Tired? Ford Explorer Signals You When to Pull Over

DEARBORN – The new Ford Explorer will come with a cup of coffee for customers who opt for an innovative new Lane Keeping System that can warn drivers if it detects they are getting too tired to drive.

Ford will introduce in early 2012 an innovative Lane Keeping System with three unique features designed to help drivers stay in control behind the wheel, including a Driver Alert System that can notify drivers if it detects signs of drowsiness.

In this case, a coffee cup light will appear on the dashboard instrument cluster to suggest the driver take a break.

"The Explorer is loaded with new innovations, including this new lane-keeping technology that helps drivers stay in control of their vehicle if they drift out of their lane or show signs of drowsiness," says Raj Nair, vice president, Engineering, Ford Global Product Development.

The system uses a small forward-facing camera mounted on the windshield behind the rearview mirror, and is able to identify lane markings on both sides of the vehicle.

When the vehicle is on the move, the camera looks at the road ahead and predicts where the vehicle should be positioned relative to the lane markings.

"Our engineering teams tested this technology for thousands of miles in many parts of the country to help ensure it performs on a wide range of roads with different lane markings," said Michael Kane, vehicle engineering supervisor for Driver Assistance Technologies for Ford, who helped develop the technologies.

The Lane Keeping System is designed to help the driver avoid leaving his or her lane unintentionally. This new technology consists of the Driver Alert System, Lane Keeping Alert and Lane Keeping Aid.

The Driver Alert System is designed to help alert drowsy drivers by monitoring the vehicle's movement compared with lane markings that are tracked by a camera mounted on the windshield.

If the system detects a driving pattern consistent with a drowsy driver, a first-level chime will sound and a coffee cup warning will appear on the dashboard instrument cluster to recommend the driver take a break.

If the driver does not respond to this alert and the system continues to sense the driver is fatigued, another warning and chime will be issued.

Drivers can monitor their condition on the dashboard at any time, even without receiving warnings. If they approach the yellow warning range, they should rest as soon as possible.

All information is reset as soon as the driver stops and either opens the door or turns off the engine.

More than 40 percent of Americans say they have fallen asleep or nodded off while driving, according to a survey conducted by the AAA Foundation for Traffic Safety.

The Lane Keeping Alert is designed to help drivers avoid unintentional lane changes. When the system detects the vehicle drifting close to lane markings, it will alert the driver through a vibration in the steering wheel to naturally direct the driver's attention to where it is required.

This provides the driver with valuable time to react and steer the vehicle back.

To calculate the lane position, Lane Keeping Alert uses data from the front camera on the windshield. A display in the dashboard instrument cluster lets the driver know when the system is operational as not all roads are well-marked.

Lane Keeping Aid takes this technology even further by providing steering torque to alert the driver of the need to steer back toward the center of the lane. The system calculates the amount of steering required based on factors such as the distance to the lane markings, yaw angle and curve radius determined from the front camera and other sensors in the vehicle.

The 2012 Ford Explorer comes equipped with a Lane Keeping System and Driver Alert System that tells the driver when his driving has been irregular and he should take a coffee break.

If the driver prefers, the Lane Keeping Alert can work in combination with the Lane Keeping Aid. When the driver signals, the system is deactivated so that the vehicle can change lanes without intervention. The driver can override the Lane Keeping Aid at any time through counter-steering, hard braking or fast accelerating.

In these cases, the system recognizes that the driver has intentionally changed lanes.

While steering torque is being applied, the system also can warn the driver if it determines the driver may not have his or her hands on the steering wheel, based on the driver's steering efforts.

PHOTO: GERALD SCOTT

John Bruce, a U.S. Army Contracting Command employee, greets well-wishers at his retirement party held at the TARDEC engineering center's main auditorium in Warren last week.

Bruce Began Army Career In '42, Now Retiring at 94

by Gerald Scott
News Dept.

U.S. Army Contracting Command employee John Bruce, Jr., turns 94 years old on Dec. 3. This is notable because that's also the day he officially retires from the Army following 69 years of combined military and civilian federal service.

That's right, Bruce has logged 69 years of service counting 4 years during World War II followed by 65 years at the Detroit Arsenal in Warren.

This achievement makes him the longest-serving active employee in the Army up until his Dec. 3 retirement date.

The Army held a big, public ceremony for Bruce and his family last week in Building 200, the TARDEC engineering center's main auditorium, which was filled with admirers, family members and well-wishers.

Asked what he would miss most following the event, Bruce said, simply, "The people, the people, the people."

Indeed, Bruce's career effectively makes him a living history of the Detroit Arsenal and its various military residents including the Army Contracting Command, TACOM, TARDEC and more.

The tribute sent by Gov. Rick Snyder partially reads:

"As Governor of Michigan, it's my distinct privilege to express our state's deep appreciation for your 69 years of federal service to the U.S. Army.

"We are able to enjoy our freedom because of brave men and women like you who commit themselves to the defense of America."

Ford's Mulally Compares Car and Aviation Business

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only wanted to make great products . . . but he also wanted to contribute to a better world.

"You see a lot of alignment here between UDM and Ford.

"So, at the end of the day, the reason I decided to join Bill and join Ford was that I knew I was being asked to serve a second American global icon (in both Boeing, and then Ford)."

Mulally's eyes were opened because when he arrived in Dearborn back then, the automaker's "profit" for 2006 was a $17 billion loss.

"I might just point out that you can go out of business real fast losing $17 billion a year," he noted.

Mulally's talk was given in front of a rapt audience in the Student Center at UDM. That's where students, faculty and visitors gathered to get the announcement of the winners of an auto-industrial "innovation" contest jointly sponsored with Ford.

He described a "One Ford" vision where, instead of the pre-2006 Ford, which tended to operate on regional business and regional platforms without sharing parts or gaining economies of scale, well, Mulally effectively put Ford's disparate global operations under one roof, so to speak.

Mulally said his first choice to lead global engineering in this endeavor was Derrick Kuzak, Ford's current Group VP and someone who actually has three different engineering degrees from UDM.

"Derrick had a vision for Ford that was dramatically different from the situation they were in," Mulally said.

Kuzak gave a separate presentation, following both Mulally's talk and the Ford Innovation Day contest.

Kuzak described how Ford is implementing innovation, technology and smart engineering to effect all the changes that the CEO wants to see.

"So, with that kind of a compelling vision, we went to work, we decided we were going to have a laser focus on the Ford brand – and Lincoln," Mulally said.

"So we divested Aston Martin, Jaguar, Land Rover, Volvo, took down our equity position in Mazda, finished the production of Mercury, to get down to Ford and Lincoln."

Thus all of Ford's resources in Dearborn and around the world could then be concentrated on Ford brand and Lincoln, and that's it.

"We approached 500 banks in New York City to apply for a small 'home improvement' loan," Mulally said, of Ford's earlier effort to borrow $23.5 billion.

"I'm so pleased that in the third-quarter earnings announcement, we announced that we've paid back over $21 billion of the $23.5 billion that we borrowed.

"And we didn't go into bankruptcy and we respected all the stakeholders and shareholders and bondholders and we didn't take one dollar of precious taxpayer money.

"I'm just saying."

Ford's turnaround really has been dramatic as its domestic share is reportedly around 16.4 percent of the U.S. market – up noticeably from prior to Mulally's arrival.

One final note about Mulally and his roots in aviation.

"It's really quite incredible, the similarities between Boeing Commercial Airplanes and Ford," Mulally said.

"One is that both Bill Boeing and Henry Ford were dedicated to safe and efficient transportation.

"When you look at the there's an incredible integration.

"I might just point out that the 777 has 4 million parts – and it actually stays in the air."

So sayeth the airplane guy, who, given his track record in Dearborn over the past five years, we can now declare is a car guy, too.

Ford Ups the Ante on Fuel Economy With New Generation of Escape SUV

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bocharging, twin independent/variable camshaft timing (Ti-VCT) and direct injection to deliver the performance feel of a larger engine, makes its North American debut on the new Escape.

It is expected to deliver even higher highway fuel economy than the current Escape Hybrid, which is EPA-rated at 31 mpg highway.

The new 1.6L EcoBoost engine is also expected to deliver better fuel economy than most competitors' larger four-cylinder engines, Ford claims.

Since launch, sales of the 1.6L EcoBoost in Europe in Focus and C-MAX are exceeding expectations by 40 percent. The engine's broad, flat torque curve has been praised for its diesel-like performance (in Europe, at least, describing any engine as "diesel-like" is actually a good thing).

Greg Johnson, Ford North America Powerpack Manager, explained the technologies that are making the EcoBoost so popular worldwide for Ford, considering that the new type of engine only came to market in 2009.

"Turbocharging basically takes the waste energy that normally goes out the exhaust, and uses it to force air into the engine – significantly increasing the output of the engine," Johnson said.

"Increasing the output of the engine lets us replace bigger engines with smaller engines (in terms of displacement), delivering fuel economy for the customer.

"Direct injection sprays the fuel directly into the combustion chamber and provides a cooling effect in the combustion chamber that lets us run higher compression ratios in our engines.

"So, for instance, in this 1.6L engine, we're running a 10:1 compression ratio – that's extremely high for a turbocharged engine.

"The high compression ratio, once again, helps us deliver improved efficiency and improved fuel economy for the customer."

Indeed, Ford says it holds 125 patents on EcoBoost technology alone, which is now part of a global approach to provide affordable fuel efficiency for millions of drivers. That approach will extend the availability of EcoBoost to 90 percent of Ford vehicles by 2013.

Local Mystery Writer Weaves 'Misunderstood' Edsel Ford into Latest Novel

by Kurt Anthony Krug
Special Writer

Author D.E. Johnson thought that just because he read a lot of books, he could write a lot of books.

However, Johnson, 58, a Central Michigan University alumnus, soon found out that wasn't the case.

"I always wanted to write," he said. "It was the thing I wanted to do going into college (at Central Michigan University), but I became convinced it wasn't practical; I needed to do the practical thing that would pay the bills, so I decided not to pursue it at the time.

"But it just ate at me. I started books half a dozen times over the years. They were all dismal; I didn't have any idea what I was doing," he said.

Undaunted, Johnson spent two years studying writing and taking classes on the craft of writing. He also pounded out his first novel, which will stay in the inside of his computer.

He then tried his hand at writing humor, but found out he wasn't as funny as he thought.

The lifelong Kalamazoo resident has ties to the automotive industry.

His grandfather, Ralph Oakland, worked for Checker Motors in the 1920s when the taxicab manufacturer was located in Chicago and moved to Kalamazoo. Oakland eventually becoming a Checker vice president.

An automotive history buff, Johnson used his rich knowledge of his grandfather's background as a backdrop for a mystery.

"So I switched to the historical mystery. I love good historical fiction that takes me to a place I've never been before and helps me learn.

"I also love smart mysteries that will really pull the story along and keep me entertained and keep me guessing. Even though I did not read a lot of historical mysteries at the time, it just seemed like a good marriage for me," said Johnson.

His second novel, "Motor City Shakedown," was recently released. It's a sequel to his inaugural novel, "The Detroit Electric Scheme," featuring protagonist Will Anderson, the fictional son of the actual William C. Anderson, the owner of Detroit Electric, an automotive company that has been defunct since 1939.

"(The real Anderson) only had daughters. I figured I'd give him a son – he'd be happy about that," said Johnson.

"I thought it would be interesting to have a son who was a namesake because part of Will's character is that he very desperately wants to live up to what his father expects of him . . . carry on the tradition of being a successful businessperson and that sort of thing."

In "Shakedown," which occurs in Detroit circa 1911, Will is still reeling from the events of the previous novel. On top of that, he gets caught up in a gang war between the Adamo Gang and the Gianolla Gang, both of which were actual gangs, according to Johnson.

In the book, "One of the local gangs is trying to shake down Detroit Electric to get the Teamsters Union in. That leads to a problem with Vito Adamo, who Will has some unfinished business with in the first book," explained Johnson.

In real life, "Adamo was the first guy to consolidate the rackets in Detroit," Johnson said. "So, really, he was the first crime boss, although back in those days it was nothing like 'The Godfather' with all the money and power – they were still essentially street gangs that strong-armed people primarily."

He added, "The Adamo Gang and the Gianolla Gang had a shotgun war on the streets of Detroit. Over a period of nine months, there were dozens of men, nine of them killed, including a policeman. It was just chaos.

"In the newspapers of the day, practically every day the headlines were something about shootings, stabbings, beatings, and whatever else going on within a 9-block radius of what was Little Italy at the time."

Adamo is one of many historical figures appearing in "Shakedown." The author has a soft spot for Edsel Ford, the son of automotive pioneer and visionary Henry Ford.

Edsel Ford succeeded his father as president of Ford Motor Company from 1919 up until his death in 1943. Johnson stated that he feels Edsel Ford – a friend of Will's in his books – is a very misunderstood individual in the annals of automotive history.

"I think he was a brilliant guy – very creative and artistic, very philanthropic," explained Johnson. "He did a lot of great things for the city of Detroit.

"People remember him as his father's lackey more than anything else. I think he was a pretty remarkable person.

"When I was writing the first book, one of my minor goals was to raise a little awareness of Edsel's abilities.

"I've continued with him in this book but not in as quite a significant role. My thought is I'd rather talk about historical figures people aren't as familiar with, partly because it gives me a little more license with them. From a historical perspective, it makes it more interesting for me and, I think, for the readers as well."

Johnson did extensive research for his novels at the Benson Ford Research Center at Henry Ford Museum, which is part of The Henry Ford in Dearborn, and the National Automotive History Collection at the Detroit Public Library.

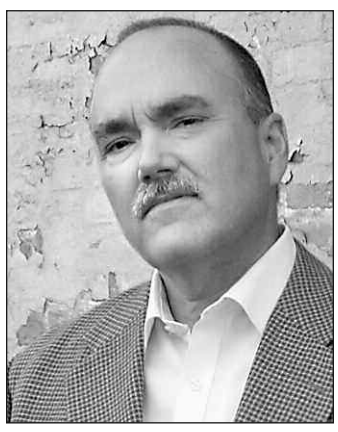
"The Benson Ford Research Center just has a phenomenal collection – they are just jam-packed with documents from the auto industry," said Johnson.

"They have a ton of stuff on Detroit Electric, including sales brochures and manuals going back to 1910. I was able to really put together a good understanding of the company and their products just by starting there and getting what I needed."

Johnson's research required him to pound the pavement. He walked around the city, taking photos, giving him a feel for Detroit.

"The one benefit of the city is that an awful lot of these 100-year-old buildings are still around, even though they may not be in good condition anymore.

"I did that (walked the city) until I felt like I could visualize what it was like at that time.



D.E. Johnson is a local author who specializes in novels that use the Motor City auto industry as his background. His latest book is called "Motor City Shakedown."

That was the point I started writing," he said.

"During my entire life, the city has been in a decline. As I started to do research, I saw what an incredible, vibrant, confident city it was. The enthusiasm that the business leaders and public leaders had for Detroit at the time – there was such a different feel.

"I wanted to communicate the Detroit that was and maybe could be again one day. I thought this might be a good way to do it."

According to Johnson, Will will return next fall for a third historical mystery.