# **Detroit Auto Scene** Tech Center News®

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# GM's Cruise Automation Unveils its First AV Vehicle – Origin

Subsidiary Cruise Automation, talked about the company's goal and the thinking behind the vehicle it launched at a special event in San Francisco Jan. 21.

"Every time we hit the road, we're faced with tradeoffs," Ammann said. "Should I spend 30 bucks, or 30 minutes of my time? Should I run that red light and shave a few minutes off my trip, or hang back and be safe?'

These are small choices, but they create some of our biggest problems, Amman said. That's because there's an inherent tension between what's good for us and what's good for the world.

"We know that taking the bus would be better for the environment - but on a Friday at rush hour, saving the planet just doesn't seem worth missing dinner with our kids," Ammann said. "But what if we didn't have to choose? What if we could create a different transportation system entirely - one that is safer, better and more afford-

Dan Ammann, CEO of the GM able for us, for our cities and for our planet?

"Earlier today, we shared what we think could be possible and unveiled the first step toward that vision. We call it the Cruise Origin. To understand where we're going, you have to understand where we came from."

Ammann said that 50 years ago, cars looked like, in a word, cars. These cars were driven by human operators and came "stuffed" with a lot of equipment for that human operator to use: a steering wheel, pedals, knobs, and dials. And, of course, a fossil fuel-burning engine up front and a gas tank in the rear.

But over the last five decades, humanity achieved unprecedented technological advancement in everything from computers to medicine, Ammann said. But the automobile? It looks pretty much the same.

"All that stuff from the oldschool car has stayed put - the

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This GM vehicle being tested in San Francisco has no dashboard because it's fully automated.

# FOUR WHEELER Names Jeep **2020 Gladiator Truck of Year**

the 2020 Jeep Gladiator.

The Gladiator Rubicon was named FOUR WHEELER magazine's "2020 Pickup of the Year" in mid-January, the same week NACTOY named the Gladiator Truck of the Year.

The FOUR WHEELER award is given annually by the editors of the opinion-leading off-road enthusiast publication, said FCA spokesman Berj Alexanian.

"The new Jeep Gladiator is the truck many buyers have been waiting years for," said FOUR WHEELER Editor Ken Brubaker. "After a week of testing in a variety of challenging environments, the Gladiator proved that it is all truck and all Jeep, which is a for-

The awards keep rolling in for midable combination. Mix in the impressive Rubicon package that includes Tru-Lok differential lockers. Rock-Trac transfer case with 4:1 low range, front disconnecting stabilizer bar and full skidplating, and it's clear the Gladiator is at the front of the class.

Over the course of a week, FOUR WHEELER's judges conducted a variety of tests spanning more than 1,000 miles of varied terrain that included pavement, gravel, dirt, sand, rocks, mud and snow. A loosedirt hillclimb and water crossings were included in testing as well. Night driving was also inte-

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# **Classic Mustang Gets a Full Restoration**

It's never too late to fix up a barn find.

Once lost, now found and restored to their original glory, a pair of historic experimental Shelby Mustangs – "Green Hor-net" and "Little Red" – were revealed together for the first time, joined by two new Shelby GT500 Mustangs at at the Barrett-Jackson Scottsdale auction on Jan. 16.

The restored 1968 Shelby GT500 prototype known as the Green Hornet and the newly restored 1967 Shelby GT500 prototype known as Little Red were unveiled by Craig Jackson, chairman and CEO, Barrett-Jackson, Wong said. Jackson restored both cars, which are the only notchback coupes ever produced wearing the Shelby nameplate

was led by Jason Billups of Billups Classic Cars in Colcord, Okla. During the process, Jackson floated the idea of finding Little Red, which had been lost. After an extensive search spear-

Restoration of Green Hornet headed by Billups, the vehicle was discovered in a rural field in north Texas, Wong said.

Finally, with Green Hornet and Little Red restored, Jackson set

**CONTINUED ON PAGE 4** 



Despite its looks, this 1968 Shelby GT Mustang was able to be fixed.



# Kiekert's Technology Evolves with the Times

#### by Jim Stickford

Most people don't think doing something as simple as opening a door can be a high-tech endeavor, but it can. Just ask the

mechanisms shift from the purely mechanical to electronic, companies like Kiekert have had to creasingly complex, OEMs and evolve as well, Hietbrink said.

As door, trunk and hood latch company expects to hire more in the upcoming year.

"In a world where cars are intop tier suppliers are under great "Our more than 160-year suc- pressure to innovate in shorter

Kiekert's Hietbrink shows how to open a car door that has no handle.

folks at Wixom-based Kiekert USA.

Mike Hietbrink, general manager of Kiekert USA, said the company has been in Wixom since 1994 and currently has two facilities in the community. One is a production facility and the other is a research and development site where they design, engineer and test parts.

The company specializes in the engineering, design and manufacturing of automotive closure system technology. That includes doors, trunks and hoods, Hietbrink said.

Over the past few years, how people gain access to a car has changed, Hietbrink said. For example, the introduction of electric cars has changed what people consider a hood.

EVs don't have traditional engines so a lot of traditional trunk space is now in the front an EV.

cess story is a story of unrelenting innovation capacity," Hietbrink said. "The excitement about advancement also shapes our company culture.

"As consistently as we advance the development of our products, is as carefully as we care for the value of our working world. That's not the only thing that made us a leader in automotive closure system technology.

"This value orientation also creates an inspiring climate in which the future flourishes. With continuous innovations and steady development of our products, we support the automotive industry."

The company got its start in Germany and now has manufacturing and design facilities in Europe, Asia and North America, Hietbrink said. They are currently employing about 170 people at both of its Wixom facilities. The

timelines." Hietbrink said

"It helps to be a company with a broad customer base. We are also able to get input from these companies. And we have people in our local regional facilities that can respond to local demand. To be able to operate like that is a great advantage."

Staying ahead of the competition means expanding the company's competence in electronics, shifting from the mechanical to the electronic and improving system integration through the use of electronics software in vehicles, Hietbrink said.

Right now, Kiekert's billion dollars of annual sales are concentrated on its side-door latch business, which accounts for 80 percent of sales.

Products include hood latches, side door latches, both side door

**CONTINUED ON PAGE 4** 

#### view this week's edition at DetroitAutoScene.com

# ACM Opens Up Space at Willow Run Park

The American Center for Mobility (ACM) now has site-ready real estate equipped for development at ACM's Technology Park at Willow Run.

Space will provide opportunities for mobility companies to co-locate next to ACM's already established, world-class Smart City Test Center, said ACM spokeswoman Dayana Rodriguez.

In the two years since opening, more than 50 global automotive and mobility companies have come to test and evolve their technologies through various projects at ACM, Rodriguez said.

The ACM Technology Park is a certified shovel-ready site and part of the Michigan Economic Development Corporation's (MEDC) Site Readiness Program. The park is designated as a Renaissance Zone through 2031, providing abatement of about 85 percent of real and personal property taxes.

It is also located on a State of Michigan designated Opportunity Zone providing deferral of reinvested capital gains.

Research has been conducted at ACM's Test Center in conjunction with the U.S. government, Rodriguez said. Major public and private mobility industry events and demonstrations have been hosted creating exposure between test engineers and technology companies essential to the growth of the mobility industry.

The Technology Park will further stimulate these types of industry collaborations, as well as the local economy by increasing regional business attraction, Rodriguez said.

With 350,000 square feet of multi-tenant space, the ACM anticipates that 1,200 potential jobs can be created at the historic site, continuing the legacy of innovation at Willow Run.

Potential uses for buildings include:

- Individual/Shared Offices; Innovation Labs;
- Start-up Incubators;
- Conferencing & Events;
- Education & Workforce Development Labs.

As the history of innovation that started with Henry Ford's WWII Bomber plant continues to evolve at the Willow Run site, Mark Chaput, ACM interim CEO said, "The American Center for Mobility is proud to continue to build on that legacy of innovation by opening the American Center for Mobility Technology Park, where we can enable a new ecosystem of people and companies to build on their ideas, to be inspired, and to change the world.'

"The Ann Arbor region is a hot bed of mobility innovation," said Paul Krutko, president and CEO of Ann Arbor SPARK, where global leaders like Toyota, Hyundai-Kia and Subaru have located their North American research and development facilities.

"Emerging companies like Navya, May Mobility, and Refraction AI are creating and testing new mobility technologies here, too.

"We know that mobility companies from around the world are looking at the region as a destination where they can grow and having the option to be located at ACM is certainly a benefit as a proof point that we are committed to providing what these companies need to be successful."

"Our state has long been known for its innovative ideas and its can-do attitude because Michigan is where big ideas are born," said Jeff Mason, CEO of the Michigan Economic Development Corporation (MEDC).

"No other state in the nation provides the breadth and depth of entrepreneurial support to high-tech and mobility companies like Michigan.

'We're proud to continue building on our entrepreneurial spirit and mobility leadership through innovative spaces like ACM's Technology.'

#### **Impounded Porsche Goes to Prom**

PHILADELPHIA (AP) - A former Philadelphia police officer charged with taking a Porsche SUV from an impound lot and using it for his stepdaughter's prom has pleaded guilty, prosecutors announced Jan. 17.

James Coolen Jr., 47, pleaded guilty Jan. 16 to a misdemeanor count of unauthorized use of a motor vehicle. He was sentenced to a year of probation. Coolen resigned from the department in October.

Coolen seized the Porsche Cayenne during a drug investigation in April and placed it in the Narcotics Bureau Headquarters' secure impound lot, according to prosecutors. They said surveillance footage showed Coolen entering the lot in his personal pickup truck April 25 and leaving in the Porsche. Two days later, the Porsche was returned and a driver that couldn't be identified because it was dark, drove away in Coolen's truck.

Prosecutors cited other evidence including GPS data from the Porsche to show Coolen had used it for his stepdaughter's prom.

"It is never easy, but it is always right, to hold a friend or colleague accountable when they do wrong," District Attorney Larry Krasner said.

# **FCA and Foxconn Exploring EV Development Alliance**

MILAN (AP) – Fiat Chrysler is in talks with the Taiwanese company Foxconn to develop and manufacture battery-powered vehicles, the U.S.-Italian automaker said Jan. 17.

Fiat Chrysler is in the process of merging with France's PSA Peugeot, which is 12 percent owned by Chinese company Dongfeng Motor Co. Both Fiat Chrysler and Peugeot have lagged in developing electric powertrains and also have been struggling to increase sales in China, the world's biggest auto market.

It was unclear what impact Fiat Chrysler's proposed joint venture with Foxconn. formally known as Hon Hai Precision Ind. Co., Ltd., would have on the wider merger, which is expected to be completed in the next year or so.

If a deal with Foxconn is reached, a joint venture would focus first on China, the biggest market for electric cars with 1.2 million vehicles sold last year half the global total.

"The proposed cooperation ... would enable the parties to bring

together the engineering and manufacturing and mobile software technology to focus on the growing battery electric vehicle market," Fiat Chrysler said in a statement.

Talks were aimed at reaching a binding agreement "in the next few months," the company said.

Automakers around the world have announced a series of electric vehicle partnerships to share the soaring cost of technology development.

Companies including General Motors Co. and Toyota Motor Co. have electric vehicle joint ventures with Chinese partners to take advantage of their experience at making low-cost vehicles.

The Chinese government has a credit-based system that encourages automakers to sell electric vehicles, leading to a proliferation of brands. But industry analysts expect high development costs to drive many of them to merge. The trend has led to a complicated mix of ties among competitors. Daimler AG's Mercedes Benz has electric vehicle ioint ventures with both BYD Auto.





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# Ford Emission Efforts Give Them 'A List' Status

duce carbon emissions - and someone has noticed.

Ford Motor Company's actions to cut emissions, mitigate climate risks and contribute to development of the low-carbon economy have earned it a place on the Climate 'A List' by CDP, a global environmental impact nonprofit whose annual environmental disclosure and scoring process is widely recognized as the gold standard of corporate environmental transparency.

The honor, for climate change, was given to Ford and 34 other American companies this year, said Ford spokesman John Cangany.

"Our people, our customers and our investors expect us to constantly do more to address climate change," said Bob Holycross, Ford vice president, Sustainability, Environment and Safety Engineering. "For more than 20 years, Bill Ford, our executive chairman, has been driving us to act more boldly around climate change.

"We believe making great vehicles, protecting the planet and maintaining a strong business are dependent on each other and not mutually exclusive priorities.

Bruno Sarda, president of CDP North America said, "Congratulations to Ford for earning a spot on this year's Climate 'A List' the company is a model for true corporate sustainability leadership.

"Climate change is an undeniable business risk if unaddressed and we must transition to a lowcarbon economy now to avoid the worst impacts. 'A List' companies know sustainability presents an exciting race to the top, an opportunity to innovate and rethink business as usual, proving that environmental responsibility simply makes good business sense.

Ford's commitment to reduce CO2 emissions consistent with guidelines in the Paris Climate Accord includes investing more

#### Learn Gardening At the Library

Fans of gardening will want to visit the Busch branch of the Warren Public Library on Wednesday, Feb. 19, for the MSU Extension - Macomb County "Gardening: Plan, Grow Harvet" class at 6 p.m.

"Having a vegetable garden is a great way to obtain local produce," said Warren librarian Andrea Mucha. "David Lowenstein, PhD, from the MSU extension -Macomb County will describe how to plant a vegetable garden and keep plants healthy during the growing season. Learn how to be a productive gardener by

Ford has been working to re- than \$11.5 billion in electric vehicles, Cangany said.

To increase the appeal and adoption of electric vehicles, Cangany said, Ford is introducing zero-emissions versions of some of its most successful vehicles, including the Mustang Mach-E later this year and an electric F-150 in the near future. The company also recently launched North America's largest EV charging network.

In 2017, Ford said it had reduced carbon dioxide emissions from manufacturing operations by 30 percent per vehicle produced – eight years earlier than planned when the goal was set in 2010, Cangany said.

Building on that success, he said, Ford announced a new global Carbon Reduction Strategy for manufacturing, with a significant emphasis on renewable energy and a continued focus on lowemission sources and energy efficiency. Ford has set an aspirational goal to run all its manufacturing plans globally on 100 percent renewable energy by 2035.

In 2019, more than 525 investors with assets in excess of \$96 trillion, along with 125 major purchasers which together spend US\$3.6 trillion on procurement, have asked companies to disclose data on environmental effects, risks and opportunities through CDP's platform, Sarda said. More than 8,400 responded.

A detailed and independent methodology is used by CDP to assess these companies, allocating grades of A to D- based on the comprehensiveness of disclosure, awareness and management of environmental risks.

CDP also encourages companies to demonstrate best practices associated with environmental leadership, such as setting ambitious and meaningful targets. Those that don't disclose or provide insufficient information are given a failing grade.



Buying energy from this DTE windmill helped for earn green honors.

# **GM's Michigan Tax Breaks Will Continue**

with the state of Michigan and

look forward to building on this

important relationship," Flores

changes will secure GM's foot-

print in Michigan and let all its in-

state facilities compete for future

work and investments.

An MEDC memo said the

said.

LANSING, Mich. (AP) - Michigan on Jan. 22 agreed to revise decade-long tax breaks for General Motors in exchange for the company's commitment to spend at least \$3.5 billion more over 10 years, including to build electric pickup trucks in Detroit.

Under the deal – the seventh amendment to the home state automaker's incentives since 2009 - the value of GM's maximum tax credit will be cut by \$325 million, to approximately \$2.28 billion through 2029, and will be capped annually.

The company will still have to retain at least 34,750 jobs in Michigan - it has about 45,000 now - but will get flexibility to count more jobs at its headquarters in Detroit and its research, development and engineering campus in the suburb of Warren.

"Overall, this will solidify the company's continued commitment to growing in our state as well as Michigan's uncontested leadership in automotive design and manufacturing," said Jeff Mason, CEO of the Michigan Economic Development Corp.

GM's Detroit-Hamtramck plant now employs about 800 people. Production of the Chevrolet Impala will cease at the end of February, at which point renovations will begin to produce electric vehicles. The plant will have 2,000 employees once it is at full capacity.

The plan was first announced in October as part of the new labor pact between the automaker and the United Auto Workers union following a strike. GM spokesman Dan Flores said the amendment to the tax credit "sets the stage for us to continue our significant commitment and investments in Michigan." He

said the Michigan Economic The last time the state and GM amended the credit was 2015, Growth Authority program has helped GM invest more than \$10 when they capped the state's liabillion in its Michigan facilities. bility but did not specify the "We appreciate our long-standamount, citing taxpayer confiing, productive collaboration dentiality.

GM agreed to disclose the outstanding credit value, \$2.28 billion, this time.

To fully qualify for the annual credit, the company will have to retain 34,750 Michigan jobs that pay on average \$1,300 a week up from \$650 under the original 2009 agreement.

#### **VW Joins School For Tech Center**

DETROIT (AP) - VW is partnering with the University of Tennessee and the Oak Ridge National Laboratory to create the company's first innovation hub for developing new technology in North America, officials said Jan. 17 in a statement.

Initial work at the hub in Knoxville will include research opportunities for UT doctoral students and will focus on electric vehicles and developing lighter components from composite materials, according to a joint statement from the three partners.

"Working with the University of Tennessee and Oak Ridge National Laboratory is a great opportunity to continue growing Volkswagen's engineering footprint in the North American region," said Wolfgang Demmelbauer-Ebner, VW's executive vice president and chief engineering officer for the region.

"This hub, along with other research institutions here, is an integral part of Volkswagen's global research and development efforts and can also directly contribute to vehicles in North America.'

VW has partnered with the University of Tennessee since opening its Chattanooga Assembly plant in 2011. The plant assembles the Volkswagen Passat sedan and Atlas and Atlas Cross Sport SUVs. Oak Ridge National Lab Director Thomas Zacharia said the collaboration benefits science and industry.

"By identifying difficult challenges and pursuing creative solutions with immediate industrial application, we can accelerate fields such as materials science, energy storage and advanced manufacturing while making vehicles better, safer and more fuel efficient," Zacharia said.



considering factors such as soil, pest management, and needs of different plants."

The Busch branch is located at 23333 Ryan Road in Warren, just two blocks north of Nine Mile, Mucha said.



# FOUR WHEELER Names Jeep **2020 Gladiator Truck of Year**

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grated into the competition to gauge each vehicle's lighting equipment.

Judges included staff from various 4x4 media brands, including FOUR WHEELER, 4-WHEEL & OFF-ROAD, and JP MAGAZINE.

"When the Gladiator was first announced, there was concern that it would be too much truck and not enough Jeep, or too much Jeep and not enough said MOTORTREND truck," GROUP Content Director Sean P. Holman.

"If anything, our testing has proven that Jeep has hit the sweet spot with the Gladiator, giving customers one of the finest off-road-capable midsize trucks on the market."

FOUR WHEELER's Pickup Truck of the Year award event now in its 31st consecutive year - is an invitation-only competition that is only open to all-new or significantly revised pickup trucks for the upcoming model year.

"Our all-new Gladiator Rubicon is the world's only truck that delivers legendary Jeep 4x4 off-road capability, open-air freedom and authentic Jeep design," said Jim Android Auto, and safety fea-Morrison, head of Jeep Brand -

tor is 100 percent Jeep and 100 percent truck - the perfect combination of rugged utility, versatility and functionality that our loyal Jeep customers have been asking for.'

Editors liked how the new 2020 Jeep Gladiator, engineered from the ground up to be the most off-road capable midsize truck ever, while building on a rich heritage of tough, dependable Jeep trucks with a combination of rugged utility, authentic Jeep design, openair freedom, clever functionality and versatility and best-in-class towing and 4x4 payload, Brubaker said.

Equipped with the proven 3.6liter Pentastar V6 engine and a versatile cargo box, Gladiator, said Morrison, is built to handle the demands of an active lifestyle while delivering an open-air driving experience in a design that is unmistakably Jeep.

Combining traditional Jeep attributes with strong truck credentials, the Jeep Gladiator is a unique vehicle capable of taking passengers and cargo anywhere, said Morrison.

A multitude of technology features, such as Apple CarPlay and tures, such as Blind-spot Moni-FCA North America. "The Gladia- toring and Rear Cross Path detec-

The Gladiator pickup truck won yet another award, this time for its ability to function well off-road.

tion, adaptive cruise control and Forward Collision Warning-Plus, further Gladiator's appeal.

All Gladiator models, said Alexanian, are Trail Rated with a badge indicating that the vehicle is designed to perform in a variety of challenging off-road conditions identified by five key consumer-oriented performance categories: traction, ground clearance, maneuverability, articulation and water fording.

Gladiator Rubicon models are equipped with signature red tow hooks, Rock-Trac 4x4 system, featuring a two-speed transfer case with a 4:1 low-range gear ratio,

front and rear heavy-duty Dana 44 axles, Tru-Lok electric front- and rear-axle lockers, segment-exclusive electronic sway bar disconnect, cab and bed rock rails and standard 33-inch Falken Wildpeak All-Terrain off-road tires.

# Kiekert's Building a New Future

CONTINUED FROM PAGE 1

and sliding door drive systems, seat back latches, trunk latches, door presenters (handles) and power closing systems and minimover rear cameras.

New technology includes secuCHARGE - a system that secures charging plugs during the EV charging process.

Even in case of a power failure, the system is Kiekert's latest generation of its charging-plug actuator. SecuCHARGE is designed for a safer and more secure charging of electric cars. The more compact and robust e-charging security system features an innovative drive technology.

The higher gear ratio inside the extremely small package results in an increased locking force, relative to conventional gearing, guaranteeing maximum efficiency from minimum space.

The robust configuration and improved sensors offer a more precise detection of the locking pin for greater system safety. It can be unlocked using the vehicle key or a mobile device such as a smartphone or tablet. The start of production (SOP) will take place at the end of 2019 followed by another SOP in 2020.

Another system is the Kiek-



This Kiekert latch helps make sure EV charging is a safe process.

that automatically opened doors are part of everyday life at grocery stores, shopping malls, and airports around the world, Hietbrink said.

Kiekert's door-drive system actiMOVE will automatically open and close side doors and, said Hietbrink, is ideally suited for electric and autonomous vehicles currently under development by automakers throughout the world.

NuEntry introduces a new world of access of Kiekert's latest vehicle access systems, to mesh

Different OEMs have different door opening methods, Hietbrink said. Some still like to have traditional door handles, even if the doors unlock electronically after receiving a signal from the key fob.

Other systems get rid of the door handle and respond to touch, with the door opening automatically.

Things are changing quickly in the auto industry," Hietbrink said. "We have to stay ahead of the curve. We have to have the technology available before ert's actiMOVE. Most vehicle with the fast-approaching au- OEMs ask for it, because if they doors still must be opened and tonomous driving and other ask for it and we then develop it,

# **Feds Seeking Information About Tesla Electic Issues**

#### by TOM KRISHER AP Auto Writer

DETROIT (AP) - The U.S. government's auto safety agency is looking into allegations that all three of Tesla's electric vehicles can suddenly accelerate on their own.

An unidentified person petitioned the National Highway Traffic Safety Administration asking for an investigation into the problem.

An agency document outlining the allegations shows 127 owner complaints to the government that include 110 crashes and 52 injuries.

The agency says the allegations include about 500,000 Tesla Model 3, Model S and Model X vehicles from the 2013 through 2019 model years.

The agency's investigations office will evaluate the petition and decide if it should open a formal probe.

Messages were left on the morning of Jan. 17 seeking comment from Tesla about the federal government's move.

The petition adds to a growing list of federal investigations into the Palo Alto, Calif. automaker's vehicles and how they have operated in the real world. Accidents have included Testas hitting stopped emergency vehicles la vehicles in which three people were killed.

The agency's special crash investigations unit sent teams to Gardena, California, and near Terre Haute, Ind. to probe two fatal crashes. Another crash in Connecticut also is under investigation.

Also, the National Transportation Safety Board will hold a hearing Feb. 25 on a separate fatal crash in Mountain View, California, involving a Tesla that was operating on the company's Autopilot driver assist system.

Authorities are trying to determine whether the cars were operating on Autopilot, a system designed to keep a car in its lane and a safe distance from other vehicles. Autopilot also can change lanes on its own.

Tesla has said repeatedly that its Autopilot system is designed only to assist drivers, who must still pay attention and be ready to intervene at all times.

The company contends that Teslas with Autopilot are safer than vehicles without it, but cautions that the system does not prevent all crashes.

NHTSA's crash program has inspected 23 crashes involving vehicles that the agency believed were operating on some form of partially automated advanced driver assist system. Fourteen of these cases involved Tesla mod-NHTSA is investigating three els. The team investigates more

closed manually, despite the fact trends in the automotive industry. we're too late.'

while in auto pilot mode. December crashes involving Tes- than 100 crashes per year.



#### Ford Shows Off Fully-Restored GT500 Mustang at Jackson Barrett Auction

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out to celebrate their significance by adding a one-of-one Candy Apple Green and a Rapid Red 2020 Shelby GT500 to his collection, Wong said. An independent rear suspension, fourwheel disc brakes and electronic fuel injection connect Green Hornet to the 2020 models, while the new supercharger is reminiscent of what's under the hood of Little Red.

"This first production 2020 Mustang Shelby GT500 is a significant piece of American performance history," said Craig Jackson.

"The independent rear suspension, four-wheel disc brakes and

electronic fuel injection engineered on this car were pioneered by Carroll Shelby over 50 years ago. He tested and developed these same experimental components on his 1968 EXP500 prototype, Green Hornet, but they were not standard in a GT500 until 2020."

Following the presentation at Jackson Barrett, the four Shelby Mustangs were started in unison by Craig Jackson in Little Red, Steve Davis in Green Hornet, Jim Owens in the Rapid Red 2020 GT500 and Aaron Shelby in the Candy Apple Green 2020 Mustang GT500.

The four vehicles represented over 2,600 horsepower, Wong said.

This now-restored classic Mustang from 1968 demonstrates just what skilled workman can to do a barn find.

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**JANUARY 27, 2020** 

DETROIT AUTOMOTIVE MANUFACTURING AND TECHNOLOGY INDUSTRIES

# **Cruise 'Origin' a New Beginning for Transportation - GM**

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steering wheel, the controls, the gas tank – leaving precious little room for each passenger," Ammann said. "Fifty years, and all we've gotten is one incremental change after another. We're still cramped in a tiny space. We're still burning fossil fuels, polluting our cities and destroying our planet. We're still spending hours out of our day stuck in traffic, inventing new swear words.'

Cruise, with its partnerships with GM and Honda, has roots in the automotive industry, Ammann said. But the company's goal is more than improving on the car.

'We wanted to reimagine transportation as if the car had never existed," Ammann said. "So, we removed the engine. We removed the driver – who, more often than not, is tired, distracted, frustrated, and rushed. We removed the equipment that's there to support the driver, including the steering wheel, pedals, rearview mirrors, windshield wipers, and cramped seats. What we came up with isn't a car that you buy. It's an experience that you share."

The result of Cruise Automation's hard work is a vehicle that is self-driven, all-electric and shared by passengers.

"It's our answer to the question about what transportation system you'd build, if you could start from scratch," Ammann "We're giving you space. said When we got rid of all that human-driver stuff, we traded it for something precious: space."

Ammann said that the Cruise Origin looks big. But in fact, it's no bigger than the average car. It's just more efficient, making full use of the space it takes up on the road.

And the doors don't hinge outward. They slide open, so bicyclists are safer. The entry is low to the ground, and three times larger than that of an average car – wide enough to make room for one person to step in while another person steps out.

Every seat is extra-legroom. And they all face each other, so you can have a conversation with family or friends.

"And because we own the entire experience, from the app to the Origin to customer service,



This AV by the GM subsidiary Cruise Automation is currently being tested on the streets of San Francisco.

our customers will get the same consistent experience, every time," Ammann said. "That's really important. Think about what happens today when you open up a traditional rideshare app, it's like rolling the dice. You might get a spacious, luxurious, clean ride, with a good driver. Or you might get a compact car that smells like Mountain Dew and Pine-Sol, driven by someone who's been up since 4 a.m."

That's a stressful way to get around. And in our view, you shouldn't have to get lucky to feel comfortable - or safe, Ammann said. Cruise riders will know what to expect every single time they open their app.

When human beings drive, we rely on our eyes and ears," Ammann said. "But even in simple suburban environments, with 20/20 vision and perfect hearing, we can only look in one direction, and we can only see and hear so much."

The Cruise Origin is powered by a brand-new, all-electric platform built by General Motors. It's got what's called redundancy, meaning there are no single points of failure across sensing, compute, networking, or power because there's no backup human driver.

Its multi-layered sensor suite is designed to keep track of multiple people and objects – even if they're far away, in pitch-black, or hidden by rain or fog.

The Origin is modular – which means it's upgradeable and the company won't have to roll out a new fleet each time we build a better sensor or computer, Ammann said. That saves both consumers and manufacturers money.

And now the real-life testing phase of the Origin is beginning, Ammann said.

"At this very moment, we're running fleets of our third-generation vehicles on the roads of San Francisco, operating a rideshare service that any Cruise employee can use, 24/7," Ammann said. "Last year alone, we accumulated nearly a million miles as we autonomously drove nearly every road in San Francisco. That's a lot of mileage, but what's really important is the data contained within those miles."

Already, the self-driving cars handle urban driving - which is notoriously chaotic and unpredictable - exceptionally well, Ammann said. So well, in fact, that they would be able to drive across the entire country without incident, even if the country's highways were the toughest San Francisco streets.

"We're on track to crack the superhuman threshold in urban environments, and expect to be

well past that threshold by the time the Cruise Origin enters production," Ammann said. "We're looking at safer roads on day one. Which brings us back to those choices: Should you choose convenience or climate? Time or money? Speed or safety?

"Our vision is you shouldn't have to choose. We're clear-eyed about what this means. We know that the only way we can create a radically different transportation system, and improve life in our cities, is if we can scale. And we know that this won't happen un-

less we deliver on a very simple proposition: a better experience at a lower price than what you pay to get around today.

Today's cars sit parked 95 percent of the time, racking up expensive parking fees while depreciating in value, Ammann said. They need a driver. They break down relatively easily.

The Cruise Origin, on the other hand, will spend most of its life in motion, working 10 times harder than the average car, day in and day out. It's engineered to include everything you need and nothing you don't, Ammann said. It doesn't require a driver, of course

Because it's modular, it will have a lifespan of over 1 million miles – six times more than the average car. And since GM has committed to producing millions of electric vehicles, we'll build it for roughly half the cost of what a conventional electric SUV costs today, said Amman. All told, the average San Franciscan household driving themselves or using ridesharing, will, on average, see up to \$5,000 back in their pocket every year.

At the same time, there will be fewer cars clogging our roads, fewer cars piled up in parking lots, and fewer cars going to the scrap heap.

"Origin means beginning. Or in this case, a new beginning for transportation - one with no more tradeoffs," Ammann said. 'What's good for you is good for the world."

Worldwide Coverage

#### Mercedes Reports Earnings Fall by Half with diesel cars, according to its

by DAVID McHUGH **AP Business Writer** 

FRANKFURT, Germany (AP) -Germany's Daimler AG, maker of Mercedes-Benz cars, saw operating earnings fall by half in 2019 as its flagship luxury brand suffered in a tougher global market, and due to more expenses tied to regulatory and legal issues with diesel cars.

The Stuttgart-based company said Jan. 22 that operating earnings fell to 5.6 billion euros (\$6.2 billion) for all of 2019 from 11.1 billion euros in 2018.

The company said it would also be hit with 1.1 billion euros to 1.5 billion euros in additional charges for regulatory and legal issues related to its diesel models. Those costs were not included in the operating earnings figures

1.3 percent at 45.79 euros in afternoon trading in Europe.

Daimler faces investigations from authorities in the U.S. and Germany over emissions issues

The company declined to comment on the state of those probes. It also faces a civil consumer class action lawsuit over diesel cars in the US.

third-quarter earnings statement. which includes Portland, Oregon-

Profit at the Mercedes-Benz Cars division, a pillar of the company's earnings, fell to 3.7 billion euros from 7.2 billion euros. But the return on sales - a key measure of how profitable the companv's cars are – fell by less, to 7.2 percent from 7.8 percent.

Global automakers are facing weaker demand in key markets, including in China, the world's largest car market. Mercedes was nonetheless able to grow unit sales in China by 6.2 percent to 693,000 cars; the U.S. market was flat with no increase at 316,000 cars.

Meanwhile, companies are un-Daimler shares traded down der pressure to invest billions in electric cars to meet regulatory demands in the European Union and China even though electrics remain a low single-digit share of the market.

based Freightliner and Thomas Built school buses, saw a smaller decrease, to 2.5 billion euros from 2.8 billion euros. The vans division saw a loss of 2.4 billion euros

The company's truck division,

And there was a charge for around three hundred million euros in the fourth quarter connected to changes at the company's Your Now mobility services group.

The joint services venture with BMW shut down its Share Now carsharing business in North America and in London, Brussels and Florence.

Operating earnings exclude financial items such as interest and tax and thus present a less complete picture of the bottom line than does net profit.

But investors and analysts often focus on operating earnings as a clearer picture of how the company's core business is faring.

The company releases full figures Feb. 11.

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**DETROIT AUTO SCENE - TECH CENTER NEWS** 



Detroit Children's Fund is getting \$3 Million from the auction of Chevrolet Corvette Stingray VIN #0001.

# **Auctioned Corvette Raises Cash for Kids**

helping a lot of children who will need help.

The Detroit Children's Fund, a nonprofit focused on high-potential investments to provide Detroit schoolchildren the opportunity to receive an excellent education, will be able to invest an additional \$3 million in their mission thanks to the auction of the first 2020 Chevrolet Corvette Stingray, said GM spokesman Kevin Kelly.

The history-making VIN #0001 of the first mid-engine Corvette – a black-on-black 3LT with the Z51 performance package crossed the block at the 49th Annual Barrett-Jackson Scottsdale Auction just weeks before teacher talent, Kelly said. the Corvette begins shipping to Chevrolet dealers.

"Reaction to the mid-engine Corvette has been extraordi-

Love of cars has ended up hand at the auction. "It's both sult, give thousands of young humbling and exciting to harness that success and provide the proceeds to the Detroit Children's Fund."

The Detroit Children's Fund will use the proceeds from the auction to fund comprehensive school interventions that result in greater academic success for children.

interventions help These great schools grow, underperforming schools improve and new schools thrive.

And because great schools require strong leadership and well-trained teachers, DCF will also use the funds to recruit, develop and retain leadership and

"All children deserve great schools," said Jack Elsey, DCF's executive director.

"The proceeds from this aucnary," said Mary Barra, GM tion will help improve public ed-Chairman and CEO, who was on ucation in Detroit and, as a re-

Detroiters a brighter future. We cannot thank General Motors enough for their commitment to DCF and the children of Detroit."

The winning bid was placed by Rick Hendrick, founder and CEO of Hendrick Companies.

"I am the number one Corvette junkie in the world," said Hendrick. "Thanks to Chevrolet and Barrett-Jackson, because they always pick charities that are so good and help so many people."

Kelly said Corvette coupe production will begin at GM's Bowling Green Assembly Plant in Kentucky in early February, with customer deliveries slated to begin before the end of February.





### **Ghosn's Legal Troubles Continuing**

Carlos Ghosn issued a statement Friday refuting the latest allegations by the Japanese automaker against the fugitive businessman.

Nissan Motor Co. on Jan. 16 filed a new set of allegations to the Tokyo Stock Exchange against Ghosn, who skipped bail and fled to Lebanon, saying he could not get a fair trial in Japan.

The lawyers said that Nissan's complaints were biased and that it never questioned Ghosn about them. They also said Nissan never tried to interview Ghosn or Greg Kelly, another

TOKYO (AP) – The legal team had long been Nissan's outside of Nissan's former chairman counsel. Nissan confirmed both were true, but denied there was any conflict of interest. The company said it considered it inappropriate to contact Ghosn or Kelly because the company and they were co-defendants.

Ghosn's legal team also complained that Nissan waited for months to investigate Ghosn's successor, former Nissan Chief Executive Hiroto Saikawa, and only after Kelly publicly raised concerns.

Saikawa resigned last year over allegations about dubious income. He has not been charged.

"This report confirms that



former executive facing charges Nissan's investigation was biof financial misconduct, or ased, lacked integrity and inde-"bothered to solicit their knowledge of the facts.'

conducted the investigation, in a statement.

pendence, and was designed and executed for the predeter-His lawyers also complained mined purpose of taking out that Latham & Watkins, which Carlos Ghosn," the lawyers said



# FCA Putting on Texas-Sized Display at Houston Car Show

As the saying goes, everything an exhilarating driving experiis bigger in Texas. That's why FCA had a big presence at the 2020 Houston Auto Show Jan. 22-26 with displays that allowed attendees to do more than just look, said FCA spokeswoman Kimberly Shults.

FCA rolled into the Houston Auto Show with a variety of displays and interactive experiences, featuring Alfa Romeo, Chrysler, Dodge//SRT, Fiat, Jeep and Ram brand vehicles.

The Jeep brand returned to the Houston Auto Show with the new 2020 Jeep Wrangler EcoDiesel, featuring the 3.0-liter EcoDiesel V6 engine, rated at 260 horsepower and 442 lb.-ft. of torque, with engine stop-start (ESS) technology standard.

The Texas Auto Writrs Association (TAWA) award winners Jeep Renegade, "Subcompact Sport Utility Vehicle of Texas," and Jeep Wrangler Rubicon, "Off-road Sport Utility Vehicle of Texas" were featured at the show.

Attendees had the chance to do more than look at Jeeps at Camp Jeep, the ultimate indoor off-road driving course. The 25,000-square-foot exhibit enabled participants to experience the extreme off-road capabilities of Jeep vehicles, said Shults. The course contained several obstacles that simulate some of the rigorous testing that Jeep vehicles must endure to be "Trail Rated," including ground clearance, traction, stability, articulation and suspension.

The new Ram Heavy Duty took center stage for the Ram Truck brand and showgoers also saw TAWA's reigning "Truck of Texas," the Ram 1500, plus trucks with award designations from the group's Texas Truck Rodeo: Ram 1500 Laramie Longhorn – "Luxury Pickup Truck of Texas"; Ram Power Wagon – "Off-Road Pickup Truck of Texas"; and Ram 2500 – "Heavy Duty Pickup Truck."

More adventurous auto show attendees were able to try the Ram Truck Test Track, an interactive adventure zone demonstrating the power and capabilities of the Ram Truck vehicle lineup, Shults said.

Professional drivers steered attendees through the interactive course in a Ram 1500 Laramie, Ram Rebel, Ram 2500 Laramie or Ram 2500 Power Wagon. Key track features included the iconic Ram Mobile Mountain, where passengers could experience first-hand the traction capabilities of a Ram truck while climbing the 13-foot high, 30-yard long, 30-degree Ram Mountain.

The Alfa Romeo display featured the Alfa Romeo Giulia, TAWA's reigning "Performance Sedan of Texas." The brand also featured the Alfa Romeo Stelvio, bringing world-class performance, seductive Italian style and

ence to the premium midsize SUV segment.

Both vehicles received an updated interior with upgraded customer touchpoints, added storage and a reimagined console, Shults said. Key, new, standard equipment includes a new 8.8-inch touchscreen display, forward collision warning, 12-month subscription to SiriusXM and new connected services, and available wireless charging and level II autonomous driving capability.

FCA also showed off just what the Chrysler brand has to offer, Shults said. As a four-time con-

secutive winner of TAWA's "Fam- tric-only mode and more than 30 ily Car of Texas," the Chrysler Pacifica and the Pacifica Hybrid reinvent the minivan segment, said Shults, with an unprecedented level of functionality, versatility, technology and bold styling.

Re-engineered from the ground up on a new platform, the Pacifica, Shults said, delivers classleading gasoline and hybrid powertrains to the minivan vehicle segment.

The Pacifica Hybrid, said Shults, is the first electrified vehicle in the minivan segment and achieves more than 80 miles per gallon equivalent (MPGe) in elecmiles of all-electric range.

Dodge also showed off how the brand delivers the industry's most powerful and fastest massproduced sedan in the world, said Shults, with the 2020 Dodge Charger SRT Hellcat Widebody powered by the proven supercharged 6.2-liter Hemi Hellcat V8 engine.

The Charger SRT Hellcat Widebody has a best-in-class 707 horsepower and 650 lb.-ft. of torque, said Shults, and delivers a top speed of 196 mph, maintaining its reign as the most powerful and fastest mass-produced sedan in the world.

The Fiat brand showcased the 2020 Fiat 500X and the Fiat 124 Spider.

The Fiat 500X features standard all-wheel drive and a fuel-efficient 1.3-liter direct-injection turbocharged engine, generating 177 horsepower and a best-inclass torque rating of 210 lb.-ft., said Shults.

Now in its 37th year, the Houston Auto Show at NRG Center is the largest auto show in the South and encompasses nearly 700 of the latest vehicle models from more than 40 manufacturers, with 80 different test drive vehicles all in one place, Shults said.



FCA has several interactive displays at the Houston Auto Show as a way of showing just what Jeeps and Ram truck can do on and off the road.

# BMW Latest OEM Caught Up in the Takata Airbag Scandal

DETROIT (AP) – BMW is recalling nearly 357,000 older vehicles in the U.S. to replace dangerous Takata front air bag inflators.

The inflators are among 10 million sold to 14 automakers that Takata is recalling.

It's the last recall that the bankrupt Takata agreed to in a 2015 settlement with U.S. safety regulators.

The U.S. government released details of three BMW recalls on Friday. All have inflators that were used to replace older ones until permanent replacements were ready.

The first recall covers about shrapnel. Permanent replace-

293,000 3-Series cars from 2000 through 2006.

The second covers nearly 60,000 3 Series and 1 Series cars from 2006 through 2012. Also included are X1, X3, X5 and X6 SU-Vs from as early as 2007 to as late as 2015. The third recall includes just over 4,000 X5 and X6 SUVs from 2007 to 2012.

Takata used ammonium nitrate to create a small explosion to inflate air bags. The chemical can deteriorate over time when exposed to high heat and humidity and burn too fast, blowing apart a metal canister and hurling

ments don't use ammonium nitrate.

The BMW inflators are part of a recall that Takata had announced earlier in the month of January.

They were sold to 14 different automakers, who will conduct their own recalls. Nissan, Ford, Fiat Chrysler, Honda, Subaru, Ferrari, General Motors and Mazda already have made recall announcements.

Takata was to recall about 70 million inflators in the U.S. that as part of the agreement with National Highway Traffic Safety Administration.

At least 25 people have been killed worldwide and hundreds more injured by Takata inflators. About 100 Takata million infla-

tors are being recalled across the globe

All of the Takata recalls are being phased in by the age of the vehicle and location. Vehicles registered farther south, where conditions are hot and humid, get first priority.

Takata could face additional recalls, though. NHTSA must decide if it has to recall inflators that use ammonium nitrate but have a moisture-absorbing chemical.

#### **Tesla Can Sell Cars in Michigan Now**

DETROIT (AP) – Michigan has serviced in Michigan," Attorney cleared the way for Tesla to sell more electric vehicles in the state and get them serviced un- another state and then transder a deal filed Jan. 22 that settles a lawsuit by the automaker.

It won't be as simple as Tesla opening a dealership on a corner lot. But consumers at least won't have to leave Michigan to buy a car or SUV.

Tesla had sued Michigan in 2016, challenging a 2014 law that ensured automakers could only sell through independent, franchised dealers and not directly to customers. The company claimed it was unconstitutional.

The state, under a Republican governor, secretary of state and attorney general, had been defending the law. The deal was reached with Democrats who were elected in 2018.

"Any Michigan resident may lawfully buy a Tesla and have it

General Dana Nessel said.

Teslas will have to be titled in ferred to Michigan. Repair centers will be allowed as long as they're owned by a Tesla subsidiary. Thousands of Teslas are on the roads now in Michigan. but they must be sold and serviced across the border in Ohio or another state.

Tesla has what it calls a 'gallery" at a shopping mall in Troy. Employees there have been barred from talking about pricing or completing sales deals, but those restrictions were lifted under the settlement.

The 2014 law was "drafted by lobbyists for Michigan vehicle dealers and manufacturers whose specific intent was to preclude Tesla from opening company-owned stores in Michigan,' Tesla attorney John Bursch said .

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GMC designed the brand's 2021 AT4 levels to offer those interested in offroading rides that are able to give them premium capabilities and a luxurious performance.

# **GMC Makes AT4 Variants Available for Entire Retail Lineup**

This year will be a busy one combine off-road capability, in- erage light-duty full-size pickup for GM's GMC brand, said Phil Brook, vice president of GMC Marketing.

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GMC is completing its pioneering move into the premium off-road space by making AT4 available across its entire retail lineup in 2020, Brook said.

With the addition of the firstever 2021 Terrain AT4, Canyon AT4 and 2021 Yukon AT4, said Brook, GMC is poised to double its AT4 offerings and strengthen its market position as the only premium truck and SUV lineup that's made to be used both onand off-road.

Introduced on the 2019 Sierra, AT4 was created as a unique persona that offers credible capability while still providing premium everyday comforts, he said.

AT4 variants distinctively novative technology and bold design, along with GMC's premium refinement to practically complement an authentic outdoor lifestyle.

Core AT4 design, said Brook, includes premium rugged exterior details, featuring black chrome grille, fog light surrounds and rear appliques, as well as unique authentic aluminum interior decor and premium fabric colors.

The response has been clear that AT4 is a winner with customers, he said.

Sierra sales were up 14 percent year-over-year in 2019, and AT4 played a huge role in that growth.

Based on initial Sierra AT4 buyer data, potential customers are adventurous, affluent, highly active and younger than the avtruck buyer looking to buy.

They are attracted to GMC's premium features, said Brook, with a more aggressive, athletic design that provides the ability to go off-road with authentic capability.

"AT4 continues GMC's bold entrance into the premium, off-road and adventure-oriented truck and SUV space," said Brook. "For each of the AT4 variants, we listened to our customers and made sure the vehicles met their active lifestyle needs.'

AT4 models are engineered to add an extra level of capability and technology tailored to customers' wants and needs, he said, adding,

"That vision is consistent across all AT4 models and the level of capability matches the needs of customers in each segment."

Professional Grade engineering highlights of the AT4 lineup, said Brook, include:

- Sierra AT4 offers a 2-inch factory lift, skid plates, Rancho monotube shocks, a stan dard MultiPro Tailgate, available Carbon Fiber Bed and available Mud-Terrain tires.
- Sierra HD AT4 features an off-road suspension, skid plates, Rancho shocks, a standard MultiPro Tailgate and up to 15 innovative camera views that helps benefit not just trailering, but visibility over rough terrain and in tight corners.
- Acadia AT4 features an Advanced Twin-Clutch AWD System for increased capa-

bility on mixed surfaces, All-Terrain tires and Traction.

- Select with Off-Road Mode. Canyon AT4 comes standard with off-road tuned suspension, an automatic locking rear differential and 31-inch Goodyear Wrangler Duratrac tires. (available Spring 2020).
- Yukon AT4 offers air suspen sion with 4 inches of adjusta bility, an electronic limitedslip differential and a 15-inch head-up display. (available Summer 2020).
- Terrain AT4 will feature a rugged exterior, confident capability and advanced technology. (available Fall 2020).

#### JANUARY Sales Event-HE ART OF MAKING PEOPLE HAPPY 🔊 BUICK | 📼 MC EXPERIENCE 🔊 THE NEW BUICK 2020 BUICK ENCORE PREFERRED 2020 BUICK ENVISION PREFERRED 2020 BUICK ENCLAVE PREFERRED \$269\* CONTU 36 \$999 DOWN \$189\* 36 \$999 DOWN \$349<sup>\*</sup> | 36 |\$999<sub>00000</sub> STK# B7525G STK# B3189 sehold \$1,559 total due at signehold \$1,577 total due at \*GM Employee with GM Lease loyalty in household \$1,742 total due a signing plus tax, title, doc. fee and plate with approved A+ tier credit ing plus tax title WE ARE PROFESSIONAL GRADE

# Volkswagen and Aeris Join Joint Technology Venture

Volkswagen Group of America, and Aeris, a technology provider in the Internet of Things (IoT), have formed Ventic LLC, a joint venture that is the result of a long-term commitment between Volkswagen and Aeris in the development and operations of connected vehicle platform technologies.

Ventic is jointly owned, with 51 percent split to Volkswagen and 49 percent to Aeris. The company will focus on Volkswagen brand vehicles in North America, starting with the launch of the next-generation Car-Net in most MY20 vehicles, said VW spokesman Mark Gillies.

Ventic offers a highly customizable approach to Volkswagen's specific requirements, Gillies said.

This gives Volkswagen the ability to manage the connected car program on a single platform, while preserving the ability to deploy solutions that differ based on region or vehicle model. "Volkswagen is committed to connected vehicle technology, as we see a future where all cars are 100 percent connected at all times," said Abdallah Shanti. Global CIO, Volkswagen Brand, and member of the Ventic Board. "Our connectivity platform expands beyond remote services and vehicle safety and security. "This platform has inherent flexibility, which enables new business models through thirdparty integration and is foundational for V2X communications. Furthermore, this platform will serve our customers with delightful and useful functions, as well as being a gateway to other digital ecosystems.' Key benefits of the Ventic platform can be summarized into three major categories, Gillies said. First, there is service flexibility and speed.

The modern microservicesbased platform architecture offers fast and flexible introduction of new services that parallel the development of a new application on a compatible smartphone.

The platform architecture also provides the ability to change rules, such as access, in a dynamic way, supporting Volkswagen's position in a shared mobility world, he said.

Then there is operational efficiency. The platform architecture supports mobility across cloud platforms, said Gillies, as required by business needs and geographical restrictions with built-in system monitoring and operational KPIs.

Finally, he said, there is customer experience.

The Ventic device platform significantly improves response times with a service delivery architecture that optimizes an endto-end system from wireless connection to telematics applications, while simultaneously addressing key concerns around hardware power management, Gillies said. "The connected vehicle is at the center of the game-changing trends in the industry - autonomous, electric, shared," said Raj Kanaya, General Manager of Automotive and Chief Marketing Officer, Aeris, and member of the Ventic Board.



"Through Ventic, we're excited to be on this journey with Volkswagen.'

"Aeris is a pioneer and a leader in the market of the Internet of Things with a proven history of helping companies unlock value through connected technologies," Kanaya said. "We strive to fundamentally improve business performance by dramatically reducing costs, accelerating timeto-market, and enabling new revenue streams."

# **General Motors Continues to Upgrade Manufacturing Sites**

GM's efforts to upgrade facilities to make the best vehicles possible is continuing, said GM spokeswoman Cheryl Messore.

General Motors Co. will be making a \$6.7 million investment in its Tonawanda Engine Plant in New York to upgrade the plant's production systems, said Messore

Of the total investment, \$4.4 million is in capital investment and \$2.3 million is in project expense to improve efficiencies in producing the 5.3L V8 engine used in full size trucks, Messore said

"Tonawanda Engine Plant's talented and engaged workforce continuously strives to help our plant succeed," said Plant Director Ram Ramanujam. "This investment helps expand our flexibility to make multiple products to meet customer demands. "It builds on our reputation of consistently launching and delivering high-quality, award-winning engines like the 6.2L Gen V DFM for the Silverado, and LT2 C8 Corvette.'

Jose M. Gonzalez, acting chairman of UAW 774, said, "GM Tonawanda Engine has a long history: our membership continues to deliver the highest-quality products for our customers. We are proud of the work we do. newly hired full-time regular employees and our communities."

This news follows an announcement that more than 30 employees were moved from temporary to full-time employment earlier this month, Messore said.

"These are great, experienced employees. Their conversion to regular full-time status will help create more engaged and motivated teams in our plant, which

is foundational to improving job satisfaction, health and safety, and the quality of our products for our customers," said Ramanujam.

Earlier in January, Wards Automotive News announced that GM's 2020 Corvette LT2 engine made at the Tonawanda Engine Plant - was named one of the Top 10 Engines and Propulsion Systems.

This is the second year in a

row that a Tonawanda-made engine earned this distinction. Earlier this week, the Corvette was named The North American Car of the Year. Messore said.

Tonawanda's employees are playing a key role in the growth of GM's core business and its journey toward a world with zero emissions. Within the past five years, Messore said, GM invested more than \$295 million in new three engine products.



This is a win for our team, our General Motors is investing several million dollars at its Tonawanda powertrain facility in New York state.

# **Different Airbag Troubles Forcing Honda, Toyota Recalls**

by TOM KRISHER AP Auto Writer

DETROIT (AP) – Two different air bag glitches have forced Toyota and Honda to recall over 6 million vehicles worldwide, and both problems present different dangers to motorists.

The Toyota recall affects about 3.4 million vehicles globally and is being done because the air bags may not inflate in a crash. The cars have air bag control computers made by ZF-TRW that are vulnerable to electrical interference and may not signal the bags to inflate.

The problem could affect as many as 12.3 million vehicles in the U.S. made by six companies. It's possible that as many as eight people were killed when air bags didn't inflate. U.S. safety regulators are investigating.

Honda's recall covers about 2.7 million vehicles in the U.S. and Canada with Takata air bag inflators. But they're a different version than the ones blamed for 25 deaths worldwide. Still, it's possible the air bags could blow apart a metal canister and hurl shrapnel at drivers and passengers.

Both recalls were announced on Jan. 21.

In a statement, Toyota said the computer may not have adequate protection against electri-

tional Highway Traffic Safety Administration began investigating problems with ZF-TRW air bag computers. The probe was expanded in April of last year to 12.3 million vehicles made by Toyota, Honda, Kia, Hyundai, Mitsubishi and Fiat Chrysler from the 2010 through 2019 model vears.

Toyota joins Hyundai, Kia and Fiat Chrysler in issuing recalls for the problem. Four deaths that may have been caused by the problem were reported in Hyundai-Kia vehicles and three in Fiat Chrysler automobiles. The investigation was upgraded after investigators found two serious crashes involving 2018 and 2019 Toyota Corollas in which the air bags did not inflate. One person was killed. Toyota said it's cooperating in the probe, which is continuing.

NHTSA is evaluating how susceptible the air bag control units are to electrical signals as well as other factors that could stop air bags from inflating. In documents, the agency said that it didn't find any other cases of electrical interference in Hyundai, Kia or Fiat Chrysler vehicles that used the ZF-TRW system but were not recalled.

ZF-TRW said Jan. 21 it continues to cooperate with the NHTSA investigation. The Honda recall covers cer-

1997 to 2001 CR-V, the 1998 to 2001 Odyssey and the 1997 and 1998 EV Plus

Acura vehicles covered are the 1997 and 1998 2.2CL, the 1997 to 1999 3.0CL, the 1998 and 1999 2.3CL, the 2001 and 2002 3.2CL, the 2001 and 2002 MDX, the 1998 to 2003 3.5RL, and the 1999 to 2001 3.2TL.

The front driver's inflators being recalled are part of a recall announced by Takata in November covering at least 1.4 million vehicles from five automakers. Honda said it's recalling a larger number of vehicles to make sure it gets all of the bad inflators.

In this case, the inflators don't contain ammonium nitrate, which is blamed for previous Takata problems that have killed 25 people and injured hundreds worldwide.

But three of the newly recalled inflators exploded and hurled shrapnel, two in Japan and one in Texas that injured a driver, Honda said in a statement. The company said in all three cases. the inflators were exposed to excessive moisture.

In Texas, the car had a salvage title with a date that coincided with a major flood, while the two cases in Japan were in salvage yards where the windows are typically left open, the company said.

2000 Civic coupe and sedan, the ance of any recalled part," the company said in a statement.

> Owners will be notified in mid-March, but replacement parts won't be available for another vear, Honda said.

Asked about loaner cars, a Honda spokesman said customer concerns will be addressed on a case-by-case basis call Honda at (888) 234-2138 with questions.

#### Local Michigan **Counties Get** Transport Help

DETROIT (AP) - Road and transit agencies across southeastern Michigan have been awarded a total of \$86 million to improve air quality and reduce congestion in areas around metro Detroit.

The federal funding for the seven-county region is part of the Congestion Mitigation and Air Quality Improvement Program, according to the Southeast Michigan Council of Governments.

The Detroit-based agency administers the program for the region and works with eligible road and transit agencies to develop projects that maximize improvements to air quality.

The funding includes about \$23 million to Detroit and its transportation department for traffic operations, modernization of traffic signals and bus replacement; \$4 million to the Ann Arbor Area Transportation Authority for new buses; and about \$3.5 million to the Blue Water Area Transit Commission to replace older buses.

Oakland County also will receive \$12 million for transportation operations, traffic signal interconnects and camera installation

The Southeast Michigan Council of Governments supports coordinated local planning with technical, data and intergovernmental resources to create better transportation alternatives to members of the greater public.

The Southeast Michigan Council of Governments serves to help meet the transportation needs of Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw and Wayne counties in Michigan.



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cal noise that can happen in crashes, such as when the vehicle runs under a different vehicle. The problem can cause incomplete opening of the air bags, or they may not open at all. Devices that prepare seat belts for a collision also may not work.

In most cases, Toyota dealers will install a noise filter between the air bag control computer and a wiring harness. But in some vehicles, dealers will inspect the computer to determine if it needs the filter. Owners will be notified by mid-March.

The recall covers certain 2011-2019 Corollas, the 2011 to 2013 Matrix, the 2012 through 2018 Avalon and the 2013 to 2018 Avalon Hybrid in the U.S.

Toyota wouldn't say if it will offer loaner cars to people who fear their air bags might not protect them. A spokeswoman suggested that owners call its customer hotline to discuss their issue at (800) 331-4331.

In March of 2017, the U.S. Na-

tain Honda and Acura vehicles from the 1996 to 2003 model vears. Honda vehicles included are the 1998 to 2000 Accord Coupe and Sedan, the 1996 to

"Honda believes that the risk of improper air bag deployment in its vehicles remains very low at this time, but we cannot absolutely guarantee the perform-

#### Motown Museum Gets a \$1M Grant

DETROIT (AP) - Detroit's Motown Museum announced a \$1 million grant from a southeastern Michigan foundation that will go toward expansion of the museum and the exhibitions that will be available to the public once constuction is finished.

The money from the Vera and Joseph Dresner Foundation will support Hitsville Next, the museum's "creative hub for entrepreneurship," officials said.

The facility was designed to offer what officials familiar with the plans called "innovative education and community engagement programs."

The grant announced this month was the most recent since museum officials said they had reached \$25 million. or the halfway point in fundraising.

The official groundbreaking was held in September of last year as part of Motown Records' 60th anniversary celebrations that honored the formation and launch of the storied recording company.

Expansion plans for the site where Berry Gordy Jr. built his music empire were announced in 2016. Last year, Gordy said he planned to donate \$4 million to the project.

Officials said the expanded facility will incorporat, among other things, some interactive exhibits as well as a performance theater and some recording studios.

most.

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# Yukon Denali and AT4 Editions Use Purposeful Technology

Who says nothing happens in January? Not GMC. The brand has unveiled the next-generation of its flagship SUVs, the 2021 Yukon and Yukon XL.

These vehicles offer enhanced by offering class-leading technology and elevated by precisely-engineered capability, said Duncan Aldred, vice president of Global Buick and GMC.

"GMC Yukon is the full-size premium SUV that's made to be used," said Aldred. "The new Yukon delivers what customers value most - premium features, purposeful technology and allterrain capability.'

The 2021 Yukon lineup is headlined by an all-new and more upscale Denali and the first-ever Yukon AT4, taking Yukon into the premium off-road space, Aldred said.

Yukon reaches a higher level of precise craftsmanship and premium accommodations through a combination of advanced features and class-leading technologies, including:

- New interior design across the Yukon lineup, highlight ed by a Denali-exclusive interior and a new, class-leading available Power Sliding Center Console.
- First-in-class, available, fourcorner Air Ride Adaptive Suspension delivers excep tional ride comfort and when 4WD LO is engaged, al lows drivers to raise the body up to 2 inches (50 mm) for additional ground clear ance when traveling off-road late availability).
- An available nine camera views, the most in the seg ment, increase driver aware ness, including High Defini tion Surround Vision, Rear Camera Mirror and GMC's ProGrade trailering system.
- Class-leading available 15inch-diagonal multicolor Head-Up Display projects speed, navigation, safety fea tures and other driver-cen tric information when prop erly equipped.

- the full-size SUV segment, an -new 6.2L V8 with Dynamic Fuel Management (standard on Denali) delivers an esti mated 420 horsepower, paired with a standard 10speed transmission.
- New available Active Re sponse 4WDTM System combines technologies in cluding an electronic Limit ed Slip Differential, to con tinuously monitor road con ditions and react to improve traction, handling and over all control.

Denali, GMC's premium luxury sub-brand, has driven much of the brand's consistent growth in recent years by adding an elevated level of design and premium craftsmanship. Introduced on the 1999 Yukon, Denali has since grown to include all GMC product lines but has always been synonymous with Yukon. About 60 percent of Yukon buyers select Denali, making it a focal point for the next-generation design.

"Yukon was the model in which Denali originated in 1999, and now more than 20 years later, we're introducing the quintessential Denali," says Helen Emsley, executive director of Global Buick and GMC Design. "It delivers a first-class experience with

• The most powerful engine in an all-new, exclusive interior and a bolder, more distinctive exterior design."

For the first time, Denali models now have an exclusive interior – a completely new instrument panel, unique seats and a choice among four unique color themes, each with its own personality outfitted with premium and authentic materials.

Each of the four color themes include authentic wood trim, with a fully natural look and texture. Leather surfaces are cut and stitched by hand in a unique Denali pattern.

As always, Denali offers the highest level of premium features and content in the new Yukon and Yukon XL. Highlights include:

- High Definition Surround Vision camera.
- 15-inch-diagonal multicolor Head-Up Display.
- Rear Pedestrian Alert.
- Fourth-generation Magnetic Ride Control.
- Premium available options, including 22-inch wheels, panoramic sunroof, Air Ride Adaptive Suspension and Active Response 4WDTM System.

The Yukon's new first-class interior features a Power Sliding Center Console, available on Denali, AT4 and SLT. The main storand passenger seats can slide back up to 10 inches (254 mm), offering an expansive storage area that enhances overall storage flexibility and organization.

When the console slides back, drivers gain access to an open space for a purse or bag, and an additional hidden drawer underneath the console's main storage bin, which provides secure storage and peace of mind.

Following the breakout popularity of the new Sierra AT4 pickup and the more recently launched Sierra HD AT4 and Acadia AT4, the new Yukon AT4 is squarely focused on rugged adventure. GMC will offer the new AT4 sub-brand across all product lines by the end of 2020.

Yukon AT4 provides premium off-road inspired design cues to match its strong capability. The first-ever Yukon AT4 features a unique front fascia that both visually carries the rugged all-terrain look and supports off-road capability.

Coupled with the available four-corner Air Ride Adaptive Suspension, the AT4 can raise and offer an additional 2 inches (50 mm) of ground clearance. When at this maximum height, the Yukon AT4 offers a nearly 32degree approach angle for added off-road capability. AT4 provides

age console between the driver a contrast to Denali's chrome-oriented look around the exterior, with trim characterized by body color or dark accents throughout, as well as a pair of red recovery hooks, similar to the Sierra AT4.

> "Our mission with the nextgeneration Yukon was to create an off-road capable vehicle with a premium interior, advanced technology and class-leading space for eight people and their cargo," said Jim Danahy, executive chief engineer of full-size trucks.

> The heart of the new Yukon is its -new Active Response 4WDTM System, a combination of technical systems including: auto twospeed transfer case, Traction Select, chassis controls and a new electronic Limited Slip Differential. Coupled with the new multilink independent rear suspension, the Yukon offers the ride sophistication and isolating characteristics typically associated with smaller vehicles but scaled for the capability requirements of GMC's full-size SUV customers.

The available four-corner Air Ride Adaptive Suspension offers ride-height adjustments of up to 4 inches total, as well as an automatic self-leveling feature. Drivers can raise the body up to 2 inches for additional ground clearance when driving off-road.

GMC's launch of the new (I-r) 2021 GMC Yukon AT4 and Denali represent a move in to a higher level of precise craftsmanship and accommodations.

# **Chrysalis Loyalty Joins the CDK Global Partner Information Program**

global provider of automotive loyalty solutions for manufacturers, funders and retailers, has become a participant in the CDK Global Partner Program, the largest third-party marketplace of automotive applications and integrations, said Mark Fretwell. commerical director of Chrysalis.

CDK Global, Inc. is the largest provider of integrated information technology and digital marketing solutions to the automotive retail industry.

As a member of the CDK Partner Program, Chrysalis Loyalty will provide dealers and OEMs an

Chrysalis Loyalty, a major helping to renew them often before they realise they are within reach of a new vehicle." said Mark Fretwell, Commercial Director of Chrysalis Loyalty.

"Our partnership with CDK means dealers across North America can benefit from oppor-

tunities to deepen relationships that lead to a fresh sale. By enabling dealers to connect customers and finance offers with new and used inventory,via CDK's unrivaled stock data, it turbocharges opportunities for renewal sales

"In turn, the integration of Key2Key with CDK's state-of-theart platform will be instrumental in helping to drive our North American growth ambitions."

"The CDK Partner Program is a powerful network that serves both dealers and their customers," said Howard Gardner, vice president and general manager of CDK Data Services.

"We are thrilled Chrysalis Loyalty has joined our more than 500 partner organizations that provide innovative dealer solutions fully integrated with CDK.

#### News Pumps Up Tesla Share Value, Rewarding CEO Musk DETROIT (AP) – The meteoric compensation packages detailed it, raising hopes that the compa-

rise of Tesla shares that recently pushed the company's value over \$100 billion could turn into a supercharged payday for CEO

Elon Musk. Stock in Tesla Inc. rose another 4.1 percent Jan. 22, pushing the market value of the electric vehicle and solar panel maker past a critical milestone in Musk's pay package. He could get a stock options package worth over \$371 million.

in company filings with the U.S. Securities and Exchange Commission.

Musk could get more stock payouts for every additional \$50 billion increase in market capitalization. By meeting ambitious market capitalization and operational milestones, he could earn more than \$50 billion over the next decade if that value hits \$650 billion.

ny, which also makes battery storage units, could finally be turning the corner to profitability.

But Tesla has posted mostly

fourth quarter and about 367,500 for the full year in 2019.

Tesla, based in Palo Alto, California, had earlier projected deliveries of between 360,000 and 400,000 units worldwide.



application that helps them drive their business forward.

With access to the extensive CDK customer base, partners will have the opportunity to build solutions impacting nearly every area of business within the modern dealership, ranging from sales to service to data intelligence, Fretwell said.

The CDK Partner Program now numbers more than 500 partner companies and 840 unique applications auto dealers can use to run their businesses. As part of the CDK ecosystem, the Partner Program provides data and workflow integration to a range of third parties, OEMs and dealers.

'Chrysalis Loyalty's flagship data tool Key2Key identifies opportunities for dealers seeking to renew customers responsibly and sustainably. It avoids creating leads by rolling negative equity into longer term finance and identifies every appropriate contact moment in the customer's ownership journey - thereby

Tesla shares closed at \$569.56 on Jan. 22, giving the company a market capitalization of \$102.7 billion.

Shares have tripled in value since May, meaning Tesla's market capitalization now exceeds the value of Ford and General Motors, combined.

For Musk, hitting \$100 billion in market value triggers an option to buy 1.69 million shares of Tesla stock for \$350.02 per share. If he sells the shares, he would make just over \$371 million.

But for the options to vest, the market capitalization has to average above \$100 billion for the next six months, and it has to be above \$100 billion for the next 30 business days, according to the

In the third quarter, Tesla posted a surprising \$143 million prof-

losses during its first decade as a publicly held company, and it lost \$1.1 billion during the first half of last year. The company reports fourth-quarter results on Jan. 29.

Earlier this year the company said it delivered a record of about 112.000 vehicles in the

This wasn't the only news that Tesla recently made in the news, the Associated Press reported.

Also, on Jan. 22, the state of Michigan confirmed to the media that Tesla had reached a lawsuit settlement allowing the company to sell and service its vehicles in the state.

#### **Toyota Celebrates \$1.3B Expansion of Indiana Facility**

PRINCETON, Ind. (AP) \_ Toyota has completed a \$1.3 billion project modernizing an Indiana factory to boost vehicle production and adding 550 jobs, the company announced Jan.17.

The project at the Princeton assembly plant in southwestern Indiana included retooling, new equipment installation and adding advanced manufacturing technology so it could increase production of the Highlander SUV. Toyota said the project grew by \$700 million and 150 new jobs from what it first announced for the factory in early 2017.

Production recently began on the new 2020 Highlander at the factory, which now has about 7,000 employees and also builds Sequoia SUVs and Sienna minivans, according to the company. The plant that opened in 1998 can now build more than 420,000 vehicles a year, up from the 400,000 vehicles it built in 2016 before the modernization project began.

Toyota executives celebrated the project's completion with a ceremony attended by Gov. Eric Holcomb at the factory about 25 miles north of Evansville.

Some production changes are planned, with Sequoia work being shifted to Toyota's San Antonio plant in 2022 and the Princeton factory continuing to build mid-size SUVs and minivans.

The company also announced it would spend \$1 million on a new program to expose area high school students to advanced manufacturing career options.

Toyota Indiana plant President Leah Curry said the program would give students a potential jump start on job opportunities in the region.



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