



600-HORSEPOWER VIPER!

DODGE ONE-UPS CORVETTE Z06

Sports Car

INTERNATIONAL

GT-R

**NISSAN'S 480-HP
TECH DE FORCE**



0-60 2.7 SEC.
ARIEL ATOM

M3 FIGHTER
MERCEDES C63 AMG

STILL THE ONE?
MITSUBISHI EVO X

JANUARY 2008
USA \$4.99 CAN. \$5.99



Sports Car

INTERNATIONAL

Volume 24 Issue 1, January 2008

features

28 Faster, Less Furious

The Mitsubishi Lancer Evolution X makes a clean break from its past.

Jay Lamm

34 Target Practice

The Mercedes C63 AMG has the handling to match its firepower.

Dan Carney

39 The Power of Power

Ninety more horsepower makes for a more convincing Dodge Viper.

Ray Thursby

44 No Roof, No Stereo, No Problem

There's very little to the Ariel Atom 2 save for outrageous speed.

Dan Carney

50 Spaghetti Western

We pit a Ferrari 512 BB against its nemesis, the Lamborghini Countach.

Zachary Mayne

58 No Softie

The Porsche 911 Turbo Cabriolet is one of the fastest soft-tops available.

Ian Kuah

63 Winning Crew

We visit the Bentley factory and drive its latest model, the Continental GT Speed.

Nick Kurczweski

70 Bold Move

The Honda Accord Coupe looks the part, but how does it drive?

Dan Carney

74 Retracing Reims

We drive a Renault Mégane R26 to the former home of the French GP.

Nick Kurczweski

78 Weighty Issues

England's PalmerSport unleashes the potential of Jaguar's XKR.

Ian Kuah

83 Hal-C-on Days

We attend a gathering of Group C and IMSA GTP race cars at Silverstone.

Steve Havelock

88 August Marathon

The annual Monterey Week begs the question: Can you do it all?

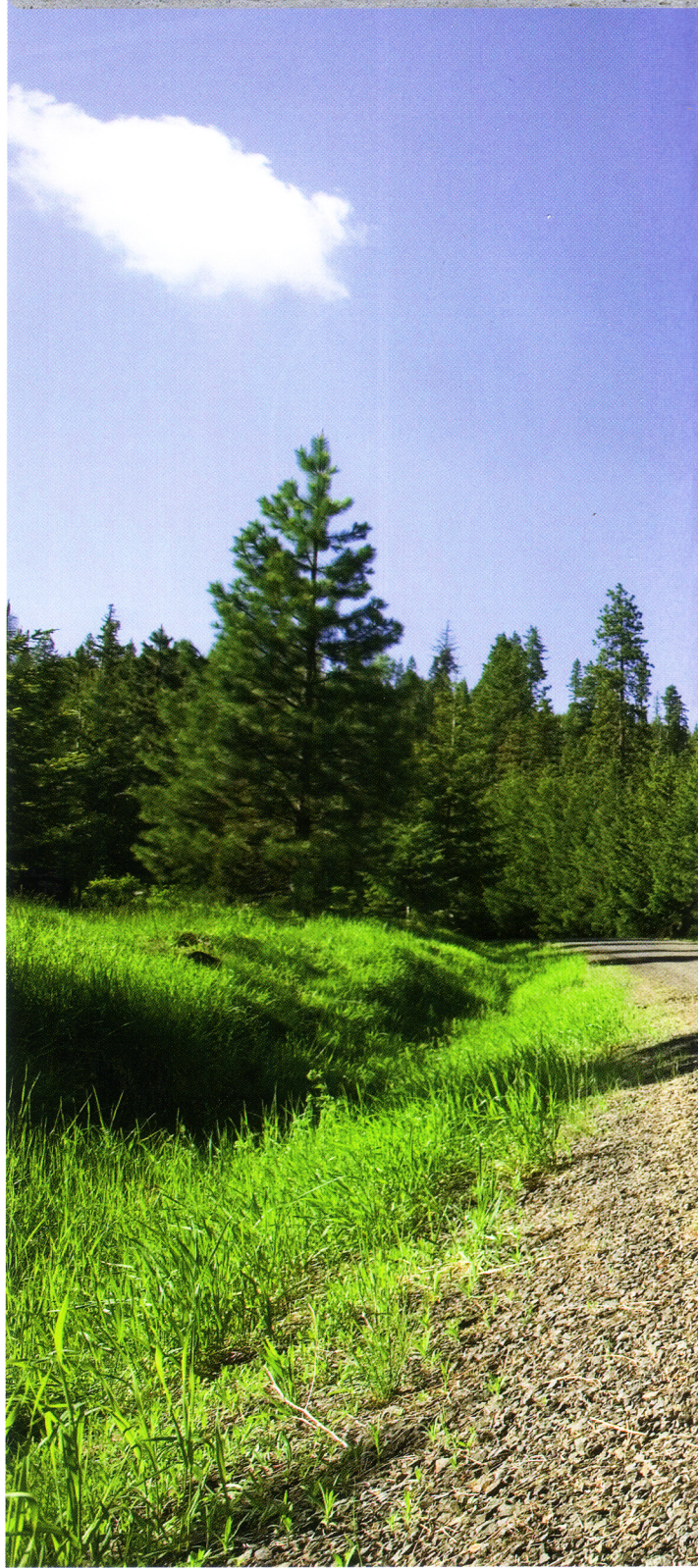
William Edgar

departments

- 8 **News** Nissan GT-R, Frankfurt Auto Show, Jaguar XF
- 18 **From The Editor** Hitting the road with Kerouac
- 20 **Design Matters** Audi R8 gets the Del treatment
- 22 **Correspondence** Nürburgring, Nismo 350Z, Porsche GT3
- 24 **Passing Glances** Mini Clubman, Shelby GT, Subaru 3.0R
- 96 **Affordable Sports** 2002-06 Nissan Sentra SE-R



63





28



74



58



44

No Roof, No Stereo, No Problem

The Ariel Atom 2 is so lightweight and elemental that it makes a Lotus Elise seem like a Cadillac.

by DAN CARNEY photography by DAVID NEWHARDT





There is no question that we are fortunate to live during an era of unprecedented increases in horsepower, with the long-standing division between sports cars and muscle cars being obliterated as each becomes more like the other. However, there is a downside to driving these stunningly fast and accomplished performance machines. They are dull.

Did we really start driving sports cars because we loved the thrill of cranking up an 18-speaker surround-sound audio system while enjoying a massage delivered by the driver's seat? Are five or six hundred horsepower whooshing through six, seven or eight automatically selected gear ratios and sent to the road by a computer-controlled all-wheel-drive system all that much fun?

As more purist heretics begin to ask these questions, more alternatives arise. We've seen Lotus offer the Elise, a bare-bones sports car for the street. And we've seen the Radical sports-racer arrive from England to offer a user-friendly motorcycle-powered track-day car. There is some crossover, as Elises visit racetracks and some intrepid owners license Radicals for street use (as is done in their home country).

But now the Ariel Atom has arrived in the U.S., offering perhaps the purest sports-car experience yet. Many of us were introduced to the Atom by an uncharacteristically ebullient review of the car by *Top Gear*'s Jeremy Clarkson. The Briton, who delights in ridiculing cars with his acerbic wit, was wholly disarmed by the Atom. It is easy to see why. The car is a 1,200-pound go-kart with a car engine in the back. No stereo. No air-conditioning. No roof. Just engine, suspension, steering and brakes, tied together with a steel tube frame that looks as if it was inspired by a Ducati motorcycle.

First, some background. The Atom is the brainchild of designer Simon Saunders, who in the early '90s resurrected the venerable Ariel marque. The British company's roots extend back to 1898 and encompass both race cars and motorcycles. It was renowned for its unorthodox square 4-cylinder motorcycle engine.

Saunders mated the historic name to a minimalist chassis—essentially a two-abreast Formula Ford—and installed the drivetrain from the Honda Civic Type R. The high-strung four was supercharged to a claimed 300 horsepower, giving the lightweight plaything the power-to-weight ratio, and the performance, of a pedigreed supercar, including a 0-60 mph time of 2.7 seconds. The mayhem started in 2002, but was largely restricted to the UK.

In 2005, an Atom was imported to Washington state, where Craig Bramscher, CEO of Brammo Motorsports in Ashland, Oregon, was in search of a manufacturable enthusiast product to launch his engineering company. Bramscher tested the car and immediately thereafter set out to England to meet with Saunders. They inked a licensing and manufacturing deal. Brammo builds Ariel's car, dubbed Atom 2, in its Ashland headquarters to Saunders' specs, and distributes them.

The frame tubes in U.S. cars are laser-cut for greater precision than the UK's hand-



PHOTO DAN CARNEY





Above: Steel tubes form an insect-like exoskeleton. Opposite, clockwise from bottom: Mid-mounted engine is rather scantily clad; Brammo factory in Ashland; air intake is just inches from your ears.

cut tubes, and the chassis is stretched an inch in the engine bay to accommodate a domestically sourced engine. GM agreed to supply the 205-horsepower supercharged 2.0-liter Ecotec 4-cylinder engine used in the Chevrolet Cobalt SS.

The stock engine runs the Eaton M62 roots-type blower with about 12 psi of boost; by turning up the wick, Brammo is able to offer a 230-hp Stage 1 kit and a 245-hp Stage 2 kit (both measured at the wheels). This brawny engine grinds out more torque than the Honda powerplant, while its seven-quart oil sump and block-mounted oil cooler help ensure durability.

The transmission and clutch are the standard GM components. These were designed to handle the strain of propelling cars more than double the Atom's weight, which bodes well for transaxle durability and clutch life.

The Atom's suspension is most closely related to your basic formula car's: The pushrod-actuated double wishbones are purpose-built and bolt to the frame using heim joints for maximum adjustability and ease of replacement. As on a race car, the source of most of the other components depends on the customer's intentions and budget.

Plain old nonadjustable Koni shocks adorn each corner, but Brammo will happily deliver your car with single- or double-adjustable shocks if desired. Same for the brakes. Wilwood calipers are standard fare, but cars that will see mostly track duty can be upgraded to Alcon hardware. The minimal

fiberglass bodywork is available in lighter-weight carbon fiber, and wings can be affixed to the front and rear to help the Atom stick to the track. The wing package reportedly trims several seconds off a typical lap time.

Price starts at \$52,000. A car with the more powerful engine and bigger brakes runs \$66,000, and it is possible to load one up with carbon-fiber goodies to the tune of \$100,000. As they say in motor racing, speed costs money.

Brammo has already delivered 110 Atom 2s to American customers and has 30 more cars under construction. The company is currently working with Ariel on a possible switch to Honda power because of supply questions concerning the GM engine. The turbocharged Ecotec variant seen in the Pontiac Solstice GXP and Saturn Sky Redline is another possibility, but Bramscher

said that he is concerned that the minimal turbo lag evident in those 3,000-lb. cars could become intolerable in the 1,200-lb. Atom.

We saw evidence of this sensitivity to power delivery in our test drive through the picturesque hills surrounding Ashland. At tip-in, throttle response seemed very eager and the Atom was prone to nasty oscillations upon take-off that make the pilot look like a clumsy driver's ed student. A conference with the company's engine-mapping engineer revealed that this is not a matter of overly

sensitive throttle response, but of the car's low mass. The throttle is already mapped to be as slow as is reasonable, he said, and with a little practice the lurching driver's ed effect subsides, which we found to be the case.

When shredding the switchbacks outside of town in our 245-hp tester, response from the pedal seemed spot-on. One can measure the throttle position either by the angle of the right foot, or just by listening. The gaping 68-mm throttle body is just inches from the driver's right ear (switching the driver's seat to the left side of the car is another change for the Atom 2), and the rasping, Slurpee-straw-

sucking-air-in-the-bottom-of-the-cup sound of the intake is instantly responsive to changes in throttle position.

Blower whine and gear noise are also continuous companions, and unfortunately, they largely overwhelm the stock exhaust note. But with a car this fast, who cares? When we were really able to open it up, the Atom feels like a high-powered superbike, with acceleration that builds dramatically as revs climb. As with the exposed lattice frame, the visceral experience of hearing and seeing every mechanical piece at work is also reminiscent of motorcycles in general and charismatic Ducatis in particular.

It seems likely that the Atom will serve as a four-wheel alternative for customers who thought they could only get such a visceral experience from a motorcycle. But because it's not a bike, there is no legal requirement to wear a helmet. However, given the lack of a windshield, the use of one seems prudent. With a helmet on, wind buffeting is not a problem at highway speeds, but, of course, this makes conversation with the passenger out of the question.

Other customers are likely to see the Atom as a race car for the road. With a removable steering wheel and six-point harness, not to mention its light weight and crazy acceleration, the Atom makes a pretty convincing case for being just that. Because outward visibility is so good, being held in place by a harness isn't the hassle during street driving that I've found it to be in real street cars like the Viper ACR.

Just like on a race car, the pedal assembly is adjustable. The brakes can be set to suit customer preferences, as well. Service manager Thomas Smurzynski explained that most customers have gone with hard brake pads that have a higher pedal effort and longer life rather than the soft, grippy track-only pads used on race cars. The pads on our tester were either carved from nearby redwood trees or were glazed and in need of replacement; it nearly took both feet to slow the car from any significant velocity, and there was no feel whatsoever from the brake pedal. In such a light car, the stock Wilwood brakes should be more than sufficient when matched to a fresh set of the right pads.

Clutch engagement is smooth and predictable, but the cable-operated shifter on our test car may have needed some adjustment; it was possible to overshoot the gate for fifth gear and get nothing.

Turning into corners, the Atom is very easy to keep on line, and the exposed wheels



Left, clockwise from top: Atom defines the term bare-bones; dampers are horizontally mounted; exposed wheels make clipping apexes a snap; revived British marque; lightweight stoppers.

Stiff Manhattan



TERRY KENNEDY, he is one dedicated Atomist. He earned this distinction by driving his Atom 2 from the Brammo factory in Ashland, Oregon to your home in northern New Jersey—twice.

It takes fortitude to drive this barely legal race/street car over long distances; only motorcyclists are less protected, and their ride is much softer. And Kennedy drove his Atom in brutal heat, pouring rain, freezing temperatures and hail.

Of course he puts a positive spin on the experience: "One of the first things you notice when driving an Atom is how much more connected to your environment, not just the road, you are. Your senses are exposed to everything: the scent of evergreens in the Northwest, fresh-cut hay in the Midwest, etc. You experience the weather, both good and bad, and pick up on the slightest changes in climate. The Atom really makes me appreciate how much we're missing when driving around in our climate-controlled, hermetically sealed vehicles.

"The Atom is an incredibly responsive car. When you ask it to do something, it does it—and does it well—no questions asked. After my cross-country drives, driving any other car feels like I'm trying to pilot a couch."

I met up with Kennedy in New York City, and he was gracious enough to let me drive his Atom. Driving it in Manhattan is like a slow dance—one is constantly scanning the surface ahead for imperfections and trying to circumnavigate them.

The good thing about this pace is the ability to watch the reactions of tourists and New Yorkers (tourists take pictures). You field questions at red lights, observe disbelief, raised eyebrows, broad smiles and lots of thumbs-up.

Fortunately, we were able to get out of town and onto some more open roads. The experience of driving the Atom is very much like piloting a formula race car. One hears the workings of the suspension and sees the activity of the steering and tires in the front through the open tube frame. The ride is stiff; if there is a rubber bushing somewhere, it escaped my scrutiny. The steering feels as if it is connected directly to the front wheels. This is a machine for the true connoisseur, someone who champions the "less is more" edict. Poseurs need not apply to this club.

And the speed! The gas pedal should be called a trigger. I had visions of Baron von Münchhausen's famous ride on a cannonball once I hit it. The car's acceleration is so massive and immediate that involuntary shouts of extreme joy escaped my wind-contoured face. I have never felt such gs.

Unfortunately, once I hit 50 mph my eyes were tearing so badly I could go no faster. Next time I'll bring goggles or my full-face helmet. Terry, please let there be a next time.

—Klaus Schnitzer

For a full report of Kennedy's road trip go to www.atomacrossamerica.org.



make hitting the apex connect-the-dots easy. Back on the throttle through the apex, the mid-engined Atom is perfectly balanced and a thrill to drive as we dialed in countersteer to offset the power oversteer. The steering is heavy, but in a purposeful way that provides ample information about the activities of the front tires. There is a noticeable tendency for them to tramline, tugging the

steering wheel to follow the contours of the road, but because the Atom's suspension is fully adjustable, the front caster can be tweaked to reduce this effect, and probably lighten the steering a bit in the process.

The Atom 2 must be titled as a kit car in most states, but Oregon is preparing to recognize Brammo as a manufacturer and permit owners to title the Atom as a new car

there. Many customers have their cars shipped to them, while others opt for factory delivery. One New Jersey enthusiast drove his Atom home across the country, documenting the trip for his blog (see sidebar). Such is the nature of true sports-car enthusiasts who value the fun of driving over posturing and posing! The Ariel Atom is perfect car for them. ●