 50 percent indicating they are definitely/probably interested in mobility sharing/co-ownership; 52 percent for journey-based ownership; 56 percent for un-

manned mobility; and 56 percent for mobility-on-demand.

 Consumer interest in emergency braking and steering system technology: Upcoming agreements between automakers and the government will require vehicles to have emergency braking a foundation technology for autonomous driving – as a standard feature within five years. The 31 percent of consumers willing to pay \$700 for the advanced version of this system (adds steering) is greater than the percentage of consumers who would pay for less expensive technologies like digital key at \$250; dash camera at \$300; and mobile system control at \$400.

> "It is critical for **OEMs** to communicate in a way that builds trust with consumers."

- Kristin Kolodge, J.D. Power

- Lukewarm on convenience: Consumers aren't as enthusiastic about niche convenience technologies. Collision protection and driving assistance-related technologies comprise most of the technologies with the highest pre-price interest, while features in the entertainment and connectivity, and comfort and convenience categories show the lowest pre-price interest.
- Notable convenience exception: Gen Z consumers have a fairly high interest in digital key technology, which eliminates the need for a physical key or key fob and is replaced by a smartphone or smartwatch. A total of 40 percent said they would like digital key tech on their next vehicle, and 58 percent are willing to pay \$250 for it, compared with 28 percent among all consumers.

"It is critical for OEMs to communicate in a way that builds trust with consumers," Kolodge said, "until people experience this technology firsthand. They have to get the heads and the hearts of consumers together. The way to do that is by starting with lower levels of automation and building from there."

Ford Tests Bamboo for Future

CONTINUED FROM PAGE 1

to evaluate the viability of using bamboo in vehicle interiors and to make extra-strong parts by combining it with plastic.

The team has found that bamboo performs comprehensively better than other tested synthetic and natural fibers in a range of materials tests, from tensile strength tests to impact strength tests. It's also been heated to more than 212 degrees Fahrenheit to ensure it can maintain its integrity.

While tests on bamboo continue, Ford is already making use of sustainable and recycled materials. The company has said it is working with Jose Cuervo to explore using the tequila producer's agave plant byproduct to develop more sustainable bioplastics to employ in Ford vehicles.

Ford uses several sustainable

materials, including:

• Kenaf, a tropical plant in the cotton family – used in the door bolsters of Ford Escape.

 REPREVE fabric, made from recycled plastic bottles, diverts more than 5 million plastic bot-

tles from landfill annually. Ford recently introduced REPREVE in the F-150.

- Post-consumer cotton from denim and T-shirts, used as interior padding and sound insulation in most Ford vehicles.
- EcoLon post-consumer nylon carpeting is used as cylinder head covers in Ford Escape, Fusion, Mustang and F-150.
- Recycled plastic bottles are becoming floor carpeting, wheel liners and shields in several vehicles, including Ford Transit and C-MAX.
- Recycled tires are used in seals and gaskets.
- · Rice hulls are used to reinforce plastic in Ford F-150 electrical harness.

• Soy-based foams are used as

- seat cushions, seatbacks and head restraints in Ford's North American vehicle lineup.
- Wheat straw is used in Ford Flex to reinforce storage bins.
- Cellulose tree fibers are used in the armrest of Lincoln MKX. Used to replace glass-filled plastic, this material weighs 10 percent less and reduces carbon emissions.

Autopalooza Sets Its 2017 Summer Activity Schedule

The Detroit Metro Convention & Visitors Bureau (DMCVB) and the MotorCities National Heritage Area (MCNHA) announced the Autopalooza lineup April 12, during a press conference at Cobo Center.

Autopalooza is a series of world-class automotive cruises, races and shows throughout metro Detroit that celebrate southeast Michigan's automotive heritage.

Autopalooza Executive Director Shawn Pomaville said the 2017 season will kick off with a four-day festival of ideas and innovation – Make the Future Detroit – April 27-30 at Cobo Center.

The Shell-Eco Marathon will return to Cobo Center as a featured element of the celebration, Pomaville said. Students from North and South America will drive their low-slung, futuristic vehicles on the city streets of Detroit near Cobo Center to achieve one goal: to drive the farthest distance, using the least amount of energy.

"Shell is proud to, once again, join Autopalooza's storied lineup to showcase automotive ingenuity and heritage along with initiatives like Shell-Eco Marathon that challenge students to test their own inventions," said Pam Rosen, general manager for Shell-Eco marathon Americas. "It is this type of innovation that got its own start here, in Detroit, and these young inventors will lead us all into a brighter energy future in collaboration with global and local partners, communities, governments and academia."

"Shell-Eco Marathon has equipped me with the skills to succeed," said Ishi Keenum, senior at University of Michigan Ann Arbor. "I have learned the importance of teamwork, project management, discipline and budget-

ing, which has set me on the path of future success in the work-place."

The Autopalooza season continues with the return of the Chevrolet Detroit Grand Prix presented by Lear, at the 2.3-mile Raceway at Belle Isle Park, June 2-4. The weekend event will feature the cars of the Verizon Indy-Car Series, the IMSA WeatherTech SportsCar Championship, the Trans Am Series presented by Pirelli and the trucks of the SPEED Energy Stadium SUPER Trucks.

"Autopalooza is such a unique collection of events that helps celebrate who we are in the Motor City," said Bud Denker, chairman of the Chevrolet Detroit Grand Prix presented by Lear. We are once again proud to be part of Autopalooza in 2017 as the attention of the automotive and racing world focuses on Belle Isle Park the first weekend of June at the Chevrolet Detroit Grand Prix presented by Lear. This event builds on our racing heritage and also provides a great opportunity to showcase the automotive technology and innovation here in Detroit.

Autopalooza also has a significant economic impact on the metro Detroit region, Pomaville said. The DMCVB calculated that the annual revenue generated from the Grand Prix, Concours d'Elegance and the Woodward Dream Cruise alone may exceed \$110 million.

The Autopalooza events also represent the rich cultural influence of southeast Michigan's automotive heritage, Pomaville said.

"Through our affiliation with the National Park Service, we inspire residents and visitors with an appreciation of how the automobile changed Michigan, the nation and the world, making our



GM Design head Mike Simcoe with his 2017 ZO6 Corvette.

unique heritage a source of pride as well as a positive influence on the future," said Pomaville. "These cars and events create a significant amount of tourism commerce with the associated economic impact while paying tribute to the automotive culture."

Other Autopalooza events include:

- Eastpointe Gratiot Cruise, June 17 in Macomb County;
- Motor Muster, June 17-18 in Dearborn;
- EyesOn Design, June 18 in Grosse Pointe Shores;Cruisin' Downriver, June 24
- in southern Wayne County;
- Sloan Museum Auto Fair, June 24-25 in Flint;

- All American Cruise, July 15 in Westland;
- Car Capitol Auto Show, July 29 in Lansing;
- Concours d'Elegance of America, July 28-30 in Plymouth;
- Clinton Township Gratiot
 Cruise, Aug. 6 in Macomb County;
- Back to the Bricks Weekend, Aug. 15-19 in Flint; • Woodward Dream Cruise
- Woodward Dream Cruise, Aug. 19 in Oakland County;
- Cruisin' Hines, Aug. 27 in Westland;
- Old Car Festival, Sept. 9-10 in Dearborn;
 Orphan Car Show Sept. 17 in
- Orphan Car Show, Sept. 17 in Ypsilanti

For information on all of the 2017 Autopalooza events, visit autopalooza.org.

Subaru Orders Recall of 33,000 Cars

DETROIT (AP) – Subaru is recalling more than 33,000 compact cars in the U.S. because a fuel problem can make the engines stall without warning.

The recall covers Impreza cars from the 2017 model year.

Subaru says in documents filed with the government that a winter blend of fuel can turn to

vapor in the fuel line, causing the engine to run rough and stall. Drivers may not be able to immediately restart the cars, increasing the risk of a crash.

The company began investigating in January after getting several reports of stalling. No crashes or injuries have been reported.

Testing Hybrid Batteries Can Be A Really Hot Job

IDAHO FALLS, Idaho (AP) – A nuclear research facility in eastern Idaho has added equipment that will allow it to test next-generation batteries for electric and hybrid vehicles.

The Idaho National Laboratory now has a pair of fireproof chemical storage units, which enable researchers to test fast-charging lithium-ion batteries in extreme temperature conditions, *The Idaho Falls Post Register* reported on April 17.

Today's fastest 480-volt electric car battery chargers take about 30 minutes to charge, said Kev Adjemian, director of the lab's Clean Energy and Transportation Division. OEMs have been working to design batteries that can complete a charge in less than 10 minutes.

Batteries capable of the faster charge speeds are more fireprone, which is why the laboratory's new equipment is necessary for testing. The fireproof units are usually used in industries such as waste management and food manufacturing and can withstand fire for four hours.

"They give (the U.S. Department of Energy) a location to do these types of tests without burning a lab or a whole building down," Adjemian said. "We're trying to test these extreme conditions in a safe environment."

The lab tests experimental batteries from other Department of Energy facilities and the United States Council for Automotive Research, which includes Ford, General Motors and Fiat Chrysler Automobiles.

Once the batteries are tested, the researchers will work with industry or lab partners on any issues that come up during testing.

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Ford Converting Open Mall Space into New Offices

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For more than 40 years, Fairlane Town Center Mall has served as a major retail hub in Dearborn. It is one of the state's largest malls - at one time housing more than 220 retailers including five major department stores, restaurants, even an ice rink. Only three major department stores now remain, and Fairlane's biggest tenant is a global automaker, said Ford spokeswoman Monique Brentley.

Ford Motor Company has converted 240,000 square feet of unused mall space, formerly occupied by as many as 26 retailers, into its new Town Center Office. Brentley said. The redesign creates a modern office space focused on wellness, collaboration and sustainability for 1,800 Ford engineering and purchasing employees.

As technology redefines how consumers shop, malls are reinventing themselves to offer not just retail and dining experiences, but community gathering areas, entertainment venues and office centers.

Rita Nelson, Fairlane Town Center general manager, said that in addition to retail, dining, entertainment and mixed-use opportunities, malls offer campus and office space solutions for nontraditional tenants.

"Retail has shifted so much

over the years and Fairlane is no different," said Nelson. "We have more than 125 stores and restaurants, but like much of the industry, we have expanded to include other opportunities.'

Ford's Town Center Office is helping to house larger operations to support the company's 10-year Dearborn campus transformation, which will co-locate 30,000 employees from 70 buildings into primarily two campus locations, Brentley said.

"As we began the 10-year process of constructing new technology labs and offices, we needed an innovative solution to situate larger teams close to our operations," said Dave Dubensky, chairman and CEO, Ford Land.

"The proximity and design of Fairlane Mall, along with its onsite amenities support our transformation in offering multiple conveniences for our employees. It is a win-win for us and the community."

The new office complex is designed to promote more team collaboration and to keep employees physically energized, mentally stimulated, engaged and refreshed, Dubensky said. Ample lounge space and cafés encourage movement, offering flexibility in terms of where employees choose to work each day. Wellness rooms, as well as reflection rooms for prayer and meditation encourage employees



Ford has converted an unused portion of a shopping mall into a new workspace.

to take breaks to recharge. The space also features lactation rooms for nursing mothers.

Walk-up stations for working are included in the new footprint. Employees can access a treadmill desk and walk at a 2 mph pace while returning email, taking a call or working on other tasks.

Designed around movement, the space promotes wellness by helping people feel healthier, more energized and accomplished while burning a few calories in the process.

Personal work areas are more

open to encourage collaboration, Dubensky said. Ergonomically designed workstations feature adjustable-height desks that offer a custom fit, along with the ability for employees to change posture throughout the day to promote energy and stimulation.

Materials have been carefully selected to foster employee wellness and sustainability. The new visitor lobby features an accent wall of reclaimed wood, while carpet made from recycled content is fully recyclable at the end of its lifecycle.

Zero volatile organic compound paint is used throughout the space.

"I was both hesitant and excited about the move," said Natalie Pohlman, a Ford College Graduate and supplier technical assistance site engineer who recently relocated to Ford's new Town Center Office.

"Since moving in, I've met a lot of new people. Having the team in one place, along with access to all of the collaboration space has made it easier to work to-

Mopar Celebrates Opening of First of Two Planned Sites

Mopar's latest facility is open for business.

Fiat Chrysler celebrated the official opening of a new Mopar Parts Distribution Center (PDC) in Winchester, Va., on April 18.

The 400,000-plus square-foot facility represents a \$12.2 million investment by Fiat Chrysler and more than 70 jobs over two shifts, said Mopar spokesman Darren Jacobs. It is also the first of two new Mopar PDCs scheduled to open in the U.S. this year.

Fiat Chrysler and UAW leadership were joined by federal and state government dignitaries and dealership representatives in marking the Winchester PDC grand opening, Jacobs said. Ceremony attendees included Pietro Gorlier, head of Parts and Service (Mopar), FCA - Global; Norwood Jewell, UAW vice president and director of the Chrysler Department; Mark Bosanac, director -NAFTA Supply Chain Management and Global Parts Supply Chain Management and Operations; Kevin Farrish, president, Farrish Chrysler Dodge Jeep Ram; Urooj Mughal, representative for U.S. Senator Tim Kaine; Dave Stegmaier, director of Community Outreach for U.S. Representative Barbara Comstock; and Hayes Framme, Virginia deputy secretary of Commerce and Trade.

We are celebrating our 80th anniversary in 2017, and throughout the years customer satisfaction has been and continues to be the Mopar brand's No. 1 priority," said Gorlier.

This new Parts Distribution Center builds upon our mission, allowing us to more quickly and efficiently serve our dealers and customers, delivering the parts they need, when they need them. This is our 22nd PDC in North America and we'll continue to expand our distribution network as the parts and accessories business keeps growing."

"Today's opening adds more than 70 jobs to the Virginia economy and makes the Mopar brand's delivery of parts to dealers and consumers more efficient. FCA continues to grow, which is a constant reminder that the auto loans were a great investment," said Jewell.



Fiat Chrysler's newest Mopar facility located in Virginia is now open for business.

framed Record statement issued by Congresswoman Comstock was opening of the PDC, Jacobs said.

A special Mopar logo, featuring a commemorative plague and signed by all event attendees, was also presented to Winchester PDC employees and management during the opening ceremo-

The new facility will handle more than 50,000 total part numbers distributed to over 200 Fiat Chrysler dealerships, located primarily in the Mid-Atlantic region.

Fiat Chrysler invested \$12.2 million in equipment for the Winchester facility, Jacobs said.

In addition to the more than 70 jobs created, Fiat Chrysler is also utilizing local resources for assistance in areas such as janitorial services, facilities management and exterior building mainte-

The Winchester operation expands the brand's current distribution network to 22 facilities in North America, with more than 50 PDCs (including joint ven-

Congressional tures) in operation worldwide, a \$10.4 million investment in a Jacobs said.

The Winchester PDC was presented in honor of the official launched under Fiat Chrysler That facility will encompass World Class Logistics methodology, which establishes a synchronized supply chain that progressively eliminates waste through the contribution of all employees and the rigorous use of methods and standards that promote an approach of continuous improvement.

The facility will be LEED (Leadership in Energy and Environmental Design) certified. LEED, administered by the United States Green Building Council, is a comprehensive system to define, measure and validate green buildings, Jacobs said. Certification in the national recognition program is based on strict standards in five key areas: site planning, water management, energy, material use and indoor environmental quality. As part of the LEED initiative, the PDC design incorporates more than 80 skylights, filtering in natural light to the workplace.

In addition to the Winchester PDC, FCA US has also announced

new Mopar PDC located in Romulus, Jacobs said.

500.000 square feet and more than 100 workers. Construction is currently in progress on the Metro Detroit facility, with a projected opening in 2017 fourth quarter.

Jacobs said that these are Winchester PDC key figure numbers to remember:

- Two shifts;
- 10 inbound tractor-trailers daily;
- 24 outbound tractor-trailers daily;
- 27 acres (facility footprint);
- 70+ employees;
- 83 skylights;
- 200+ dealers served; • 400,000 square-feet (PDC
- size); • 9.2 million+ pieces shipped annually;
- 50,000+ part numbers handled:
- \$12.2 million invested in designing and building the new Mopor facility;
- 2.6 million+ order lines shipped annually.

Volvo Joins Rush For EV Cars in Chinese Market

SHANGHAI (AP) - Volvo Cars, the Chinese-owned Swedish automaker, said April 19 it plans to make electric cars in China for sale worldwide starting in 2019 amid pressure by Beijing for global auto brands to help develop its fledgling industry in alternatives to gasoline.

The announcement at the Shanghai auto show is among a flurry of automakers' plans for electric models in China, their industry's biggest market. The ruling Communist Party has the world's most aggressive EV goals, both to clean up smogshrouded cities and seeking the lead in an emerging industry.

On April 18, General Motors Co. said it will produce a gasoline-electric hybrid version of its Chevrolet Volt in China. Ford, Volkswagen AG, Nissan Motor Co. and other brands also intend to sell electric models in China, adding to competition in a market that has been dominated by lower-cost Chinese producers.

Volvo said its first pure-electric model will be based on the economy-size CMA platform it shares with Chinese automaker Geely, which bought the Swedish brand from Ford in 2010. It said the name, size and other details were yet to be decided.

"It will be for global export. So it is built from the start to work all over the world," said Henrik Green, Volvo's senior vice president, research and development.

Volvo has three factories in China. In 2015, it became the first automaker to export Chinese-made cars to the U.S.

Chinese buyers have shown little enthusiasm for electric cars due to concern about cost, reliability and limited range. But Chinese authorities are using a mix of incentives and penalties to push for electric models. OEMs are scrambling to develop models with consumer appeal.

"It's clear that China wants to take a leading role globally in terms of the regulatory environment and electrification," said David Schoch, Ford's president for the Asia-Pacific.



OF THE MONTH **NOW THROUGH APRIL 28th**

FINAL WEEK to Get Spectacular Savings on Our Most Popular Models!

/B.1

Was \$30,120

Sale Price \$21,999

Was \$33,775

Sale Price \$28,219*

NO EMPLOYEE

DISCOUNT REQUIRED!

2017 BUICK ENCORE "PREFERRED"



- 1.4L TURBO DOHC ENGINE!
- PUSH BUTTON START!
 INTELLINK RADIO w/8" DIAGONAL COLOR TOUCH SCREEN!
- REMOTE KEYLESS ENTRYI
- REAR VISION CAMERAIBLUETOOTH FOR PHONE
- ONSTAR w/4G LTE w/BUILTIN WIFT HOTSPOTT STK# BG880

24 MONTH LEASE



MONTH

MONTH

\$999 DOWN NO SECURITY DEPOSIT REQUIRED

2017 BUICK ENCLAVE "CONVENIENCE"



- INTELLINK RADIO w/8" DIAGONAL COLOR TOUCH SCREEN!
- REMOTE START AND ENTRY
- 7 PASSENGER "CAPTAIN CHAIR" SEATING!
- TRI-ZONE CLIMATE CONTROLL
- POWER LIFTGATE! 19" ALUMINUM WHEELSI
- STK# BG1280

24 MONTH LEASE

Was \$39,990 Sale Price \$33,699*

Was \$25,685



\$999 DOWN NO SECURITY DEPOSIT REQUIRED

2017 BUICK REGAL "SPORT TOURING



- 2.0 TURBO DOHC 4 CYL SIDI ENGINEI
 INTELLINK RADIO w/8" DIAGONAL
- COLOR TOUCH SCREEN! REAR SPOILER!
- REMOTE KEYLESS ENTRY!
 18" ALUMINUM WHEELS!
- REAR VISION CAMERAL BLUETOOTH FOR PHONE!
- ONSTAR w/4G LTE w/BUILT-IN WIFI HOTSPOTI

24 MONTH LEASE

Was \$30,005 Sale Price \$23,999*



MONTH \$999 DOWN

NO SECURITY DEPOSIT REQUIRED

2017 BUICK ENVISION "PREFERRED"



- INTELLINK RADIO w/8" DIAGONAL COLOR TOUCH SCREEN!
 REMOTE KEYLESS ENTRY AND START!
- REAR VISION CAMERI
 18" ALUMINUM WHEELS!
- PUSH BUTTON STARTI
- BLUETOOTH FOR PHONE!
 ONSTAR w/4G LTE w/BUILTIN WI-FI HOTSPOTI STK# BG1041

24 MONTH LEASE

Was \$36,795 Sale Price \$26,999*



MONTH

NO SECURITY DEPOSIT REQUIRED

EXPERIENCE THE NEW BUICK

2017 GMC TERRAIN "SLE 2"

- 2.4L DOHC VVT ENGINE!
- DIAGONAL COLOR TOUCH SCREEN!
- REMOTE KEYLESS ENTRY!
- REAR VISION CAMERA!
- · ALUMINUM WHEELS! HEATED MIRRORS!
- BLUETOOTH FOR PHONE!
- DNSTAR w/4G LTE w/BUILT-IN STK# BG642

24 MONTH LEASE



MONTH

\$499 DOWN! NO SECURITY DEPOSIT REQUIRED

2017 "ALL NEW" GMC ACADIA "SLE 1"

The Best Price...

PERIOD!



- INTELLILINK RADIO W/7" DIAGONAL COLOR TOUCH SCREEN!
- KEYLESS OPEN AND START!

2.5L DOHC SIDI VVT ENGINE!

- REAR VISION CAMERA! • 7 PASSENGER SEATING
- · ALUMINUM WHEELS!
- BLUETOOTH FOR PHONE ONSTAR w/4G LTE w/BUILT-IN
- WI-FI HOTSPOT! STK# BG1419

24 MONTH LEASE



\$999 DOWN NO SECURITY DEPOSIT REQUIRED

2017 GMC SIERRA "SLE" DOUBLE CAB 4x4



- INTELLILINK RADIO W/7'
- DIAGONAL COLOR TOUCH SCREEN! REAR VISION CAMERA!
- POWER DRIVER'S SEAT!
- TRAILERING PACKAGE!
- REMOTE START AND ENTRY!
- ALUMINUM WHEELS! ONSTAR w/4G LTE w/BUILT-IN WI-FI HOTSPOT!
- STK# BG546

Sale Price \$34,343*



36 MONTH LEASE

MONTH \$999 DOWN NO SECURITY DEPOSIT REQUIRED

2017 GMC SIERRA DENALI 4x4 CREW CAB

st Price...

PERIOD!



- 5 31 V8 ECOTECS ENGINE
- 5.3L V8 EDOTECS ENGINE!
 INTELLILINK RADIO W/7"
 DIAGONAL COLOR TOUCH SCREEN!
 ENHANCED DRIVER ALERT PACKAGE!
 REMOTE START AND ENTRY!
 FULL-FEATURE LEATHER-APPOINTED HEATED BUCKET SEATS!
 6" RECTANGULAR CHROMED
 TUBULAR ASSIST STEPS!
 ADDILLAR ADDILLAR CHROMED
 TUBULAR ADDILLAR CHROMED

- 20" ULTRA BRIGHT MACHINED
- ALUMINUM WHEELS! ONSTAR w/4G LTE w/BUILT-IN WI-FI HOTSPOT! STK# BG1160

36 MONTH LEASE :907°

NO SECURITY DEPOSIT REQUIRED



MONTH \$999 DOWN



WE ARE PROFESSIONAL GRADE

We'll Give You \$2000 MINIMUM for Your Trade-In... GUARANTEED!*







Was S56.750

Sale Price \$48,269

SHOWROOM HOURS:

Monday Tuesday Wednesday Thursday

8:00 AM - 9:00 PM 8:00 AM - 6:00 PM 8:00 AM - 6:00 PM 8:00 AM - 9:00 PM 8:00 AM - 6:00 PM

(734) 946-8112

moranbuickgmc.com 14000 TELEGRAPH ROAD, TAYLOR

*Pictures may not represent actual sale vehicle. All applicable incentives including bonus cash, bonus tags, competitive lease, lease conquest and/or lease loyalty offers have been deducted from Sale Prices/Payments and are subject to change by the manufacturer without notice and are plus title, tax, plate, doc and CVR fees and were valid at time of printing. GM Employee discount is required except where noted. Leases are 10,000 miles per year. 2017 Envision is former courtesy transportation vehicle with under 2350 miles. Disposition fee may be required at lease turn in. \$2000 minimum trade-in guarantee is for 2006 or newer vehicles in drivable condition. No branded titles. Certain restrictions apply, see dealer for complete details on all incentives/offers. Sale ends 4/28/2017 @ 6:00PM.



NOW THROUGH APRIL 28th

FINAL WEEK to Get Great Deals on EVERY Car, Truck & SUV In Stock!

2017 TRAX "LS"



- ECOTEC 1.4L "Turbo" DOHC VVT Engine!
- OnStar w/4G LTE w/built-in Wi-Fi Hotspot!
- 7" Color Touch Screen Radio w/Bluetooth! Remote Keyless Entry!
- Bluetooth for Phone!
- Rear Camera!
- Steering Wheels Radio Controls!
- Chevrolet Complete Care INCLUDED!

Sale Price: \$15,189* Was \$21,895 24 MONTH LEASE







\$999 Down

NO Security Deposit required. Tax, title and plate fees extra

2017 EQUINOX "LS"

- 7" Color Touch Screen MyLink Radio!
- OnStar with 4G LTE w/built-in Wi-Fi Hotspot!
- Bluetooth for Phone!
- Remote Keyless Entry!
- Rear Vision Camera!
- Chevrolet Complete Care INCLUDED!

Was \$26,405 Sale Price: \$18,249* 24 MONTH LEASE





\$999 Down

NO Security Deposit required. Tax, title and plate fees extra

2017 CRUZE "LT"



- 1.4L Turbo DOHC Engine! **Automatic Transmission!**
- 7" Color Touch Screen MyLink Radio!
- OnStar w/4G LTE w/built-in Wi-Fi Hotspot!
- Aluminum Wheels!
- Remote Keyless Entry! Rear Vision Camera!
- Bluetooth for Phone!
- Chevrolet Complete Care INCLUDED!

Sale Price: \$15,199* Was \$22,325 24 MONTH LEASE





\$999 Down

NO Security Deposit required. Tax, title and plate fees extra.

2017 MALIBU "LT"



- 1.5L Turbo DOHC Engine!
 - 6 Speed Transmission!
 - 8" Color Touch Screen MyLink Radio!
- Bluetooth for Phone! Rear Vision Camera!
- OnStar w/4G LTE w/built-in Wi-Fi Hotspot!
- 17" Alloy Wheels!
- Remote Entry and Start! Chevrolet Complete Care INCLUDED!

Was \$26,895 Sale Price: \$18,699* 24 MONTH LEASE





\$999 Down

NO Security Deposit required. Tax, title and plate fees extra.

2017 TRAVERSE "LS"



- 6.5" Color Touch Screen Radio!
- 8 Passenger Seating!
- Rear Vision Camera!
- Power Driver's Seat! Bluetooth for Phone!
- OnStar with 4G LTE w/built-in Wi-Fi Hotspot!
- Chevrolet Complete Care INCLUDED!

Was \$32,195 Sale Price: \$22,949* 24 MONTH LEASE





\$999 Down

NO Security Deposit required. Tax, title and plate fees extra.

2017 SILVERADO "LT" 4X4 DOUBLE CAB



- Automatic Transmission!
- GM Bed Liner INCLUDED!
- 8" Color Screen MyLink Radio w/USB Ports!
- OnStar w/4G LTE w/built-in Wi-Fi Hotspot!
- Steering Wheel Radio Controls! Remote Keyless Entry!
- Aluminum Wheels!
- Chevrolet Complete Care INCLUDED!

Was \$41,060 Sale Price: \$32,177* 24 MONTH LEASE





\$999 Down

NO Security Deposit required. Tax, title and plate fees extra.

We NEED your Trade... Get \$1000 OVER Kelley Blue Book... GUARANTEED!



The Best Price... PERIOD! **RICH MILNE AUSTIN ELYA** rmilne@moranautomotive.com aelya@moranautomotive.com **SHOWROOM HOURS:**

Monday Tuesday Wednesday Thursday **Friday**

8:00 AM - 9:00 PM 8:00 AM - 6:00 PM 8:00 AM - 6:00 PM 8:00 AM - 9:00 PM 8:00 AM - 6:00 PM

35500 S. Gratiot Avenue... North of 15 Mile / Clinton Township

FIND NEW ROADS



CHEVROLET _____