

AN Alpha - Male

LEXUS SC 430

Having already earned a reputation for quality and providing a unique, exclusive driving experience, Lexus has garnered some of the most loyal customers enjoyed by any world-wide automaker.

Spending some of that loyalty, in 2002 Lexus gambled on their successful, masculine, long-hood original SC 400 (rumored to be a "perfection" of Porsche's luxu-cruiser 928 GT coupel, unchanged for nearly a decade, and completely re-designed it into the current SC 430, a bit controversial, and also Lexus' first convertible.

Detractors called it too feminine. Lexus says it was designed with reference to the French Riviera. It was likened to an upside-down oyster. Some complained that it did not get enough at

Credits:

Model: Britney Lea

Makeup: Meghan Handy

Location: Chateau Elan Winery and Resort

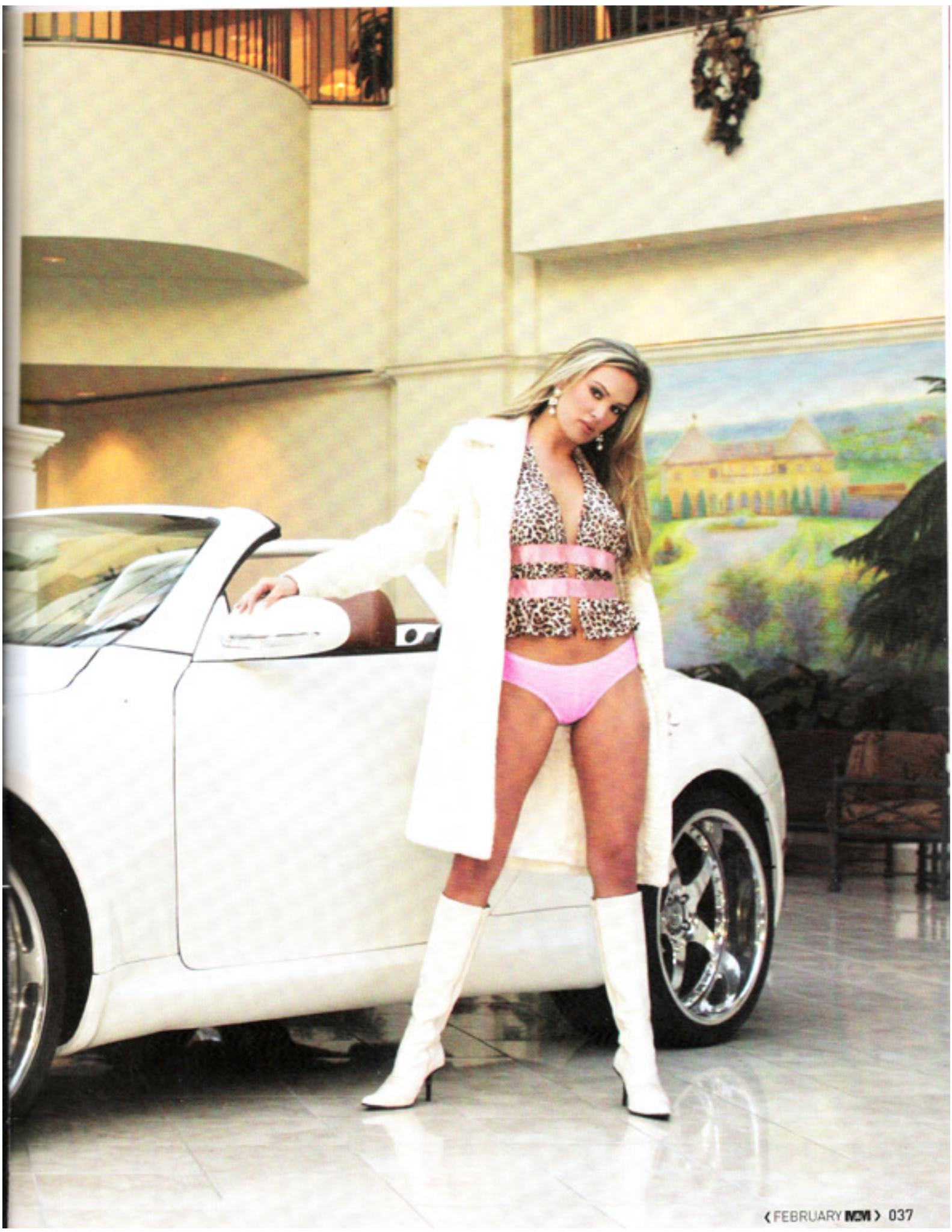
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tention. Reviewers picked at the puny rear seats or mere 8.8 cubic feet of trunk space. Its 0-60 times of 5.9 seconds with its 4.3-liter 32-valve V8 (from the larger LS 430 sedan) was considered only mediocre, as if Lexus had set out to compete with Boxsters and Corvettes. Lexus did not even offer a manual transmission.

But Lexus knew what it was doing. More than half of the first year's 12,000 SC's were already sold before they hit Lexus showrooms, despite the \$60,000+ MSRP. Why? Quality of build, quality of ride, and luxury.

Despite being an all-new car, Lexus maintained its quality reputation with the new SC, obtaining the rank of "Highest-Ranked Premium Luxury Car in Initial Quality" by J.D. Power and Associates' "Initial Quality Study"™. The Lexus SC 430 even recorded the best score ever in this category.

The quality of its ride and sound system were likewise the best anyone could offer. And Lexus' attention to fit and finish is so amazing that one begins to wonder if the rear seats are really there to give Lexus' wood and leather craftsmen more area for showing off.

So why would anyone tamper with it at all?



Well Lexus SC owner Michael Snipes had a problem that only *Makes & Models* readers fully understand – he had a friend with a faster car. A Porsche 996 twin-turbo to be exact. That's fast. If the only "problem" one could have with a Lexus SC 430 is that it was not fast or "masculine" enough, then that ought to be easily fixed, right?

Michael knew it would not be easy. He chose the Lexus' route and took his SC 430 to Anderson Audio & Performance (www.anderson-audio.com) in Suwanee, Georgia. AAP specializes in big-boy toys, really high-end audio and performance from boosted and turbo-forced induction.

He wanted to beat the Porsche, he said. That was their charge. Oh, and don't lose any of the Lexus' superb ride, luxury and quality.

AAP didn't even blink. Despite the fact that no one had done this kind of thing to a Lexus before, this was right down their alley. They knew they could do it. But their horsepower calculations indicated the stock Lexus could not hold the extra oomph they could pour into it without some body and finish upgrades. No one wanted to just bolt fenders on this car. So Michael enlisted help from JRD Tuning (www.jrdtuning.com), which specializes in high-line custom-built cars as well as providing engineering and tuning to Panoz, the way AMG is to Mercedes or Ruf to Porsche.

JRD's Johan Ragnarsson and Niclas Jancic grew up studying engineering together in Sweden. They had been trained in the European "old school" way of hand-rolling metal with an English Wheel in Johan's father's Swedish metal-working shop – nearly a lost art in today's automated economy. Yet perfect for a Lexus project like this.

JRD and AAP both understood that Michael wanted to go all the way, never half-way. In an abundance of honesty also rare in today's economy, they explained to Michael that it would be easier and less expensive to just buy a car to beat his friend's twin-turbo Porsche. But what fun would that be? And Michael is really into the kind of engineering that went into this project,



Michael was one of the first to sign up for the new Lexus. He decided to buy it the instant he saw the concept prototype on tour. But he was a little disappointed at the resulting street car. He knew it had potential to be a killer. And there was the little problem of a friendly nemesis in the Porsche.

AAP knew it would be harder to beat an all-wheel-drive car like the Porsche with a two-wheel drive Lexus. They determined something over 700 horsepower would be needed. They evaluated capacity enlargements, supercharging, piston changes, turbo-charging, NOS, and every option, remembering that drivability was also still a priority.

AAP ultimately selected a twin-turbo system "because you can just turn a knob and change the car's attitude." The driver could go from 380 to 600 hp with a turn of a knob. And this was the outcome, verified by a dyno at the rear wheels. This translates to something around 800 horsepower at the crank. It has more in it but once it exceeds 600 hp the stock transmissions, even enhanced ones, break.

Stock pistons and cylinders would not work. So they had custom rods and pistons made, "claying" inside the heads to check piston clearances. Heads ported and polished and compression was lowered to 8.5 to 1.

The bottle seen in the back seat is not nitrous, but an intercooler-sprayer to keep it cool.

They created a custom exhaust with full-flow catalytic converters, all in stainless steel. Headers were customized to house the turbos, plus custom intercooler piping, and custom twin fuel pumps in the tanks to handle faster fuel delivery. They used two of the smaller HKS 2835 turbos so it would respond quicker and provide better low-end torque.

They added a custom-strengthened transmission and twin custom transmission coolers with fans – hastening to add that the fact that the 700+ horsepower beast has munched six transles, shows just how cutting-edge this project has been.

They added a coil-over suspension and larger anti-roll bars, but otherwise retained the factory suspension, not changing geometry so it still rides wonderfully like a Lexus should.

The biggest mechanical challenge of all was the hand-built Motec wiring harness programmed so that the car works and functions like factory. It took weeks and several visits from Jarrett Humphries at Powerhouse Racing to help tune the Motec.

The team also called in technical help from Pirelli, Brembo, Recaro, HRE, Kicker and Alpine.

Chris of AAP calculated that they would need the widest tires available. They wanted to stick with 20" wheels and still wanted it to be an every-day driver. JRD selected custom HRE wheels: 20x12 in the back and 20x10 in front, wrapped in Pirelli P-Zero Rosso Assymetricos at 345/25ZR20. And that meant wider fenders.

JRD had to net about 3" more clearance on each side. It ended up being 6" total increase for the rear, 4" for the front. Their criteria: "It couldn't look stupid."

Using computer assistance from digital photos, JRD created the masculine body work seen here. JRD used metal because "that's the proper way of doing it." Also, they considered structural aspects of the quarter panels. Cutting into them

hindered the original design. They wanted as much wheel travel clearance as possible. That meant fabricating an entirely new wheel well.

Note the hood. They needed more venting for the radiator and intercooler. They used a system pioneered in racing, also adopted by such luminaries as the Ferrari F50, which vents air from the front radiator over the top, also reducing front lift at speed. It is of course hand-made in aluminum.

Inside the cockpit, JRD (a Recaro Dealer) added Recaro Style fully-powered sport seats, matching them to the original Lexus seat tracks so the Lexus motor mechanism still works. JRD went the additional step of getting, from Lexus in Japan, the proper leather from the same herd and dye-lots, so it would match the factory leather.

The Lexus already had an award-winning stereo, but AAP had to create a system as obnoxious as the new motor. Starting with two large Kicker 10" solo baric L7 square subwoofers they installed an Alpine "flip-out" piece with 7" TFT screen to display navigation and DVDs. Monster cables and interconnects tied in two amplifiers, a 1,200 watt for the sub-woofers and 100x4 for the mid and high-range. Everything was covered in stock leather, again from the same cows.

Shown in the middle of the trunk is the logo for Michael's company, the Phoenix Retail Group. Units on either side include the EQ (equalizer) and the other is a fuse-holder. A voltmeter built into the fuse-holder keeps an eye on the system. A battery in the rear is a Stinger gel-cell, plus a traditional lead-acid battery is in the front, are wired together so that each helps the other.

Michael wanted a roll-bar in it. He had seen a



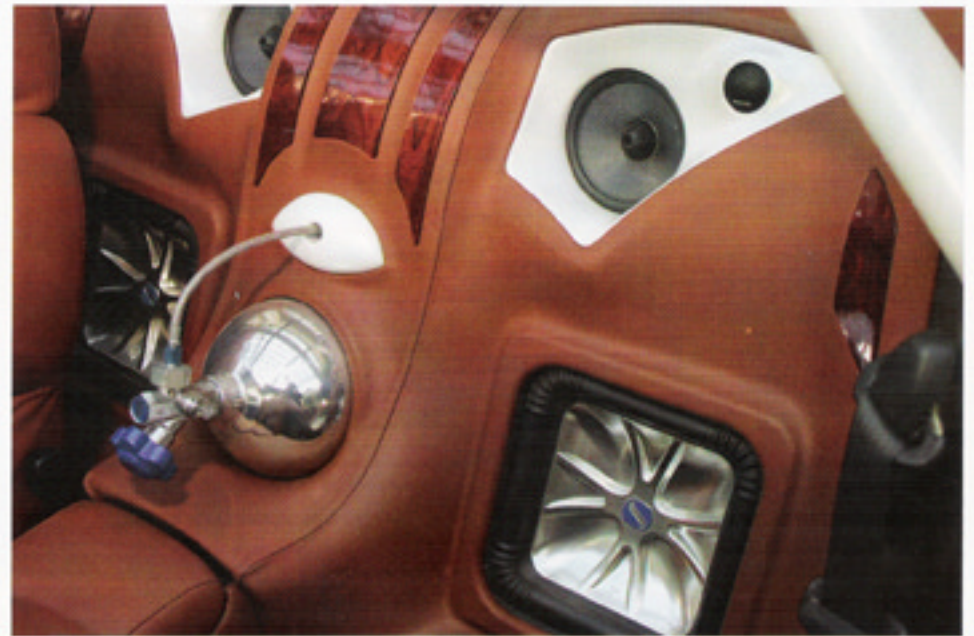




Lexus a pace-car with a roll-cage, and he wanted it oval and wider toward the bottom. Again, JRD with it's old-world metal crafting used two tubes to fashion 8" mild steel roll bar.

The big intercooler in the front necessitated a new intake in the front bumper. Michael wanted a front spoiler in the bottom of the front bumper but there was nothing in the standard aftermarket that looked good enough for the Lexus design. So JRD modified one to fit the new beast.

A Brembo 14" brake kit, same as on the Ferrari F-50, fit the front. For the rear, Brembo made a



prototype 4-piston brake kit using 13" rotors and Brembo's Aston Martin front calipers.

The final creation was deliciously coated in PPG Tri-Stage Pearl paint, the original color.

The whole project took more than a year and is still not finished. What a satisfying challenge to both AAP and JRD. One high point was when the factory Lexus representatives first saw the car. Beyond impressed - they were a bit jealous of this new Alpha-Male SC 430.

So was it all a success? In terms of the best-looking, best-built, fastest Lexus anyone could build, absolutely. But did Michael beat the Porsche? Well it turns he's not the kind of guy to actually race the car. He just used that as the goal. But with something north of 800 hp there's no doubt that AAP and JRD made a Lexus that makes challengers tremble. There is probably now a certain twin turbo Porsche owner calling up Chris and Johan with "Hey guys, I was wondering..." ***