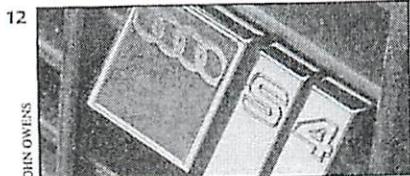


DEPARTMENTS

- 4 Headliner
 - 6 Dutch Mandel
 - 8 Denise McCluggage
 - 8 Fast Poll
 - 10 Car Board/Letters
 - 24 Escape Roads
 - 26 Reviews
 - 27 Classified Advertising
 - 52 Competition
 - 54 Late Racing News
 - 55 Television
 - 56 . . .But Wait, There's More
- COVER PHOTOGRAPHY: John Owens

COVER STORY



"S" Is for Sleeper

The spoils of Audi's (recent) success: S4
by Daniel Pund with
photography by John Owens

FEATURES

- 17 **Eight Valves In**
Audi's flagship A8 adds
a five-valver for 2000
by John P. Cortez
- 18 **The Land That
Speed Limits Forgot**
At least until Friday,
May 28, when they
suddenly remembered.
No more fun of any kind!
by Mark Vaughn

SHEETMETAL

- 20 **AutoFile in Brief:**
Mitsubishi Galant GTZ
- 22 **AutoFile in Brief:**
Volkswagen Jetta GLX

MOTORSPORTS

- 44 **Air Traffic Control**
The aftermath of Le Mans
- 46 **CART at Portland**
- 50 **NASCAR at Pocono**

T H E N E W S 6 . 2 8 . 9 9

Got horsepower?



AMERICAN TOM TAYLOR designed urethane body parts for the TOMS-prepared Altezza 280T. Let's hope Lexus officials drive it before a version comes to the United States as the IS 300.

Competition for the venerable BMW 3 Series could become a major trend in the next few years. Lexus launches the IS 300 here in 2001. Infiniti will have an all-new G20. Audi will roll out a new line of A4s. Honda and Mazda may be preparing competition in this class, too.

So, with the small sports sedan emerging as the potential Next Big Thing (kind of nice that it's not a truck this time, isn't it?), we offer a look at a tricked-out home-market Toyota Altezza, with hopes that Lexus picks up as much of this car's character as possible in the IS 300, the 3.0-liter V6 version of the Altezza due in North American Lexus dealers in the 2001 model year.

Hot sports sedans do not require rocket science, though. Check out the FutureCar Challenge detailed in Headliner. The winning college students combined TDi/electric hybrid power, cow-motif interior styling and stiff spring rates with an American midsize sedan body.

This IS the one

Toyota has launched a 276-horsepower Altezza 280T in Japan through NETZ, one of its main dealer networks. For about \$29,900, the 280T (so named for its Japanese-

measured horsepower rating), powered by a 2.0-liter turbocharged four, is the BMW-challenging Altezza. The Altezza is sold in Europe as the Lexus IS 200.

Toyota's motorsports arm, TOMS, chose a turbocharger used on some Japanese-market Subaru Imprezas over a Toyota-spec turbo because of better reliability and power, says chief TOMS strategist Yoshiteru Yamada. "We took the Impreza unit, fitted in an IHI high-performance turbine, played around with it on the dyno, tweaked it some more, and came up with a very responsive 280T," he says.

TOMS added a twin-plate clutch, Sparco racing seats, aerodynamic cladding and 18-inch wheels. Spring and damper rates were overhauled to virtually eliminate body roll. Though only 100 280Ts will be sold in Japan, customers can buy the parts and upgrade their cars to Altezza 280T specs.

Boxster No. 3

Porsche may add a Speedster-style Boxster to its lineup within 18 months, insiders say. The new car, to slot above the 252-hp Boxster S coming to the United States early next year, is aimed at establishing Porsche's mid-engined car as the king of roadsters. It also bridges the gap to the more-expensive 911.

Conceived along the lines of Porsche's 911 RS models, the new Boxster would get the S version's 3.2-liter flat six and reworked 911 six-speed manual gearbox. Performance targets are said to be in line

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with the 911, meaning 0 to 60 mph in 5.5 seconds and a top speed of about 175 mph.

Porsche plans to hit those targets by lightening the Boxster's 2732-pound body. Among the proposed measures are aluminum doors, hood and trunk lid, and a simplified interior with lightweight, hard-shell seats and more basic trim. Like the 911 RS, the new Boxster would get a cut-down windshield, larger wheels and deeper front air dam.

Delta of Saturn

General Motors' upcoming Delta small-car platform was to revolutionize the No. 1 automaker. All of GM's small cars worldwide would have the same platform, use a lot of outsourced parts, and have distinctive sheetmetal. But GM is running into glitches, which the press has mostly attributed to a power struggle with the United Auto Workers over extensive outsourcing. The real culprit may not be manufacturing issues, but design.

The Saturn SC/SL/SW series, which will get the Delta platform, is on schedule, according to a well-placed source. The Saturns will debut in mid-2002, with character lines connecting them to the 1990-95 S series. The original car's character lines were diminished in the '96 facelift.

Development of the next Chevrolet Cavalier is more troubled, the source says. Consumer-clinic reaction to a design proposal for the Cavalier, which will be a four-door sedan only, was reportedly so negative that GM may simply rebadge the next Opel/Vauxhall Astra, also a Delta-platform car. That would save Chevy only a bit of time, because the car would need to be refitted to meet U.S. bumper-height standards. The new Cavalier is scheduled to debut in calendar year 2004.

The source says Pontiac will probably drop the Sunfire.

Corrections

The 1999 Saab 9-3 Viggins are not all pre-sold (Headliner, AW, June 7). About 150 of the 400 Viggins destined for the United States still are available, Saab says, although because of the car's low volume, they are not available through European delivery.

The manufacturer's suggested list price for the trip computer in our long-term Porsche 911 Carrera (AW, June 21) is \$275, or \$15 less than indicated in the story. That also reduces the bottom-line sticker price of the car to a more-affordable \$76,167. •

HEADLINER

FutureCow romps

Wisconsin students build a hybrid-electric sports sedan

Forget about your poky Prius. Stuff your short-range EV1. Shelve the cramped microcars. The car-enthusiast engineering students at the University of Wisconsin-Madison have the idea: a diesel-electric five-seat sport sedan named FutureCow.

Even the feds say it's a winner, awarding it first prize in the 1999 FutureCar Challenge. Wisconsin's team—which struck us as the one most packed with driving enthusiasts among the 13 university teams that entered—started with a 1994 Mercury Sable prototype with an all-aluminum body donated by Ford, converted it to run on a Ford of Europe 1.8-liter TDi diesel (mostly) and an electric motor (for extra thrust

as needed), inserted cowhide-pattern sport bucket seats and refined the handling to a fare-thee-well. The team packed the car with 600 rechargeable battery cells “borrowed” from Milwaukee (the brand, not the city) cordless drills; the batteries draw power from the engine/generator and regenerative braking.

The car was competing in the Department of Energy's FutureCar Challenge, a competition with goals parallel to those of the Partnership for a New Generation of Vehicles. PNGV, in which DoE partners with the U.S. Council for Automotive Research consortium of Ford, GM and DaimlerChrysler, aims to develop an 80-mpg, five-seat family sedan. Judging began June 2, and included a drive from Auburn Hills, Mich., to Washington, D.C.

FutureCow had a horn that said “moooooo. . .” and won overall by sweeping the energy efficiency, acceleration (quicker than a stock Sable), dynamic handling over-the-road fuel economy (62 mpg) and Solo slalom performance categories. It also won the award for innovations in aluminum and for best-appearing vehicle (the paint scheme incorporated a checkered flag).

Second place went to Virginia Tech, which tied for first (with UW-Madison) last year with a series hybrid. VT actually had the most impressive technological achiever for a bunch of students: They converted a Chevy Lumina (dubbed Animul, which is Lumina backward) to run on hydrogen-powered fuel cells, replacing last year's internal-combustion engine and generator with a fuel-cell pack donated by Energy Partners, and devised a hydrogen fuel delivery system. Animul was quieter idle, but louder at speed, than DaimlerChrysler's NECAR4, and scored second on the strength of having the lowest emissions (zero) and the best teamwork (VT had huge 50-member team and another 70 fervid on-campus supporters).

Third place went to Michigan Technological University's Northwind, which represented an improvement on the team's fourth-place finish in 1998. MTU won in the consumer acceptability category by maintaining and improving on the base Dodge Intrepid's comfort and convenience features. The powerplant was a series hybrid with a 1.9-liter turbodiesel (from VW) whose sole role was charging the batteries and the electric motors.

This year was the fourth and final one for FutureCar. But at its completion, the DoE announced a replacement program. In FutureTruck 2000, engineering students will be challenged to convert a model-year 2000 Chevy Suburban into a fuel-mileage champ. After two years of re-engineering the Chevy, the teams will have another two years to work over a Ford SUV. Talk about future cows. . .

—Kevin A. Wil

