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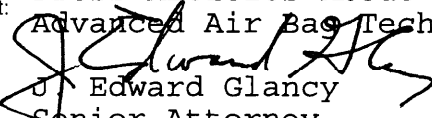
99 NOV -9 PM 2: 02

Memorandum

Subject: Press Articles About Vehicles Incorporating
Advanced Air Bag Technologies

Date: OCT 27 1999

From:

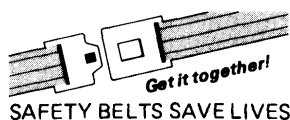

J. Edward Glancy
Senior Attorney

Reply to
Attn. of:

Docket 99-6407-13

To: Attached are several press articles which discuss vehicles
incorporating various advanced air bag technologies.

Attachments



9TH STORY of Level 1 printed in FULL format.

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October 11, 1999; Monday 22:34 Eastern Time

SECTION: Financial pages

LENGTH: 725 words

HEADLINE: New air bag technology reaching mass auto market With
FEA-US-Automakers-Gla

BYLINE: CATHERINE STRONG

DATELINE: WASHINGTON

BODY:

At car dealers this fall: new, more sophisticated air bags that adjust their force of inflation to the severity of a crash to protect passengers better.

It's no longer just a high-tech concept. So-called dual-stage air bags are on the 2000 models of some luxury cars and several of the nation's most popular family cars the Ford Taurus and Honda Accord.

Safety experts say the new technology will reduce deaths and injuries from air bags that inflated explosively, prompting a public outcry.

In serious crashes, when passengers need the devices' full power to cushion them, the new bags inflate with about the same force as those in 1999 model cars. But in lower speed crashes, the air bags pop open with at least 20 percent less force.

A sensor in the front of the car detects the severity of a crash by calculating the change of velocity that occurs when another object, such as a car, crashes into it. Another sensor registers whether a front seat belt is buckled. If a belt is being used, the full force of the air bag is delayed until a higher speed when it is needed.

'Today in cars we have a one-bag-fits-all mentality. This changes all that,' says Stephen Kozak, a Ford engineer who oversaw the Taurus system's development.

Government officials, automakers, insurers and safety advocacy groups agree the new technology will reduce air bag deaths and injuries particularly of young children and shorter adults in low-speed crashes.

'It reduces the risk (of deaths and injuries) dramatically in better tailoring the air bag inflation to the crash,' said Dr. Ricardo Martinez, head of the National Highway Traffic Safety Administration.

Air bags have been blamed for at least 145 deaths mostly children and shorter women in low-speed crashes the victims otherwise should have survived, federal

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SAFETY
99 NOV -9 PM 2:02

AP Worldstream, October 11, 1999

safety regulators say. Air bags also have saved an estimated 4,600 lives in higher-speed crashes.

Ford Motor Co. has the dual-inflation air bags on both the driver and passenger side of its model year 2000 Taurus, the third-best-selling car nationwide. Honda Motor Co. has them on just the passenger side of its 2000 Accords. The Accord is the second-best-selling car.

The decision by Ford and Honda to put the technology on their top-selling family cars as standard equipment means that for the first time advanced air bags are reaching large numbers of American families. The automakers say they plan eventually to expand the system to other vehicles.

"You're going to see this technology spread very rapidly," said Brian O'Neill of the Insurance Institute for Highway Safety.

Several luxury automakers also have dual-stage air bags on some 2000 models, such as the Mercedes-Benz S-class sedans and BMW 3-, 5- and 7-series sedans, but all those models sell in much smaller numbers because of their high costs. Some Honda **Acuras** had a dual-stage bag for the 1999 model year.

Automakers declined to discuss the new technology's price.

Toyota, which makes the Camry, the nation's best-selling car last year has not announced plans for dual-stage air bags; neither have other major automakers in the United States General Motors and **DaimlerChrysler** AG.

But GM spokesman Terry Rhadigan said: "It's no secret that we and everyone else are working on that. It's the wave of the future."

Honda is focusing on the passenger side because that is where children the most vulnerable population have suffered serious injuries. "It reduces the potential for air bag-related injury there," said spokesman Mike Spencer.

Ford believes both front-seat passengers could benefit from dual-stage bags with a "significant reduction" in moderate to severe injuries, including deaths, Kozak said.

Ford put the system on the driver's side to help short adults who sit close to the steering wheel and are more likely than other adults to be injured by the air bag. A sensor detects whether the driver's seat track is nearly or all the way forward and signals the air bag to always deploy the first, softer stage in crashes.

Kozak predicted the new Taurus system will eliminate about half of today's air bag deployments for belted passengers. And the majority of air bags will inflate at the lower level, he said, because most accidents are at lower speeds.

That translates into fewer air bag-related injuries.

LANGUAGE: ENGLISH

LOAD-DATE: October 11, 1999

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The Plain Dealer

October 7, 1999 Thursday, FINAL / ALL

SECTION: AUTOS; Pg. 1G

LENGTH: 1363 words

HEADLINE: REFASHIONING A FAVORITE;
2000 FORD TAURUS GETS A NEW LOOK, ADDITIONAL ROOM AND A BIG SAFETY UPGRADE

BYLINE: By CHRISTOPHER JENSEN; PLAIN DEALER AUTO EDITOR

DATELINE: CHARLOTTESVILLE, VA.

BODY:

The 2000 Ford Taurus has a new look and a bundle of new features, ranging from adjustable pedals to air bags that vary their inflation depending on the severity of a crash. That makes for a significant change in the new Taurus, which is precisely what Ford Motor Co. figured it needed.

"We want to recapture the spirit and legacy of Taurus," said David Marinaro, chief program engineer for the first redesign of the Taurus since the 1996 model year.

What is unsaid is that recapturing the Taurus legacy involves recapturing the sales leadership that the Taurus last enjoyed in 1996, losing it in 1997 and 1998 to the Toyota Camry.

Prices on the new Taurus sedan begin at \$18,245 for the Taurus LX and \$19,295 for the fancier SE, including destination and delivery charges. The station wagon's price is \$20,450, also including destination and delivery.

Here is what Ford thinks will give the Taurus a far stronger position when it arrives in dealerships early in November.

New look

Ford said the look of the 2000 model is "evolutionary." The automaker must have redefined the word "evolutionary." Under Ford's new definition, a hanging victim would undergo an evolutionary process.

The radical look of the last generation is gone, replaced by a look that remains distinctive but is one that Ford officials think will find wider acceptance. After all, neither the Camry nor the Accord makes a particularly strong styling statement, and each seems to do just fine.

Dimensionally, the 2000 Taurus is about the same length as the 1999 model,

and the wheelbase is identical. The most significant dimensional change is that the roof is higher. Gone is that swept-back and dive-down look. The result is 1.9 inches more head room in the rear and 0.8 inches more head room in front. That means the Taurus feels far roomier.

There is no difference in the amount of front and rear leg room between the 1999 and 2000 models.

The trunk is larger, with the capacity increasing 1.2 cubic feet, to 17 cubic feet, which is large for a vehicle in this class.

Personal safety

The adjustable brake and gas pedals are the most noteworthy convenience feature. By pushing a small button, the pedals can be moved fore and aft, giving short drivers the chance to reach the pedals and get as far back from the air bag as possible. The feature is a \$120 option and is available on all models.

The Taurus also offers what Ford calls its "**Personal Safety System**," the core of which is a more advanced system for triggering and controlling the air bags.

The short version is that the new computerized system can tell the severity of a frontal crash and knows how much force it should use to inflate the air **bags**, according to Stephen T. Kozak, manager of restraints at Ford.

In a low-speed crash, if the occupants are belted, the computer might decide it is not necessary to deploy an air bag at all. Its other choices are a low-speed deployment or a high-speed deployment, depending on the impact.

There is also more good news for those who are short of stature (wasn't that delicately put?). There is a sensor that tells how close the seat is to the steering wheel. If the occupant is too close, it will tell the air bag to always open only at the lower inflation speed. The idea is to reduce the chance that the air bag will hurt someone seated too close to the wheel.

Side-impact air bags are also available in the front, and they are designed to protect not just the chest, but the head as well, Kozak said.

Even the front seat belts are sophisticated. First, they use pre-tensioners, which automatically reduce the slack upon impact. Second, they have force limiters, which means that if the force on the body is so great that the belt itself might cause an injury, the belt eases up a bit.

The previous Taurus got excellent crash-test scores for frontal protection from the National Highway Traffic Safety Administration (NHTSA) and the Insurance Institute for Highway Safety, and Ford engineers say they are confident the new model will perform as well. However, those agencies have not yet tested the new Taurus.

On the road

Additional soundproofing has been added throughout the Taurus. Ford said road noise has been reduced 30 percent compared with the earlier model.

Ford also said it has made important changes to the ride and handling of the Taurus. First, the ride has been made a bit softer in response to consumers who complained it became a bit too rough on mean streets such as those in Cleveland and Detroit.

The difference between the 2000 and a 1999 model is noticeable, with the new Taurus having far less rigid control over the upward body motions, at times hinting of soft-riders such as the Crown Victoria. But when it comes to handling, there is no relation whatsoever to the Crown Victoria. The 2000 Taurus effortlessly worked its way along the back roads near Charlottesville with poise and competence.

The brake-pedal feel is also greatly improved, which makes driving the Taurus more reassuring. Anti-lock brakes are options, however, not standard equipment.

Two engines are available, and both are built in Ohio. The first is the Vulcan 3.0-liter V-6, built in Lima. It is rated at 155 horsepower at 4,900 revolutions per minute (rpm), an increase of 10 horsepower over last year's engine. It also provides 185 foot-pounds of torque at 3,950 rpm, 15 more foot-pounds than produced last year, according to Ford.

The upscale engine is the 3.0-liter Duratec V-6 built at Engine Plant No. 2 in Brook Park. It is rated at 200 horsepower at 5,650 rpm, an increase of 15 horsepower. At 4,400 rpm, the torque is rated at 200 foot-pounds, also 15 more. Ford's figures show that 180 of those foot-pounds are available by about 2,000 rpm, which means the kind of good response that would be helpful in around-town motoring.

The Vulcan is standard on the entry-level LX and fancier SE models. The Duratec is an option on the SE sedan and wagon. That is a change from last year, when the Duratec was available as a \$495 option on any model. Also, Ford has upped the price on the Duratec from \$495 to \$695.

My short drive was in cars equipped with the Duratec, and it does everything one could want, ranging from a good low-speed response to strong, smooth acceleration.

The only transmission is a four-speed automatic. It worked fine, but it didn't seem as quick to react or to shift as smoothly as the four-speed in the Chevrolet Impala I tried just a week or so before.

Conclusions

A final verdict won't be possible without more driving of real production vehicles on roads not chosen by Ford. But Ford has clearly done more than just change some sheet metal.

The Taurus' Personal Protection System is unmatched on any other vehicle in this class, and the adjustable pedals should be a major attraction to anyone who has worried about the danger of sitting too close to an air bag. Many consumers may also appreciate the more comfortable ride.

At first look, the 2000 Taurus appears to be an impressive combination. One issue that may bother former Taurus owners is quality. Models in the early and mid-1990s had problems, although the 1997 and 1998 models have held up better,

The Plain Dealer, October 7, 1999

according to the frequency-of-repair survey by Consumer Reports magazine.

However, the 1999 Taurus also ranked at the bottom of its family-car category on a customer-satisfaction survey by **AutoPacific** Inc. and second-to-last in a similar survey by another research firm, Strategic Vision Inc. The last vehicle in the Strategic Vision survey was the Mercury Sable, the Taurus' twin.

But a Ford officials responded that the new 2000 model addresses the problems that made consumers unhappy. He also noted there have been constant improvements in quality and that the 1999 Taurus ranked above the auto-industry average in the latest Initial Quality Study by J.D. Power and Associates. A Power spokesman said the industry average was 167, while the Taurus scored 165, slightly better.

At first glance, it appears Ford has all the right pieces and more. If, indeed, the quality is good, the 2000 Taurus could once again give the Camry and Accord some serious competition.

GRAPHIC: PHOTOS: NO CREDIT; PHOTO 1; Ford Motor Co. literally raised the roof on the 2000 Taurus, adding head room and giving the interior a much larger feel.; PHOTO 2; The trunk on the 2000 Taurus is larger than before, with the capacity increasing 1.2 cubic feet, to 17 cubic feet.

LANGUAGE: ENGLISH

COLUMN: IN THE DRIVER'S SEAT

LOAD-DATE: October 8, 1999

27TH STORY of Level 1 printed in FULL format.

Copyright 1999 The Atlanta Constitution
The Atlanta Journal and Constitution

October 1, 1999, Friday, Home Edition

SECTION: Wheels; Pg. 1S

LENGTH: 795 words

HEADLINE: Safety first, and last: Redesigned Taurus seeks return to top of family field

BYLINE: Karl Ritzler, Staff

SOURCE: AJC

DATELINE: Charlottesville, Va.

BODY:

It takes a lot to make a midsize family sedan stand out from the pack.

It's the biggest car segment, with Toyota Camry, Honda Accord and Ford Taurus routinely at the top of the list of best-selling cars. **It's** also a crowded segment, with nearly every manufacturer having an entry, often its flagship automobile.

"**This** is a significant part of the market," said analyst Robert Duronio with **AutoPacific** Group in Detroit.

But **it's** a plain segment, with vehicles that have a similar shape and look. "I hate to use the term 'appliances,'" Duronio said. "**But** these cars are meant to get the family from point A to point B. It's solid **transportation.**"

After five years as the best-selling car in America, Taurus was redesigned for 1996 to make a styling statement. Ford watched the love-it-or-hate-it design fall from the top of the best-seller list.

For the redesigned 2000 Taurus, safety is the theme.

At a recent preview of the vehicles in Virginia, the 2000 Taurus sedans and station wagons were exactly what most drivers will expect --- capable, comfortable, secure.

The toned-down, more conservative styling "**doesn't** offend anyone," Duronio said.

The big changes are under the skin, starting with the safety package.

"**The** best feature is the one we hope they never **use**," an integrated package of an advanced restraint system and two-stage air bags, said marketing manager George Murphy.

The Atlanta Journal, October 1, 1999

Sensors throughout the vehicle --- in the seat belt buckles, on the seat track and in the front of the car --- detect how severe a crash is, whether the occupants are buckled in and how far they are from the air bags. The system determines how much force to use to inflate the bags.

The car adapts to the driver and passengers, said brand manager Rick Crossland.

Now standard on the Taurus is a trunk-escape system with a glow-in-the-dark, T-shaped pull handle that Ford executives said tested well with children.

Safety will play well with the car's target market, Duronio said. "The midsize segment has always had a family equation involved."

The new cars will be in showrooms late this month or in early November. Full-scale production begins this month in Ford's Hapeville and Chicago assembly plants.

Part of the delay is to avoid competing with introductions of other, new Ford products, especially the Focus compact car, which debuted in September.

Two days of driving in Virginia showed the Taurus is not a **testosterone**-charged roadster or a brawny, house-size sport-utility vehicle. It drives like the family car it is. The 200-horsepower, 24-valve Duratech engine delivers more power for passing and climbing grades than the **155-horsepower** Vulcan. Both are 3.0 liters.

"We wanted to capture the spirit of Taurus," said chief program engineer David T. Marinaro. That meant keeping the plush ride and more nimble handling built into the current model.

Option choices include a couple of surprises. One is power-adjustable pedals that move up to 3 inches closer to the driver. This is one safety item (it allows the driver to be farther from the air bag) that will feel like a convenience feature. For smaller drivers, especially women, it means a comfortable position in the seat and behind the wheel.

Another is the choice of a **five-** or six-passenger configuration. Ford says there will be no price difference. In the five-passenger version, the driver and front-seat passengers get bucket seats with a console between them. It houses the transmission shifter, cup holders and storage space. The six-passenger version can squeeze a third small person in the front seat, or the center portion can fold down to reveal storage spaces and cup holders. The shift lever is on the steering column.

Those are the types of things that keep midsize cars selling well, **AutoPacific's** Duronio pointed out.

"Lots of people don't like the trucklike feel of sport-utilities. A large number want to stay in **cars**," he said.

The midsize segment offers five or six passengers comfort, room and performance.

The Atlanta Journal, October 1, 1999

The sales figures prove it. Through the end of August, Camry, Accord and Taurus were 1-2-3 in car sales despite trailing Ford and Chevrolet pickup trucks as overall sales leaders.

Chevrolet is counting on the reintroduced Impala and its venerable Lumina as its entries in the segment.

But fragmented sales with other General Motors models make neither a threat to become a sales leader. Toyota and Honda **don't** plan updates to their segment leaders until 2002 and 2003, respectively.

That leaves this year to Taurus.

"**Ford** created tremendous equity in the Taurus nameplate since it was introduced in **1986**," Duronio said. It is a familiar name and has the best reputation for quality among American nameplates, he added.

GRAPHIC: Photo

The 2000 Ford Taurus sedan. / KARL RITZLER / Staff

Photo

The 2000 Ford Taurus station wagon features an advanced restraint system and **two-** stage air bags. / KARL RITZLER / Staff

Photo

The No. 1 midsize family sedan Toyota **Camry**. / Toyota

Photo

The No. 2 Honda Accord. / Honda

LOAD-DATE: October 1, 1999

54TH STORY of Level 1 printed in FULL format.

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SEATTLE POST-INTELLIGENCER

August 20, 1999, Friday , FINAL

SECTION: NEWS, Pg. C16

LENGTH: 1029 words

HEADLINE: HYUNDAI SONATA THE BEST BUY IN ITS CLASS

BYLINE: G. CHAMBERS WILLIAMS III FORT WORTH STAR-TELEGRAM

BODY:

Who says you can't buy a roomy, comfortable, elegant and mechanically reliable midsize sedan for under \$20,000?

Anyone who does hasn't looked at the 1999 Hyundai Sonata. Prices start at \$15,000, even with air conditioning and power windows and door locks.

Sure, **Hyundai's** reputation in the U.S. market is somewhat tarnished, and you can't make a second first impression, as the old saying goes. If American consumers could take a second look at Hyundai and forget their first impression based on the Mitsubishi-designed subcompact that Hyundai wishes it could forget, perhaps this South Korean automaker could regain a measure of sales success in the United States.

The redesigned 1999 Sonata is perhaps the best-kept secret in the midsize class.

This is an excellent car, with high quality evident throughout. Its comfort, performance and styling are on a par with those of the sector leaders: the Honda Accord, Toyota Camry and Ford Taurus.

The ride is as comfortable as you'll find in this class. The vehicle isn't as quiet as a Camry, because the engine is a bit noisy at high revolutions. But this really isn't a problem; the noise isn't loud enough to be a nuisance.

Road handling is typical for an Asian sedan, and it corners well. There is plenty of power with either the four- or six-cylinder engine.

The front bucket seats are very comfortable, and three adults can sit side by side in the rear bench seat with adequate knee room. The trunk holds 13.2 cubic feet of cargo, which is about a cubic foot less than the Camry and Accord, yet still adequate for most needs.

Styling is among the Sonata's strong points. **It's** not a cookie-cutter copy of any of its competitors, yet it has a pleasant, modern look that compares well with cars in its class.

The Sonata even comes with side air bags for the front-seat occupants - one

of the first in its class to include this safety feature. Sonata has advanced air-bag technology: The passenger front air bag will not activate unless more than 66 pounds of weight is detected in the seat, and the side air bag won't deploy unless at least 33 pounds is detected - both great protective features for small children riding up front. (Of course, the safest place for children is in the back seat.)

The best part is the price: The Sonata is thousands of dollars less than most comparable midsize sedans.

A base Sonata GL, with a 16-valve, 2.4-liter, in-line four-cylinder engine, lists for an unbelievably low \$15,799, complete with four-speed automatic transmission, air conditioning, power windows and door locks, AM/FM/cassette stereo, tilt steering wheel, rear defroster, wheel covers and dual remote-control outside mirrors. The engine, rated at 149 horsepower and 170 foot-pounds of torque, is among the most powerful four-cylinders in this class.

A base Camry is \$17,838 - \$2,037 more - but then you have to add \$1,005 for the air conditioning and \$780 for the power windows and door locks.

That puts the **Camry's** base price, with a **133-horsepower** four-cylinder engine, higher than the base price of the up-level Sonata GLS (**\$17,799**), which comes with a 2.5-liter V-6 engine and lots of extras not found on the four-cylinder Sonata or the Camry.

A four-cylinder Accord, equipped comparably to the \$15,799 Sonata, lists for \$19,190. Even the cheapest Taurus, the best-selling American car, lists for \$17,445, but then you have to add a few dollars' worth of **accessories**, such as the AM/FM/cassette stereo, to match the content of the \$15,799 Sonata. (Granted, the Taurus comes with a V-6 engine, but it has 145 horsepower - 4 less than the power of the Hyundai four-cylinder engine.)

It could be argued that the Camry or Accord would hold its value better, so that in the long run, the consumer would make up the difference between the two prices when the vehicle is resold.

But there are many consumers - and I'm among them - who prefer to pay less **upfront** and then to keep a car for a long time to get their money's worth out of the vehicle. This strategy makes the Sonata an outstanding buy - in fact, the best buy in the midsize sedan segment.

If you want to spend \$20,000 on a midsize sedan, our test car - a fully equipped Sonata GLS V-6 (including leather seats and wood interior trim!) - would give you a lot more for your money than any vehicle in this class.

At a total sticker of \$19,077, our Sonata GLS was \$5,000 less than a comparably equipped Accord and nearly \$6,000 less than a Camry. That means that for the same monthly payment you would make for an entry-level Camry or Accord, you could enjoy a top-of-the-line Sonata, riding in genuine style and comfort.

Sure, there isn't much prestige. So if image is what you're looking for, spend the extra bucks and go with a Honda or Camry, or, hey, even a baby Lexus or Acura.

But I believe that anyone who sees your new Hyundai GLS, takes a ride in it with you, and then looks at the sticker price will understand: You're a practical person who makes sound financial decisions and still has a really nice car to show for it. The Sonata, then, does make a positive statement on your behalf.

Here are some of the particulars on our test model GLS:

The double-overhead-cam, 24-valve V-6 engine is rated at 170 horsepower and 166 foot-pounds of torque.

Included in the base price of \$17,799 (plus \$435 transportation) are power windows and door locks, four-speed electronically controlled automatic transmission with adaptive logic, power rack-and-pinion steering, four-wheel power disc brakes (most of the competitors have rear drums), cruise control, 15-inch aluminum alloy wheels, tilt steering, power remote-control heated outside mirrors, air conditioning, rear defroster, 100-watt AM/FM/compact disc stereo, front bucket seats and a 60/40 split-folding rear seat.

The leather package (\$1,200) also brings a six-way power adjustable driver's seat.

Fuel economy is about midrange for the class: EPA estimates are 20 miles per gallon in the city and 28 mpg on the highway. The tank holds 17.2 gallons of gasoline, and unleaded regular is recommended.

GRAPHIC: Photo

HYUNDAI MOTOR AMERICA: The 1999 Hyundai Sonata sells for less than \$20,000, but has the comfort, styling and performance of more expensive cars.

LANGUAGE: ENGLISH

LOAD-DATE: August 21, 1999