Detroit Auto Scene

"FIRST IN THE HEART OF DETROIT"

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2015: A YEAR IN REVIEW

The Good: Auto Sales and Profits Are Up; The Bad: Recalls, Fines; The Ugly: VW Cheats

by Jim Stickford

When historians look back at the year 2015, they will probably say it was a mixed bag for automobile manufacturers.

On the one hand, sales of vehicles in the U.S., as well as profits, reached levels not seen in years. On the other hand, 2015 was also a big year for recalls and government fines.

Although the industry experienced record sales, a plethora of new technolgy and the advent of driverless cars, all of this was overshadowed by the Volkswagen scandal.

By far, the leading story for 2015 was Volkswagen getting caught for deliberately cheating on emissions testings.

News broke in late summer that the world's top-selling automaker had cheated.

VW CEO Martin Winterkorn resigned, plans were announced to recall 11 million cars globally and set aside \$7 billion to pay for them. In the United States, where more than 500,000 VW cars were recalled, several government agencies began investigating.

Then there was the Takata airbag scandal. Japan's Takata

dence for years that its air bags could explode. A defect was linked to eight deaths and more than 100 injuries worldwide.

Takata agreed to pay U.S. regulators a \$70 million fine. It also agreed to phase out air bag inflators that use ammonium nitrate, which was blamed for the explosions.

In all, Takaka airbags affected millions of vehicles and 11 auto manufacturers.

There were many other recalls from fuel tanks and ignition

Corp. admitted concealing evi- switches to headlights and brakes. The record number and swift manner for reporting to NHTSA comes on the heel of the 2014 GM Cobalt ingnition scandal that caused an overhaul in the NHTSA rules, regulations and fines.

> As for 2015 auto sales, Kelley Blue Book estimated on Dec. 23 that new-vehicle sales are expected to increase 13 percent year-over-year to a total of 1.7 million units in December 2015,

> > CONTINUED ON PAGE 3



Mary Barra at the 2016 Chevy Cruze reveal in June



2015 Jeep Cherokee being made at Toledo Assembly



Ford's Joe Hinrichs, right, at F-Series Super Duty assembly line



2016 Chrysler Town and Counry

Chrysler Leads Everyone In Minivan Sales – Again

Chrysler and Dodge have com- numbers and were looking for an

Ford Employees Develop 6,000 Inventions

From the automaker whose founder, Henry Ford, was known for introducing innovations – the affordable car, the assembly line, the franchise dealer and more comes a record number of new patents

Ford Motor Company employees this year delivered 6,000 new inventions, - an increase of 36 percent from 2014.

Ford Smart Mobility and other initiatives continue to accelerate the pace of innovation, said Ford spokesman Karl Henkel.

Many of the new patents have been related to autonomous and connected vehicles, wearable devices, eBikes, navigation, ridesharing platforms and other technologies, said Henkel.

These patents include technologies to help autonomous vehicles detect other vehicles at obstructed intersections, as well as technologies to alleviate range anxiety in electrified vehicles and to extend range in real-world driving.

Mobility – the company's plan to use innovation to ascend to the next level in connectivity, mobility, autonomous vehicles, the customer experience, and data and analytics - 2015's record-breaking output of inventions features thousands of technologies that enable key advancements in connectivity, analytics, wearables, electrification and safety.

For example, a new bike system can detect bike lanes and alert cyclists of path deviations. Another one would suggest a safe vehicle speed based on nearby infrastructure, average vehicle speed and GPS data, and a new front brake light technology would improve vehicle-tovehicle and autonomous drivingto-pedestrian communication.

"The commitment Ford has made to innovation is commendable," said James Malackowski,

an intellectual property firm.

"The strength of Ford's patent portfolio has resulted in the company being named a constituent to the Ocean Tomo 300 Patent Index for five years.'

Ocean Tomo annually releases its 300 Patent Index, which is based on the value of a company's intellectual property.

Hundreds of Ford employees all over the world are responsible for this achievement, Henkel said.

In the past three years, Ford employees in Asia Pacific increased invention disclosure submissions more than 140 percent, North America is up almost 100 percent and Europe saw an increase of more than 50 percent.

Recently, Ford showcased the breadth of its patent portfolio by licensing robotic test driving technology, which saves time

bined once again to lead all automakers in minivan sales in the motive transportation. United States and Canada.

That's no surprise to Chrysler, the inventor of the minivan.

The first minivan was introduced in the year 1983, when Ronald Reagan was President of the United States. Lech Walesa was the Nobel Peace Prize Laureate

The Internet was created, and the first mobile phones were introduced to the public. U.S. astronauts completed the first space shuttle spacewalk, the Baltimore Orioles won the World Series – and Chrysler hit a home run with the introduction of the first minivan.

While the minivan was introduced in 1983, it got its start in 1977, said Fiat Chrysler spokesman Jiyan Cadiz. In the late 1970s, U.S. "baby boomers" were starting families in large

economical alternative to auto-

Traditional sedans and wagons continued to get smaller due to pollution and fuel economy concerns, and full-sized vans were being customized as passenger vehicles - but the combination of poor ride comfort, large size and rear-wheel-drive design did not make them ideal for family hauling, Cadiz said.

Chrysler designers and engineers understood the shortcomings of the full-sized van and began early development studies on a vehicle that would fulfill the needs of new families.

Chrysler pinpointed a potential vehicle market that needed to deliver a few simple premises: fuel-efficient, easy to step into, family-friendly and smaller than the Dodge Ram Van.

CONTINUED ON PAGE 4

Another new invention is designed for cyclists - allowing riders to report road obstacles to help other riders.

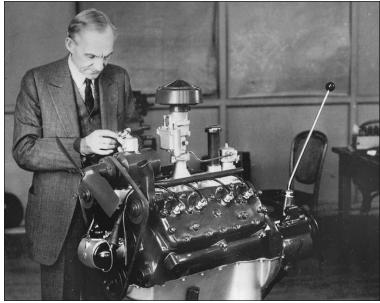
"Our engineers and scientists are inventing ways to address mobility challenges more than ever - with more patent applications filed this year on car-sharing, wearables, bikes, cloud computing and in other areas to improve consumers' lives inside and outside the car," said Raj Nair, Ford executive vice president and chief technical officer.

"By hosting – and participating in - more internal hackathons and innovation labs, our employees are stepping up to show that inventing is a priority for leadership in the industry.'

Nair said as part of Ford Smart

chairman and CEO. Ocean Tomo.

CONTINUED ON PAGE 4



Henry Ford with a 1932 V8 engine

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DETROIT AUTO SCENE

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FCA Recalling 450,000 Jeep, **Durango SUVs**

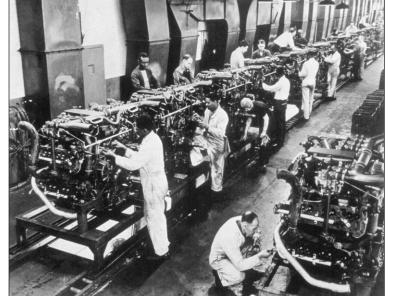
NEW YORK (AP) - Fiat Chrysler Automobiles is recalling nearly 450,000 SUVs worldwide in two separate recalls that include the Jeep Grand Cherokee.

The automaker said Dec. 24 about 353,000 Jeep Grand Cherokee and Dodge Durango SUVs with model years 2011-12 are being recalled because wiring in the vanity mirror may overheat and create a fire hazard. No injuries or accidents were reported

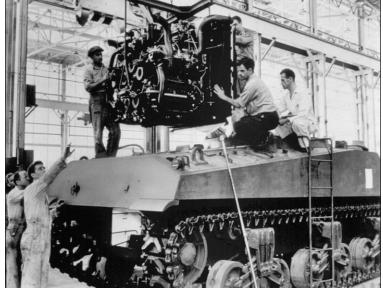
The second recall is for more than 93,000 Jeep Compass and Patriot SUVs with model year 2015.

The company says it will inspect and fix a clamp that may be out of position.

The out-of-position clamp may allow power steering fluid to leak, creating a possible fire hazard. The automaker says no injuries or accidents were reported.



Chrysler's Jefferson Ave. plant in 1942



Engine and Sherman M4A3 tank at Warren Tank Plant in 1942

FCA Releases Documentary on 'Arsenal of Democracy'

production extends beyond the auto industry. There was a time when that production played a major role in saving the world.

To that end, in recognition of the 75th anniversary of President Franklin Delano Roosevelt's historic "Arsenal of Democracy" radio broadcast (Dec. 29, 1940), Fiat Chrysler has released "Automakers and the Arsenal of Democracy," a short documentary that chronicles the role of the Chrysler Corporation as one of the primary military suppliers for the Allied war effort.

Narrated by Fiat Chrysler historian Brandt Rosenbusch, the nearly six-minute feature provides viewers with an unprecedented look at the Chrysler Corporation's wartime production, Frazier said, which included trucks and tanks; aircraft parts and components; guns, ammunition, rockets and bombs; and a

Detroit's history of industrial variety of other goods and materials that were a vital part of military operations.

> The documentary may be viewed on Chrysler's YouTube channel.

> And, Fiat Chrysler continues that tradition of supporting and honoring those who serve - both past and present, said Fiat Chrysler spokesman Kevin Frazier.

> The Auburn Hills automaker supports the men and women of the U.S. Armed Forces, both at home and abroad, said Frazier.

> Fiat Chrysler currently has numerous employees who are on active military leave, active or inactive reservists or veterans. Further, the automaker has numerous military-related programs, Frazier said, emphasizing community growth, support and gratitude throughout the U.S. and the world, including:

• Annual monetary donation

to the Marine Toys for Tots Foun- Armed Forces, Fiat Chrysler has dation program.

• Support toward the construction of the World War II Memorial in Washington, D.C.

• Financial support of the United Service Organizations (USO)

 Donation of Jeep vehicles to selected Operation package recipients.

As a partner with our U.S.

played a vital role in keeping America safe and free, Frazier said. The company continues to support the men and women who serve in the fight to enable and preserve democracy for the rest of the world, he said.

Fiat Chrysler, Frazier said, assists vehicle restorers, collectors and scholars with information from the corporate archives.





NAIAS Auction to Benefit Dealer Charity Arm

tional Auto Show (NAIAS) and *Robb Report* are holding a charity auction to raise funds for the Detroit Auto Dealers Association's Charitable Foundation Fund.

Robb Report spokeswoman Elyse Heckman said the auction, also known as The Gallery, will feature a "world-class" array of silent auction items for the evening's festivities, encompassing unique luxury experiences and products from the worlds of culinary, fashion, style, design, and hospitality.

Proceeds from the evening will benefit the Detroit Auto Dealers Association's Charitable Foundation Fund.

Heckman said The Gallery event has become the official kickoff to NAIAS, taking place this year on Saturday, Jan. 9. Hosted once again at the MGM Grand Detroit, guests will enjoy dinner served by worldrenowned chef Wolfgang Puck Guests will have the added opportunity of strolling through a \$7 million collection of brands such as Aston Martin, Bentley, BMW, Ferrari, Lamborghini, Maserati, Porsche, Rolls Royce, and many more iconic nameplates. "Our partnership with Robb Report brings a new element of luxury to The Gallery, as their expertise in luxury lifestyle is the perfect complement to the event's featured luxury automobiles on display. Our guests will experience a fully immersive and comprehensive evening of unforgettable luxury and top-tier design," said Paul Sabatini, 2016 NAIAS chairman. "I'm truly amazed at the roster of unbelievable auction items Robb Report was able to curate for our incredibly lucky guests." The Gallery will welcome nearly 500 high-net-worth guests over the course of six hours, Heckman said. Guests will have the opporsilent auction items, which include the likes of the following items, shopping excursions and vacation packages:

• An all-inclusive luxurious 8-Day European River Cruise (\$6,000 - over \$10,000) from Uniworld Boutique River Cruise Collection;

• A Custom-Made Suit (\$5,000) from Bespoke Neapolitan Tailor;

• A Cleveland Cavaliers package, including four courtside seats to a home game, dinner and drinks in the owner's suite, an authentic autographed Le-Bron James jersey, and a onenight stay at The Ritz-Carlton Cleveland;

• A South Floridian 'Shop & Stay' Experience with Miami's Premier Fashion Destination, Aventura Mall and Mediterranean-Style Retreat Turnberry Isle Miami, home to Celebrity Chefs Michael Mina's BOURBON

The North American Interna- tunity to bid on a selection of Steak and Scott Conant's COR-SAIR restaurants;

Tickets to The Gallery and more information can be found on the NAIAS website naias.com.



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Detroit Auto Scene

JANUARY 4, 2016

"FIRST IN THE HEART OF DETROIT SINCE 1933"

For 2015 – The Good: Sales, Profits Were Up; **The Bad:** Recalls, Fines; **The Ugly:** VW Cheats

CONTINUED FROM PAGE 1

resulting in an estimated 18 million seasonally adjusted annual rate (SAAR).

Kelley Blue Book also said December will cap the biggest year of U.S. new-car sales that the industry has ever seen, with total light vehicle sales of roughly 17.5 million, representing a 6.1 percent jump from 2014 totals. The previous high was 17.35 million units in 2000.

"December has become one of the biggest sales months of the year, helped by year-end targets and prominent holiday sales events," said Tim Fleming, analyst for Kelley Blue Book. "As we move into the new year, expect this strength to continue, although at a slower rate than this year.

million to 18 million units, which would represent another recordbreaking year."

As for profits, full-year results aren't in yet. But GM's third quarter was strong. Profits fell slightly, but the company rode strong North American sales to overcome \$1.5 billion in costs from its deadly ignition switch recall.

Meanwhile, Ford's gamble on trucks has paid off. Pickup trucks drove the Dearborn automaker to record North American numbers in the third quarter, and the company expects the trend to continue for a while, said Ford sales analyst Erich Merkle.

Ford earned \$2.7 billion in North America, up 89 percent from a year ago, largely due to higher sales of its new F-150 pickup truck. Ford debuted the alu-"In 2016, Kelley Blue Book fore- minum-sided truck in the fall of

casts sales in the range of 17.5 2014, but didn't hit full production at its two U.S. facilities until June. "What really stood out were the F-Series," said Merkle. "Trucks really stole the show."

Sales of F-Series pickups hit a nine-year high in the third quarter.

the other hand, Fiat On Chrysler was unable to escape recall costs. Net income for Fiat Chrysler's U.S. operations fell 89 percent in the third quarter as the automaker set aside millions of dollars to pay for future safety recalls.

The Auburn Hills company reported its net profit was \$70 million in the third quarter comVolkswagen's defeat devices were developed at this facility. pared with \$611 million last year. Fiat Chrysler US posted a little

\$848 million adjustment for recalls, along with \$159 million for more than \$1 billion in one-time vehicles damaged in a Chinese pretax charges. That included an port explosion last August.

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OCC Names New Executive

Robert M. Kelly assumed the Ford Motor position of executive director of facilities operations at Oakland Community College (OCC), effective Dec. 7. Prior to joining OCC, he was assistant superintendent for auxiliary and support service at the state's second-largest K-12 district, Utica Community Schools, said OCC spokeswoman Bridget M. Kavanaugh.

Kelly will oversee the public safety, risk management, construction, environmental health and safety, and maintenance departments for the school's five campuses, including more than two million square feet of classroom, library, office, administrative. and common areas.

Kelly brings nearly 30 years of professional experience in facilities operations and support services including work with L'Anse Creuse Public Schools, Ford Motor Land Services and

Company, Kavanaugh said. At Ford, he managed the infra-

structure and capital spending plan and budget for corporate, commercial and Research and Engineering Center properties, as well as maintenance and construction for Ford World Headquarters and other properties.

"Bob brings a level of expertise and a steady hand to help ensure our campuses are highly efficient and safe learning environments," said Peter Provenzano, vice chancellor of Administrative Services

"As OCC's facilities wear with age and heavy use, we need to be sure our classrooms, labs, auditoriums and grounds meet the needs and expectations of our students and community while we continue to address the financial challenges in higher education.













PAGE 3

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Patent leadership continues on efficient powertrain technologies. Henkel said. Ford has increased filing of electrification patents nearly 200 percent in the

In 2014, Ford filed for more than 400 patents dedicated to electrified vehicle technologies.

Prior patents on technology that benefits consumers include Ford's EcoBoost engine lineup, which offers a combination of fuel efficiency and power to meet a wide range of driver needs, Henkel said.

Ford has 275 U.S. patents on EcoBoost, with another 200 pending. Ford has more U.S. on gasoline turbocharged direct-injection -EcoBoost - technology than any other automaker today, Henkel

Inventing is an important part of Ford DNA, Nair said, pointing out that Henry Ford earned more than 150 patents for his inventions.

Ford Shelby GT350 Mustang, BMW 340i Among Ward's '10 Best Engines'

The 10 best engines in the industry are honored every year by *WardsAuto* editors.

The publication released in December its list for model year 2016, and the winners represent a broad spectrum of the industry. The 3.6L DOHC V6 (Chevrolet Camaro/Cadillac ATS), the 2016 Chevrolet Volt propulsion system and 3.0L Turbodiesel DOHC V6 (Ram 1500 EcoDiesel) engines were written about in a previous issue of this newspaper.

Other winners included:

• 5.2L DOHC V8 (Ford Shelby GT350 Mustang);

• 3.0L Turbocharged DOHC I-6 (BMW 340i);

• 2.0L DOHC 4-cyl./50-kW Drive Motor (Hyundai Sonata PHEV);

• 3.5L DOHC V-6 (Nissan Maxima);

• 2.0L Turbocharged DOHC 4cyl. Boxer (Subaru WRX);

1.8L DOHC 4-cyl./53-kW
Drive Motor (Toyota Prius HEV);
2.0L Turbo/Supercharged

DOHC 4-cyl. (Volvo XC90).

WardsAuto editors really liked the Ford Shelby 5.2L DOHC V8 engine. They wrote, "Ford has no trouble muscling its way onto this year's list with a 526-hp naturally aspirated 5.2L bruiser of a V8 in the new Shelby GT350 Mustang.

"With its heralded flat-plane crankshaft and weight-reducing Plasma Transfer Wire Arc cylinder coating, Ford's "Voodoo" V8 casts a spell on *WardsAuto* editors by demonstrating that a red-line of 8,250 rpm is not something to fear but embrace.

"Derived from the 5.0L 'Coyote' V8 that won *WardsAuto* 10 Best Engines trophies in 2011 and 2012, the 5.2L, with old-school port fuel injection, 6-speed manual transmission and using premium fuel, reaches the 100 hp/L threshold, which is extremely difficult for a big engine without forced induction.

"Truly suited for hammering around the track, the GT350's engine is described as 'positively demonic' by a Mustang loyalist intoxicated by the brash exhaust note and subtle but soothing shimmy at idle.

"The Voodoo engine does everything well, from puttering around town to frightening small animals. *WardsAuto* editors consider it the pinnacle of internalcombustion engineering."

Editors noted that BMW remains "the most-honored automaker, with 32 *WardsAuto* 10 Best Engines trophies since the competition began in 1995. The latest comes for the new B58 3.0L turbocharged inline-6 that resides in the 340i sedan and is destined for numerous BMW applications in years to come.

"The 320-hp B58 replaces the N55 turbo 3.0L, which earned three trophies from 2011 to 2013. With a larger twin-scroll tur-

"Plug in the Sonata and bank on at least 27 miles of electric range before the direct-injection 2.0L starts the heavy lifting. Charging takes 2.7 hours with 240V or nine hours with a 120V wall socket.

"But plan to be pleasantly surprised, like one editor was, when a 30-mile commute with a full battery ends with 8 miles of electric range still in the battery. Thank the software that allows for aggressive regeneration while decelerating and braking.

"In real-world situations that included a mix of gasoline and electric driving, *WardsAuto* editors achieved fuel economy between 41 and 80 mpg. But it's not just about saving fuel. The highcompression 154-hp 2.0L is the soul of this hybrid and makes it enormously fulfilling and smooth to drive. And don't forget the \$4,500 in various federal tax credits."

WardsAuto editors said that Nissan has always been a strong performer when it comes to engines. The company collected its 17th *Wards Auto* 10 Best Engines trophy and the 15th for its 3.5L V6 that comes from its vaunted VQ engine family.

The VQ, in displacements ranging from 3.0L to 3.7L, won 14 straight trophies between 1995 and 2008.

"This year, it returns with a sig-

nificant overhaul in time for its launch in the all-new Maxima sedan, carrying over the aluminum block, port fuel injection, compression ratio and bore and stroke.

"But 61 percent of the new VQ's parts have been redesigned to reduce friction and weight and promote better breathing. The new heads, intake ports and intermediate locking valve timing make for more complete combustion, and a new intake manifold with wider and shorter runners improves airflow.

⁴Like the 3.0L that dazzled us in the Maxima in 1995, the improved VQ makes for light, lively and refined power delivery, and the sterling midrange torque is still there. And we can't recall ever getting 30 mpg from this engine long ago."

Editors said that Subaru was a returner to the list with another winner – its 2.0L turbocharged 4-cyl. boxer that turns the Subaru WRX into a riotous weekend racer or a docile suburban cruiser.

Editors wrote, "producing 268 hp and 258 lb.-ft. of torque, this direct-injection "FA" boxer has become the poster child for highoutput, affordable turbocharged 4s. Last year, it managed to float to the top of our list among a sea of 15 4-cyl. turbos, many of them quite good. "This year, there were eight 4cyl. turbos, and the WRX capitalized on that mathematical advantage with its low weight, twinscroll turbocharger and palatable \$28,895 base price, with Premium trim.

"The FA boxer makes the WRX fast, fun and spirited, while being perfectly suitable for daily driving. This is a great engine that completes the package: a reasonably priced practical sports car with a rally racing heritage."

Editors also praised Toyota's fourth-generation Prius engine. They wrote that "with an all-new 95-hp 1.8L 4-cyl. paired with two electric motors pumping another 53 kW of juice from batteries stored in the rear, the new Prius delivers seamless acceleration and real-world fuel economy during our evaluations of up to 61 mpg.

mpg. "There's a lot of new technology onboard, such as the cooled exhaust-gas recirculation used for the first time on a Prius to improve fuel economy and emissions. It's quieter and silkier than the old Prius, and a 'Power' button provides a noticeable kick on freeway entrance ramps.

"With an attractive as-tested price of \$24,700, the Prius is the least-expensive vehicle on our list, while selling at the highest volume." from the *WardsAuto* editors for the company's consistency.

Editors wrote that last January, Volvo's Michael Fleiss collected a trophy for the 2.0L T5 turbocharged 4-cyl. in the S60 sedan and told a *Wards Auto* editor he would be back in January 2016 when the more powerful 2.0L T6 engine wins an award as well. It was a gutsy statement. And one that Volvo was able to make good on.

"But a year later, after our editors have driven the new XC90 and routinely got better than 24 miles per gallon in a big 7-passenger CUV with all-wheel drive, the WardsAuto staff now is equally enthusiastic about this all-aluminum engine rated at 316 hp and 295 lb.-ft. of torque."

Editors also liked the way that only four pumping pistons provided the power necessary to effortlessly drive this 3-row peoplemover. This results in the XC90 "having the composure, power and refinement of a high-feature V6. The T6 arguably is the new benchmark for high-output 4-cyl. engines."

This, editors wrote, sets this direct-injection powerplant apart from other small engines employing forced induction in the pairing of supercharging to provide immediate punch with turbocharging to carry on at higher rpm.

Volvo also received praise

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bocharger, higher compression ratio and the impeccable balance afforded by an inline layout, BMW proves once again an engine need not make outrageous horsepower or torque numbers to be enormously rewarding and thrilling to drive.

"The 340i loves to stretch its legs in the upper reaches of the powerband, which didn't stop a number of editors from topping 25 mpg during our evaluations.

"The B58 springs from a new modular architecture that begins with the 6-cyl., then lops off pistons to make 3- and 4-cyl. variants. Those B38 and B48 engines, evaluated in Mini Hardtops in this year's competition, also impressed the editors, but not quite like the BMW 340i."

Editors called the Hyundai Sonata plug-in hybrid "remarkable." It employs an "excellent 2.0L 4-cyl. paired with a 67-hp electric motor, which draws energy from a 68-kW lithium-polymer battery.







2016 Midnight Edition of the Chevrolet Trax

Chevy Trax Strikes Midnight

Chevrolet will be producing the 2016 Trax Midnight Edition a blacked-out styling statement for the small SUV.

The new model offers customers a bold choice and "adds to the momentum of the brand's record 2015 crossover sales," said GM spokeswoman Leslie

"Introduced just a year ago, the Trax has quickly become an important vehicle for Chevrolet, bringing in new, younger and more female buyers to the brand," said Betsy Flegg, senior marketing manager, Chevrolet

"The small SUV segment is the fastest-growing in the industry and models such as the new Trax Midnight Edition provide customers an expressive option."

Based on the LTZ trim, the Midnight Edition features black wheels, bezels, beltline molding and door handles, along with a black rear license plate applique. Inside, the seats are trimmed with gray accents and the floor mats feature gray piping.

Trax sales were 57,707 for the first 11 months of 2015, placing it LTZ's \$26,125 suggested MSRP.

Call it going over to the dark second in the segment, with almost 20 percent market share, Rajewski said. Chevrolet crossover sales were up 35 percent for the same period.

Fusing small-car agility and utility convenience of an SUV, said Trajewski, Trax offers up to 48.4 cubic feet of cargo space. A 1.4L turbocharged engine offers the efficiency of a small displacement engine – an EPA-estimated 34 mpg highway (FWD models) – with the power of a larger engine on-demand, she said. Connectivity features include an available 4G LTE Wi-Fi hotspot.

Trax is joined by a full complement of Chevy crossovers and SUVs including the Equinox, Traverse, Tahoe and Suburban, Rajewski said. The Trax Midnight Edition will be assembled at GM's Bupyeong-gu facility in South Korea. It's based on GM's Gamma II platform. The original Gamma platform was developed by Opel. The Gamma II platform was developed under the leadership of GM Korea.

The Trax Midnight Edition goes on sale in late February 2016, with a package price of \$500, in addition to the Trax





PAGE 7

DENSO to Display Its New Technologies at NAIAS

Automotive supplier DENSO will showcase its safety, autonomous drive and environmental technologies with interactive, augmented reality displays at the 2016 North American International Auto Show (NAIAS), to be held at Cobo Center in Detroit Jan. 11-24.

A premier sponsor of the event, DENSO is exhibiting at the show for the 12th consecutive year, said DENSO spokeswoman Bridgette LaRose.

The supplier, which has its North American headquarters in Southfield, will use an augmented reality platform to show its vision for "smart cities" of the future, and how its tech could be used to make life smarter, safer and easier, LaRose said.

The display shows how vehicles, infrastructure, homes and grids can become connected and more energy-efficient in future smart cities. In this Smart City, vehicles talk to each other and to the city infrastructure.

Visitors will see how these technologies can be used to time traffic lights, prevent accidents, or work with a phone app to book a parking space or get transportation within city limits.

In the residential area, users will see how their home will "know" when you're approaching and automatically adjust your heating/cooling and lighting, LaRose said.

In the farming area, unmanned machinery could work the fields and maximize all areas of crop productivity based on communicating information from a centralized location. Users will see how this tech can be used in semi-truck long-haul platooning.

DENSO. LaRose said. will also be showing off its safety technology. The company's exhibit will feature a Harmonious Communications Cockpit equipped with safety support systems and intelligent technologies to help drivers and passengers arrive at their destinations safely.

To move to a society free of driving accidents, LaRose said, this cockpit features Head-up Display so drivers can keep their eyes on the road. Features include:

• Harmonious Lumi that illuminates to inform drivers of obstacles in the road;

• Driver Status Monitor. a camera to monitor the driver's attentiveness; Active Footrest to notify the driver when lane change assistance is activated;

• Electric Mirror, which displays rear and side images when a potentially threatening situation is detected.

DENSO also will display its Advanced Driving and V2X technologies.

The company will also display its newly developed standardized Heating, Ventilating and Air Conditioning (HVAC) unit, which received the Automotive News Premier Automotive Suppliers' Contribution to Excellence (PACE) Award in 2015 for its industry-first standardized HVAC unit that is 20 percent smaller and lighter than conventional units, said LaRose.

It's the world's first standardized HVAC component that can be used in a variety of vehicles. which will allow carmakers to realize a cost savings, LaRose said.

DENSO also will feature its Gasoline Direct Injection (GDI) and Hybrid, Electric Vehicle (HEV) and Stop/Start technologies.



SERVICE: Sun CLOSED; M, TH 7am-8pm; T, W, F 7am-6pm; Sat 8am-1p No Security Deposit Required. Programs subject to cl to change without notice. See dealer for details. Exp ange. Pho res 1/4/16





PAGE 8

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REMIUM I



Southfield-based Superior Industries International, Inc., a manufacturer of aluminum wheels for passenger cars and light-duty vehicles in North America, appointed Michael Bruynesteyn to its board of directors, effective immediately.

Bruynesteyn's appointment increases the size of the board to eight directors, seven of whom are independent, said Superior spokesman Kerry Shiba.

Bruynesteyn currently serves as treasurer and vice president of Strategic Finance at Turner Construction, the largest nonresidential commercial construction company in the United States, Shiba said.

He has more than twenty years of finance experience, largely focused on the automotive industry in a variety of global senior roles spanning corporate finance, investment banking and equity research. He has also served, since 2013, as a member of the advisory board of Levant Power Corporation, a privatelyheld developer of automotive active suspension technology.

"We are extremely pleased to welcome Michael Bruynesteyn to the board of directors of Superior Industries," said Margaret S. Dano, chairman of the board. "His extensive experience in finance and capital markets and his in-depth knowledge of the automotive industry, along with a proven track record as a financial strategist, comes at an exciting time of transformation at our company.'

IHS Purchases Canadian Car **Info Company**

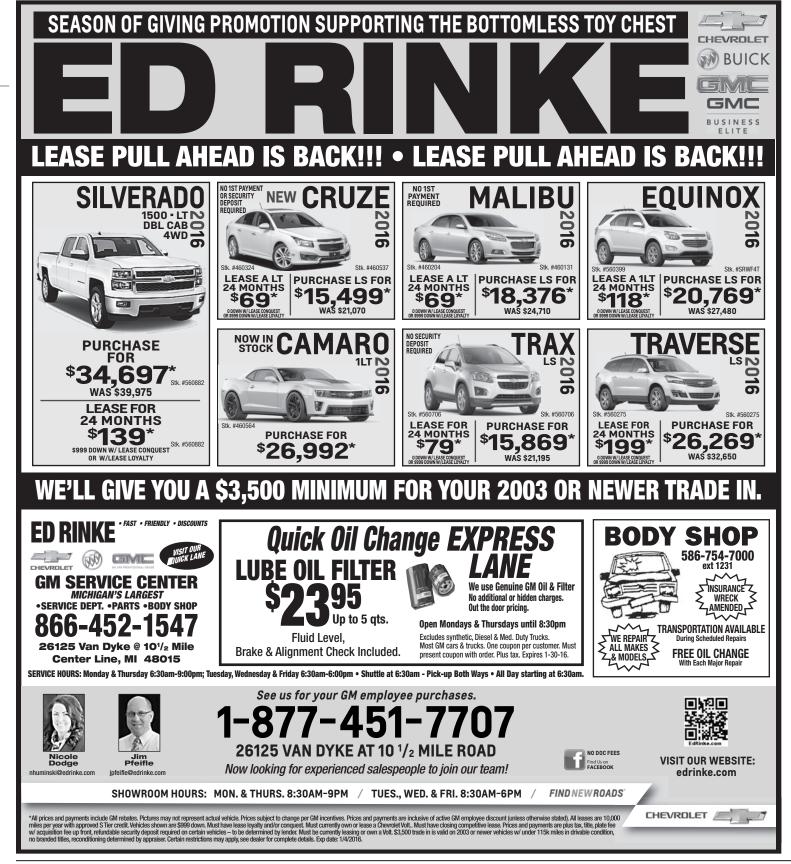
IHS Inc., a global source of critical information and insight, on Dec. 28 acquired CARPROOF Corporation, a Canada-based company that offers products and services in vehicle history, appraisal and valuation for the automotive industry, for \$650 million CND (approximately \$460 USD), million said IHS spokesman Dan Wilinsky.

More details on the acquisition will be provided on the IHS fourth quarter and year-end 2015 earnings call on Jan. 12, 2016. Wilinsky said.

CARPROOF was founded in 2000, Wilinsky said, and is the industry standard in Canada for providing automotive vehicle history reports to dealers, auto auctions, original equipment manufacturers, lenders, insurers, governments, law enforcement agencies and consumers.

Wilinsky said CARPROOF has been repeatedly recognized as one of Canada's best managed





companies and has appeared on Deloitte's Technology Fast 500 and Fast 50 lists.

In July 2013, IHS acquired CAR-FAX, the leading vehicle history expert for used car buyers, sellers and the automotive industry in the U.S., Wilinsky said.

"Like CARFAX, CARPROOF is a high-growth business and gives IHS the opportunity to expand our vehicle history report services into Canada," Jerre Stead, chairman and chief executive officer of IHS, said. "By combining the capabilities of CARPROOF and CARFAX, we also will accelerate product development to better serve the needs of our customers. This acquisition will add a highly accretive revenuegrowth and EBITDA-margin business for IHS, and provide significant room for further growth."

CARPROOF (carproof.com) employs more than 130 people in Canada and is headquartered in London, Ontario, Canada, Wilinsky said.