



FULL Metal Jacket

WIDEBODY '02 LEXUS SC430
TWIN TURBO

STORY SHALIN KEENAN PHOTOS CLINT DAVIS

When Atlanta's Michael Snipes arrived at AAP Motorsports driving this rare pearl with goals of 700 whp, it was clear this project would go where few Lexus' (is that Lexi?) have gone before.



THE FORMER CEO and owner of Hiram, GA's Phoenix Retail Group Inc., a design and retail store fixture construction company that helps clients like Home Depot, Circuit City and Staples maximize profits, Michael Snipes, 51, fell in love with the Lexus SC430 convertible at the 2001 Atlanta Auto Show. After five months of being on the waiting list, he finally took delivery of a fully-loaded 430 in August that year.

After a couple of years Snipes grew tired of the convertible's overall performance and aesthetics and decided to pay a visit to AAP Motorsports. "The suspension was much too soft," he offers, "... like something my wife would drive. I wanted a car that would outrun my friend's Porsche 996 twin turbo!" And so, the responsibility of making the SC430 do just that fell upon AAP co-owner Chris Anderson.

Specializing in high-end one-offs and building custom cars at their modest 5,800 sq.-ft. shop in Suwanee, GA, Anderson co-established Anderson Audio and Performance (now AAP Motorsports) in 2001 at age 30.

"We started the Lexus in August 2003 and never really stopped," says Anderson, who's no stranger to modifying Toyota powerplants for maximum horsepower. He helped build the world's third fastest Supra, running 8.19 at 175mph in the Atlanta-based NOPI Drag Racing Series.

Anderson's partner Yamil Widy drives a '93 Supra in a different class and the five-year-old company has also built a pair of wide-body Supras – one red with a fully-built twin turbo, the other yellow with a single turbo motor – to enjoy on and off the track.

To build a 996 assassin, the motor is the top priority. Toyota's 4.3L 3UZ-FE V8 does all with 300 hp at 5,600 rpm and 325 lb.-ft. of torque at 5,600 rpm, but it's nowhere near a stock 2002 Porsche 911 Turbo, which makes 415 hp from its 3.6L engine. Aware of this, Snipes directed Anderson's crew to go ahead and build the twin-turbo V8 he'd been envisioning.

The engine bay contains some impressive hardware like a ported and polished cylinder head, custom Pauter billet rods, Ross forged pistons, an 8.5:1 compression ratio and twin HKS GT2835 turbos, which are paired with HKS super sequential blow-off valves and TIAL 38mm wastegates. GReddy Airinx filters are part of a network of three-inch custom pipes that connect with a custom three-row intercooler with dual individual end tanks for cooling each turbo independently. A Holley N-Tercooler system cools the intake charge before combustion while custom dual four-into-one headers with 1.75-inch primaries transmit burnt fumes to a three-inch custom stainless steel dual exhaust utilizing high-flow cats.

AAP installed two Walbro 255 Lph fuel pumps alongside an Earl's filter and

DETAILS

2002 LEXUS SC 430 CONVERTIBLE

WHEELS, TIRES, BRAKES

(r) 20x13-in. HRE 545R aluminum wheels, 345/25ZR20TL Pirelli Rosso P Zero Assi-metrico tires, Brembo (13.5-in. rotors, 4-pot calipers, pads); (f) 20x10-in. HRE 545R aluminum wheels, 285/30ZR20TL Pirelli Rosso P Zero Assi-metrico tires, Brembo (12-in. rotors, 2-pot calipers, pads)



The new body work remains faithful to the Lexus' lines yet evokes a much more emotional response....



CHASSIS, SUSPENSION

Tein CS fully-adjustable coil-overs w EDPC; 2-in. lower than stock

CHASSIS, BODY

JRD Tuning (custom "all-metal" widebody fenders, hood, urethane ground effect incl. f/r bumpers, steel roll bars, PPG Lexus Pearl White paint job w matching interior accents)

INTERIOR

MoTeC ADL-2 instrument cluster; motorized Recaro leather seats x2; AAP Motorsports custom (dash, door panels, wood trim); leather reupholstery;

black suede-reupholstered trunk; Defi 60mm gauges (water temp, tranny temp)

I.C.E.

Alpine (IVA-D900 in-dash monitor w DVD/CD/XM satellite radio receiver, NVE-852A DVD navigation system); Kicker (speakers - SS56.2 component speakers x4, S10L7 10-in. subs x2; amplifiers - SX700.4, SX1250.1; KQ30 equalizer); AAP custom (1 cu.-ft. sub enclosures, rear speaker pods, fiberglass amp rack); Hooker Audio wiring & interconnects; Optima Yellow Top battery; Dynamat Xtreme sound deadener



Aeromotive fuel pressure regulator that feeds the factory fuel rail. RC Engineering 770cc injectors get the mix inside the cylinders where it's ignited by NGK spark plugs and controlled by a MoTeC CD18 ignition control box.

The factory ECU has been retained for various functions like air conditioning and convertible top operation, however, it has been relieved entirely from its engine management duties. Instead, AAP went for something a little more familiar. Their Supra drag car uses a standalone MoTeC

system, therefore making the M800 EMS a suitable replacement for the SC430. This programmable modification takes complete control over all of the car's various functions, including injector duty cycle and fully variable cam control for starters. The intensive tuning work is courtesy of Powerhouse Racing's Jarett Humphreys and it has paid large dividends to the sum of 717 whp (up 139 percent) and 705 ft-lbs of torque (roughly a 117 per cent increase) at 6,800 rpm with 24 pounds of boost. "We really turned the boost up to get to 700

hp at the tires," Anderson reveals, before estimating a mid-10 at 135 mph ET.

With at least 415 hp and 380 ft-lbs more than stock, the snarling 3UZ-FE is now essentially a race motor. As such, a host of drivetrain modifications were necessary to be able to hold the power. Perhaps the most recent change to the car though is the custom built billet GM-TH400 three-speed automatic. A Gear Vender overdrive unit provides a fourth forward gear for street use. AAP also installed custom drive shafts, a 10-inch Protorque torque converter, Race

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Logic traction control system as well as a TRD limited slip differential with 3,500-rpm stall speed for improved traction.

Early on during the project it became apparent the SC430's stock transmission and scant footprint were insufficient for this level of horsepower. Addressing one of these issues is the aforementioned tranny upgrade; a custom wide-body conversion by JRD Tuning takes care of the other. JRD's namesake Johan Ragnarsson eased Snipes into the idea by first showing him a computer rendering of his custom "all-metal" kit that adds three inches of width to the front and six inches in the rear.

This body kit is similar to ones Ragnarsson made for the red and yellow Supras mentioned earlier. For these, he took a hands-on approach, expertly toiling over his shop's English Wheel for several months to fabricate four brand new wide-body quarter panels. He also customized the stock hood with aluminum vents to improve airflow, fabricated a roll bar that spans the back seat area and built a unique urethane-based ground effects package. The new body work remains faithful to the

Lexus' lines yet evokes a much more emotional response paired up with the PPG color-matched Pearl White paint job.

AAP filled the massive wheel wells with 20- by 13-inch HRE 545R polished aluminum rims in the back, with 10-inch-wide versions up front. The luxurious three-piece rims benefit from Pirelli Rossa P-Zero Assi-metrico tires – sized 345/25ZR20TL and 285/30ZR10TL respectively – and corresponding Brembo front and rear braking upgrades. The rear setup consists of 13.5-inch rotors with four-piston calipers while the fronts have 12-inch diameter rotors and two-pot calipers. The soft suspension has also been addressed via a complete fully-adjustable Tein CS coil-over system that rides two-inches lower than stock. Tein's Electronic Damping Force Controller permits more specific compression and rebound adjustments directly from the cockpit, which is where we go next.

On the inside, AAP installers Tim Gertz and Kevin Mutters performed extensive modifications to create a more functional and classy atmosphere. From custom-appointed leather Recaros with motorized comfort settings to custom door panels

With 717 rwhp and 705 ft-lbs at 6,800rpm and 24psi, the snarling AAP-built 3UZ-FE is essentially a race motor.

and wood veneer, AAP's experience with installations shines through. They retooled the dash to house a data-logging MoTeC ADL-2 instrument cluster and Defi gauges displaying water and tranny temperatures. The ADL-2 is directly integrated into the EMS and can display most of the car's vital information directly on its backlit LCD display.

The center dash column underwent some changes as well. Boost settings for the turbo system are accessible via a GReddy Profec e-01 electronic boost controller that replaces the factory navigation screen. An Alpine IVA-D900 DVD/CD/XM satellite radio receiver with motorized widescreen monitor is custom-installed in the factory location and linked up with an Alpine NVE-852A DVD-based GPS navigation system in the trunk.

Each door panel has been rebuilt in





SOURCEBOX

AAP Motorsports

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URL: www.anderson-audio.com

Location: Suwanee, GA

JRD Tuning LLC

Tel: 404-213-3908

Fax: 770-307-1714

E: jrdtuning@aol.comURL: www.jrdtuning.com

Location: Hoschton, GA

FB Performance

Transmissions, Inc.

Tel: 631-242-0008 (in NY);

or 800-769-1118 (outside NY)

Fax: 631-243-3054

URL: www.fbperformance.com

Location: Bay Shore, NY

Kicker Car Audio

www.kicker.com

Dynamat

www.dynamat.com

a three-tone wood-leather-fiberglass finish embellished by a raised Lexus logo in front of the Kicker SS56.2 midrange drivers in the lower portion of the door. AAP pulled the rear seats to make way for a two custom MDF/fiberglass sub enclosures each housing a Kicker SL107 square subwoofer as well as paint-matched fiberglass speaker pods with a second SS56.2 component beneath the roll bar. A polished 10-pound nitrous bottle is nestled in between, providing the button-activated N-Tercooler system its N₂O shot.

Part of the game here was to keep the convertible top in-tact and unobstructed. Putting a bunch of amplifiers back there made it even tougher. AAP worked around the lack of space and fabricated a fiberglass amp rack to accommodate Kicker SX700.4 and SX1250.1 customizable amplifiers, a KQ30 equalizer as well as the I.C.E. system's passive crossovers all strung together with Hooker Audio wiring

and interconnects. The original amp rack and certain parts of the amplifiers have been painted white while the rest of the trunk is refinished in black suede to contrast nicely with the rest of the car.

Snipes drives the Lexus regularly. In fact, he's put over 32,000 miles on it and spent close to \$150,000 in modifications. There's certainly not much left to upgrade, but we're confident this project isn't over yet. Some future plans could include a direct port nitrous system and getting involved in racing. Not sure what type; but, for now Snipes is utterly satisfied with the results.

This SC430 eventually found its way back to the Atlanta Auto Show, to the AAP/JRD booth where its mesmerizing proportions and powerful engine were the talk of the show. Even the Lexus USA people were extremely impressed. What better compliment is there? And, to all the 996 TT owners out there, you might want to stay away from this pearl white assassin. **MS**



SPECIFICATIONS

2002 LEXUS SC 430 CONVERTIBLE

ENGINE

Toyota 3UZ-FE 4.3L V8

ENGINE MODIFICATIONS

Ported and polished cylinder head; 8.5:1 compression; custom Pauter billet connecting rods; Ross forged pistons; ARP (head studs, main bolts); HKS (GT2835 turbo x2, SSQV BOV); TIAL 38mm wastegate x2; AAP Motorsports custom (GReddy Airinx intake, 3-row intercooler w individual end tanks, dual 1.75-in. 4-into-1 headers, 3-in. stainless steel dual exhaust w high-flow cats, fly-by-wire converted to cable system); Walbro 255 Lph fuel pump x2; Earls fuel filter; Aeromotive pressure regulator; RC Engineering 770cc injectors; Nitrous Express N-tercooler; PWR radiator; Taylor 10.5mm ignition wires; NGK 6097 spark plugs; Setrab (oil cooler, trans cooler); Royal Purple 20W50 full synthetic oil; K&N oil filter

DRIVETRAIN

FB Performance custom-built GM-TH400 3-sp. auto transmission w Gear Vender overdrive unit; B&M (Hammer shifter, shift knob); Race Logic TCS; Protorque 10-in. torque converter (3,500 RPM stall); TRD LSD; AAP custom drive shafts

ENGINE MANAGEMENT

MoTeC (M800 programmable standalone EMS, CD18 ignition control box, coil packs); GReddy Profec E-01 boost controller

NUMBERS

717 whp / 705 ft-lbs of torque @ 6,800rpm; 24psi (boost); 3,840 lbs. (w/o driver)

