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EUROPEAN FORD FOCUS FIRST TO GET OHIO-BUILT CVT?

Following several delays, the Batavia, Ohio, joint venture plant operated by Ford Motor Co. and ZF Friedrichshafen AG will begin producing continuously variable transmissions for Ford late this year, reports *Automotive News*. A larger CVT will bow next year for Ford's upcoming Five Hundred and Freestyle vehicles that will be made in Chicago.

The newspaper, citing CSM Worldwide, says the first vehicle to get the smaller CFT 23 unit will be the European version of the Ford Focus small car. The Northville, Mich.-based forecasting firm also says the transmission will be used in a tall wagon derivative of the vehicle called the Focus MFV. ZF and Ford confirm they plan to ship the CFT 23 to Europe but won't reveal the application.

CVT versions of the Focus and Focus MFV are expected to total 30,000 vehicles per year, according to *AN*. CSM says the transmission likely will be used in other European vehicles as well.

Production of the larger CFT 30 transmission, which can handle higher torque loads, will ramp up in the first quarter of 2004. ZF expects combined production of the two Batavia-built transmissions to reach 700,000 annually by 2007. The plant, which is 51% owned by ZF, has the capacity to build up to 1 million transmission per year. It originally was to begin production in late 2001.

ZF currently makes another CVT, the Ecotronic VT1F, in Belgium for use in the BMW Mini. The Belgium-made unit is even smaller than the CFT 23, uses a wet clutch instead of a torque converter and can handle only about 129 lb-ft of torque.

HONDA: V-6 ENGINES ARE BIG ENOUGH

Contrary to lingering speculation that it soon will build a full-size pickup truck, Honda Motor Co. continues to pooh-pooh the idea.

In the company's most recent rebuttal, Honda of America Senior Vice President Larry Jutte tells *Ward's Auto World* that a body-on-frame chassis and a V-8 engine would be essential for such a vehicle, but Honda doesn't have any experience with either. Moreover, he says, the company is happy with its current engine portfolio and feels no

need to expand into larger powerplants as long as sales of its existing vehicle lineup remain strong and Honda engineers can continue to refine V-6 and four-cylinder systems.

Last week Honda's plant in Anna, Ohio, produced its 10 millionth engine since it opened in 1985. Honda expects the plant to churn out the next 10 million units in half the time due to improved efficiencies and increased vehicles sales. The automaker also plans to ramp up production at its new plant in Lincoln, Ala., to 300,000 units annually by next year.

The Anna plant makes a variety of 4- and 6-cylinder engines for Honda's Accord, Civic, Element, Odyssey and Pilot vehicles as well for the Acura TL, CL and MDX. Honda says the facility, which operates three lines, accounts for nearly 40% of its global engine production. This fall it will begin supplying 3.5-liter V-6 engines to General Motors Corp. for use in the Saturn Vue.

HYUNDAI, KIA TO INCREASE R&D SPENDING 50% THIS YEAR

Hyundai Motor Co. and its Kia Motors Corp. affiliate plan to increase their research and development spending to $1.9 billion this year, reports *Auto Asia.* The publication says the investment is 49% more than the South Korean automakers spent on R&D last year. Much of the new budget likely will be aimed at developing products for North America. Hyundai targets annual sales of 500,000 vehicles in North America by 2006 and 1 million by the end of the decade vs. 375,000 last year.

DEVELOPER TOUTS SYSTEM TO HEAT WINDSHIELD WASHER FLUID

Microheat Inc. says its new HotShot technology is more efficient at clearing ice, snow and bugs from a vehicle's windshield than competitive systems used to heat fluid reservoirs, nozzles or blades and is cheaper than heated windshields. The five-year-old company, based in Farmington Hills, Mich., generated considerable publicity about the system by demonstrating it during the North American International Auto Show in Detroit last week.

Microheat's system runs off a vehicle's battery and can be operated briefly when the engine is off. At the touch of a button, 2 ounces of windshield wiper fluid is routed from the traditional reservoir into a separate container where it is heated to 145°F in about 40 seconds. If the driver feels that more fluid is needed, subsequent 2-ounce batches can be heated in about 10 seconds.

Once heated, wiper fluid is routed back through existing nozzles and sprayed onto the windshield—after the nozzle is cleared by a blast of water vapor heated to 185°F. Microheat claims the initial 2 ounces of heated fluid can clear most light frost build-up in 10 seconds, and the company estimates it would take about two minutes to melt 1mm of ice.

The system is designed to work with any washer fluid, regardless of outside temperature. The supplier also boasts its system will extend the life of the wipers because it clears ice and other debris that can damage rubber blades.

Competitive systems that heat the main reservoir require more power than the HotShot system, according to the supplier. It also notes that alcohol evaporates during each heating cycle and may eventually cause unused fluid in the reservoir to freeze.

Microheat has 27 patents pending on its technology and is developing similar systems for vehicles with rear windshield wipers and headlight washing systems. It says

a U.S. Big Three automaker tested the system in Canada last winter and may offer it as an option on some 2006 model vehicles. The company also is targeting heavy-duty truck and school bus applications.

Drivers activate the heating system and windshield wipers separately with Microheat's base $285 system. The company also has developed an integrated $359 unit that automatically turns the wipers on when the fluid is heated and switches them off after the fluid has been squirted onto the windshield. The company began selling both systems over the Internet earlier this month.

CONFERENCE IN ICELAND TO FOCUS ON DEVELOPING HYDROGEN INFRASTRUCTURE

The Icelandic New Energy consortium will host a hydrogen development conference in Reykjavik April 24-25. The event, which aims to lay out a plan to create an infrastructure for the environmentally friendly fuel, will feature European Commission energy officials and speakers from member companies DaimlerChrysler, Shell Hydrogen and Norsk Hydro.

The conference will coincide with the opening of Iceland's first hydrogen filling station. Part of the ECTOS (ecological city transportation system) project, the station will supply hydrogen to three Mercedes Citaro fuel cell buses and be supported by Shell, Norsk Hydro, the University of Iceland and Straeto (a local transportation company). Hydrogen for the network will be derived from geothermal sources, including Iceland's 130 volcanoes.

BRIDGESTONE DEVELOPS 158-INCH TIRE

Bridgestone Corp. says its new 5.1-ton tire is the largest production tire built. Measuring 158 inches in diameter, the tire will cost nearly $30,000 and be used for 350-ton vehicles used for carrying ore at mines. Bridgestone will build the tires at its plant in western Tokyo for customers in North America and Indonesia.

For passenger vehicles, the company is introducing its Potenza RE750 performance tire. Featuring a unidirectional tread pattern, the new tire lasts longer and is quieter than previous models, according to the tiremaker.

MAZDA MULLS RX-8 DERIVATIVES

With the introduction of its new four-door RX-8 still five months away, Mazda Motor Corp. already is considering adding convertible and coupe versions of the sports car to its lineup. According to reports following a recent media preview of the RX-8, Mazda is toying with the idea to help spread development costs over more vehicles.

The platform used for the rotary engine-powered RX-8 is the only one Mazda doesn't share with Ford Motor Co., which owns a controlling 33% stake in the Japanese automaker. Mazda hopes to sell about 30,000 of the high-performance cars annually in the U.S., which is more than four times the best sales year for the most recent version of the RX-7 two-seater. The automaker predicts that the RX-8's four-seat, four-door layout will appeal to more buyers.

For now, Mazda says it has no plans of using its venerable rotary engine in other models. The company rules out offering the powerplant in the Miata, for example, because it feels it would add too much cost and complexity to the car's otherwise simple design.

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