

## Ford's Auto Start-Stop System Saves Fuel, Emissions

DEARBORN – Ford's popular fuel-saving technology that automatically shuts off the engine when the vehicle comes to a stop – a feature found today on the Ford Fusion Hybrid and Ford Escape Hybrid and some Ford cars in Europe – will soon be added to conventional cars, crossovers and SUVs in North America.

Ford's patented new Auto Start-Stop system for gasoline engines will improve fuel economy for most drivers by at least 4 percent. The gain can be as high as 10 percent for some drivers, depending on vehicle size and usage.

It can also reduce tailpipe emissions to zero while the vehicle is stationary or waiting at a stoplight.

Ford has more than 244 patents for its Auto Start-Stop technology and will showcase the feature on a concept in

January at the North American International Auto Show.

Auto Start-Stop is the latest example of Ford moving aggressively to bring affordable advanced fuel-saving technologies to all customers.

Ford has already introduced electric power steering, dual-clutch PowerShift six-speed transmissions and other fuel-saving features as part of the company's commitment to lead or be among the leaders in fuel economy in every segment.

Ford's global Auto Start-Stop technology is smooth, quiet and seamless, and it requires no changes to the driver's behavior. In city driving when the vehicle is stopped, the engine restarts the instant the driver's foot leaves the brake pedal. When the engine is off, all of the vehicle's accessories function normally.

"For the driver, Ford Auto Start-Stop provides extra fuel efficiency without inconvenience, as it works completely automatically," said Barb Samardzich, Ford vice president of Powertrain Engineering. "And, just like in our hybrid vehicles, the heater and air conditioner work as normal so drivers will not sacrifice comfort."

The global rollout of Auto Start-Stop is under way in Europe. The system, designed to work on both gasoline and diesel engines, is standard on the ECONetic models of the Ford Ka and Mondeo, and is launching now on Focus, C-MAX and Grand C-MAX. The fuel-saving system debuts in North America in 2012 and eventually will be offered in all of Ford's global markets.

Many North American Ford customers are already famil-

iar with Auto Start-Stop. A similar system has been installed on more than 170,000 gasoline-electric hybrid vehicles Ford has sold since 2004.

Ford is the leading domestic producer of start-stop systems. In 2011, the version of Ford's Auto Start-Stop designed for gasoline-electric powertrains will be on the Escape Hybrid and Fusion Hybrid, as well as the Lincoln MKZ Hybrid.

"Many of the same Ford engineers who designed the Auto Start-Stop system used on Ford and Lincoln hybrids are developing the Auto Start-Stop system for non-hybrid vehicles that will be sold around the globe," said Samardzich.

When Auto Start-Stop debuts in North America, it will be available on gasoline-powered cars and utilities with ei-



Ford's Auto Stop-Start technology, first developed on the Ford Escape Hybrid and other alternative vehicles, will now be deployed across other vehicles in the automaker's mainstream fleet.

ther a manual or automatic transmission, as well as vehicles that use Ford's patented dual-clutch six-speed automatic transmission.

Ford's aggressive move to direct-injection EcoBoost engines is one of the technologies that enable the Auto Start-Stop system to work

seamlessly, Samardzich said. The direct-injection system, which sprays the exact amount of fuel directly into the combustion chamber, helps enable extremely fast engine starts, Samardzich explained.

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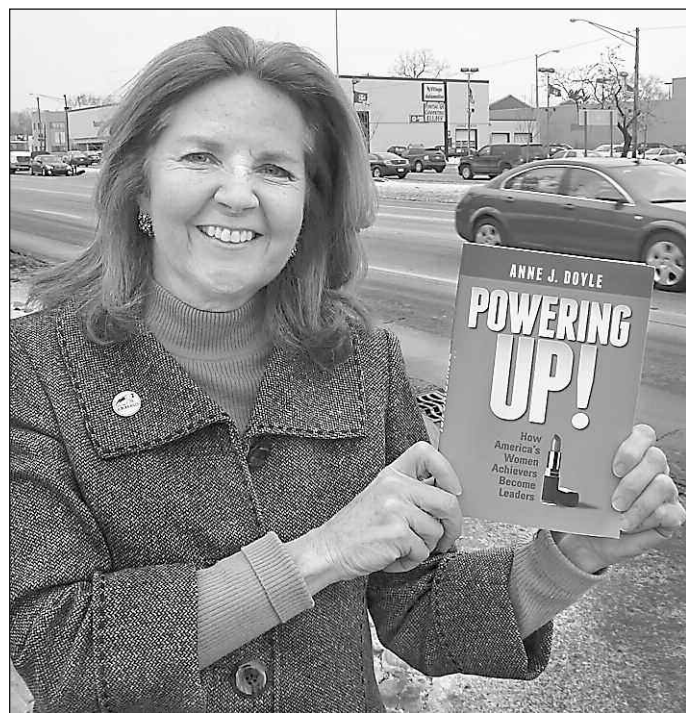


PHOTO: GERALD SCOTT

Former Ford executive Anne Doyle has published a new book about empowering women's leadership in the workplace.

## 'Powering Up!' with Former Ford Exec Anne Doyle

by Gerald Scott  
Editor  
U.S. Auto Scene

"Getting women engaged at the leadership level and throughout the auto industry and our whole society is not about 'diversity' to me – it's about the full engagement of the human race."

So declares former Ford executive Anne Doyle, who has written a new book about further empowering women's leadership in the workplace and will be published soon.

The book is entitled, "Powering Up! How America's Women Achievers Become Believers."

Doyle is a well-known metro Detroit presence by now – she was among the first female TV sportscasters in the nation to report from men's locker rooms, she distinguished her-

self at Ford communications, she continues to be a business consultant at Anne Doyle Strategies and in her spare time these days she's also a city councilwoman in Auburn Hills.

Somehow, she found the time to do cutting edge research and interview over 150 business women to write this new book. She differentiates between success and leadership – a given businesswoman may be perceived as a success, but she may not have gotten instruction in the particulars and nuances of leadership along

the way.

"However, despite our academic excellence, professional accomplishments and world savvy, American women are still leadership underachievers," a book blurb declares.

"Powering Up!" is an inspiring field guide that offers aspiring women practical steps, focus and courage required to lead."

Doyle worked at Ford Motor Co. from 1987 to 2000 and her time there gave her real-world immersion in the challenges that women still face when

climbing the proverbial corporate ladder.

"(I worked) primarily in public affairs and then I spent three years on the Governmental Affairs side – handling Washington and grass-roots political, creating that grass-roots political machine," Doyle said.

"So my last position was director of North America Communications for U.S., Mexico and Canada, for Ford, Lincoln-Mercury and all that.

"But over the years, I've also

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## New University of Michigan Study Says State to Add Manufacturing Jobs

By KATHY BARKS HOFFMAN  
Associated Press

LANSING, Mich. (AP) – For the first time in 11 years, Michigan is expected to add more jobs than it loses in 2011, yet there's little reason to toast the new year just yet.

University of Michigan economist George Fulton expects the state to add about 6,300 net jobs next year and 48,000 in 2012, giving the state an average 12.4 percent unemployment rate in 2011 and 11.5 percent in 2012, down from an average rate of more than 13 percent this past year.

The state still has a long way to go to replace the nearly 860,000 jobs it has lost since the economy began sliding in June 2000. Even a welcome 2-percentage-point drop in the unemployment rate

over the past year leaves it with a rate of 12.4 percent, behind only Nevada and tied for second place with California. Michigan now ranks 37th in per-capita personal income and was the only state to lose population over the past decade, according to new census numbers.

For 23-year-old Bret Wamhoff, who graduated in spring 2009 with an aeronautical engineering degree from Western Michigan University, the state's economic woes have temporarily halted his dream to work on a team designing cars or airplanes. He spent a year bouncing between work on his grandfather's farm and a part-time retail job, living with his parents in the Lansing suburbs while applying for engineering jobs around the country.

Getting no offers, he settled

in May for a six-month stint at Whirlpool Inc. as a lab technician modifying washers for product development tests in Benton Harbor. He started a new job last month with Xoran Technologies in Ann Arbor as an electro-mechanical technician, running tests and packing for shipment the CT scanners the small manufacturer builds.

"Graduating in Michigan with the current state economy has been another set of lessons in and of itself," said Wamhoff, who's making less than he had hoped to earn as an engineer. Now living with his wife in Ann Arbor, Wamhoff's glad he has been able to stay in Michigan and hopes engineering jobs become more plentiful as the economy improves.

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## After Toughest Tests, Ford's EcoBoost Truck Engine Ready for Its Physical

DEARBORN – Ford powertrain engineers will tear down an engine that has gone a distance equal to six times around the earth and three-quarters of the way to the moon. Or put another way: the engine has the equivalent of 160,000 miles and 10 years of rugged use.

Now, Ford engineers want to see how the engine's parts and components held up. They will disassemble and examine it for long-term durability in front of the public at the North American International Auto Show in Detroit at 11 a.m. on Jan. 15, 2011.

"Customers will be able to see for themselves how the components fared during a regime of tests that, when taken together, are far more extreme than even the harshest-use customer could dish out," said Jim Mazuchowski, V6 engines programs manager. "This EcoBoost truck engine received no special treatment, and now we're going to see how it did."

The F-150 EcoBoost engine saw its first action on the dyno in July. Engineers punished it in temperature and load extremes simulating

nearly 10 years of use – a regimen tougher than any consumer could ever subject a truck to. At this point, most engines would be ready to be rebuilt or retired, but the EcoBoost testing engine was just beginning.

The engine was dropped into a regular production 2011

F-150 at Kansas City Assembly Plant. Then, it hit the road and saw some of the most severe use Ford engineers have ever dreamed up:

- It hauled 55 tons of lumber
- It ran at full throttle for 24

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Ford engineers will disassemble and examine the 3.5-liter EcoBoost "hero" truck engine for long-term durability in front of the public at the North American International Auto Show in Detroit on Jan. 15.



PHOTO: STEFANIE CARANO

The UAW Local 900's 2010 Christmas Angels Program provided gifts for 145 children throughout Southeast Michigan. The Union Local is housed in Wayne.

## UAW Local 900 Gives 'Adopted' Kids A Merry Christmas with Food and Gifts

by Stefanie Carano  
Staff Reporter  
Detroit Auto Scene

Thanks to the generosity of UAW Local 900, disadvantaged children across Southeast Michigan had a Christmas this year.

The organization's 2010 Christmas Angels program invited 50 families representing 145 children from all over metro Detroit to the Local 900 hall on Dec. 18 for an afternoon of pizza, cookies, a visit with Santa Claus and a gift giveaway.

"Our members adopted these kids," said Ebony Kennedy, Local 900 co-chair and community service committee chair.

"The kids get to meet their angels, take pictures with them, eat lunch with them," he said.

Participating union mem-

bers chose a child – ranging in age from 0 to 16-year-olds – to adopt.

After their selection was made, the union members were required to either purchase gifts for the child based on a wish list provided or donate money to the community service committee to purchase gifts for them.

Names and information on the children came from area charity organizations.

"Some come in from the Salvation Army, some come in by referrals from social workers," Kennedy said.

"We also take in some veterans, a few families where the fathers got killed in Iraq and Afghanistan."

Kennedy said they worked with the Wayne and Westland Goodfellows for referrals as well.

Gift items ranged from clothing to toys to video

games and MP3 players, depending on the age and interest of the child.

Kennedy said books were a popular item, especially among the older children on the list.

"We had a big request for books," Kennedy said.

The Christmas Angels program is just one of a number of charity projects conducted by Local 900 each year.

After a fire at an apartment complex in Westland left 39 families without a home, Local 900 made a generous donation to help provide for the displaced residents.

Other projects this year included support of Forgotten Harvest, which distributes food to food banks and emergency food providers across Southeast Michigan.

UAW Local 900 represents Ford workers at plant locations in Wayne.