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Ruf CTR3

THE AUTOBAHN'S
DARK KNIGHT!



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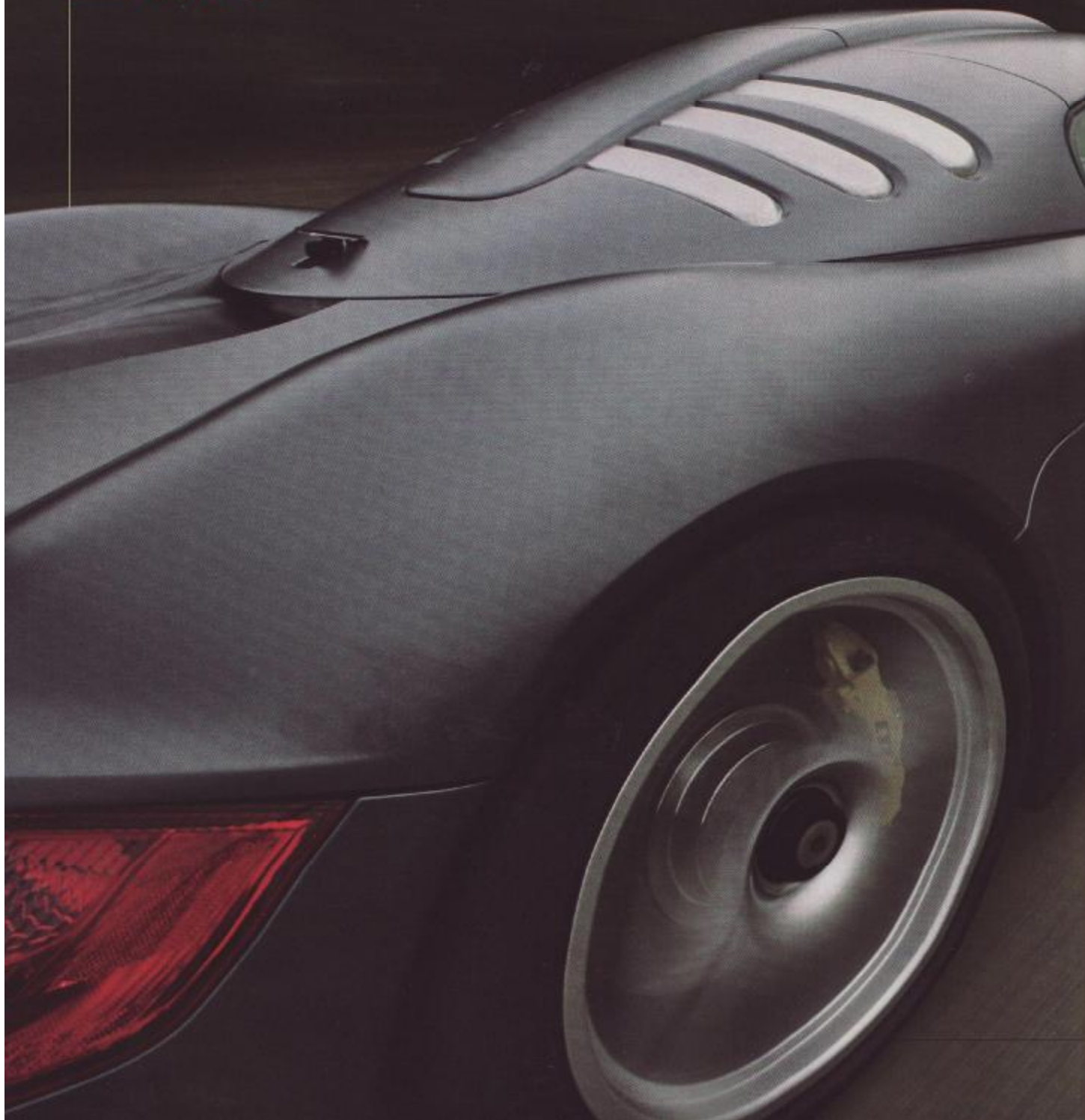
Ruf's
Electric 911

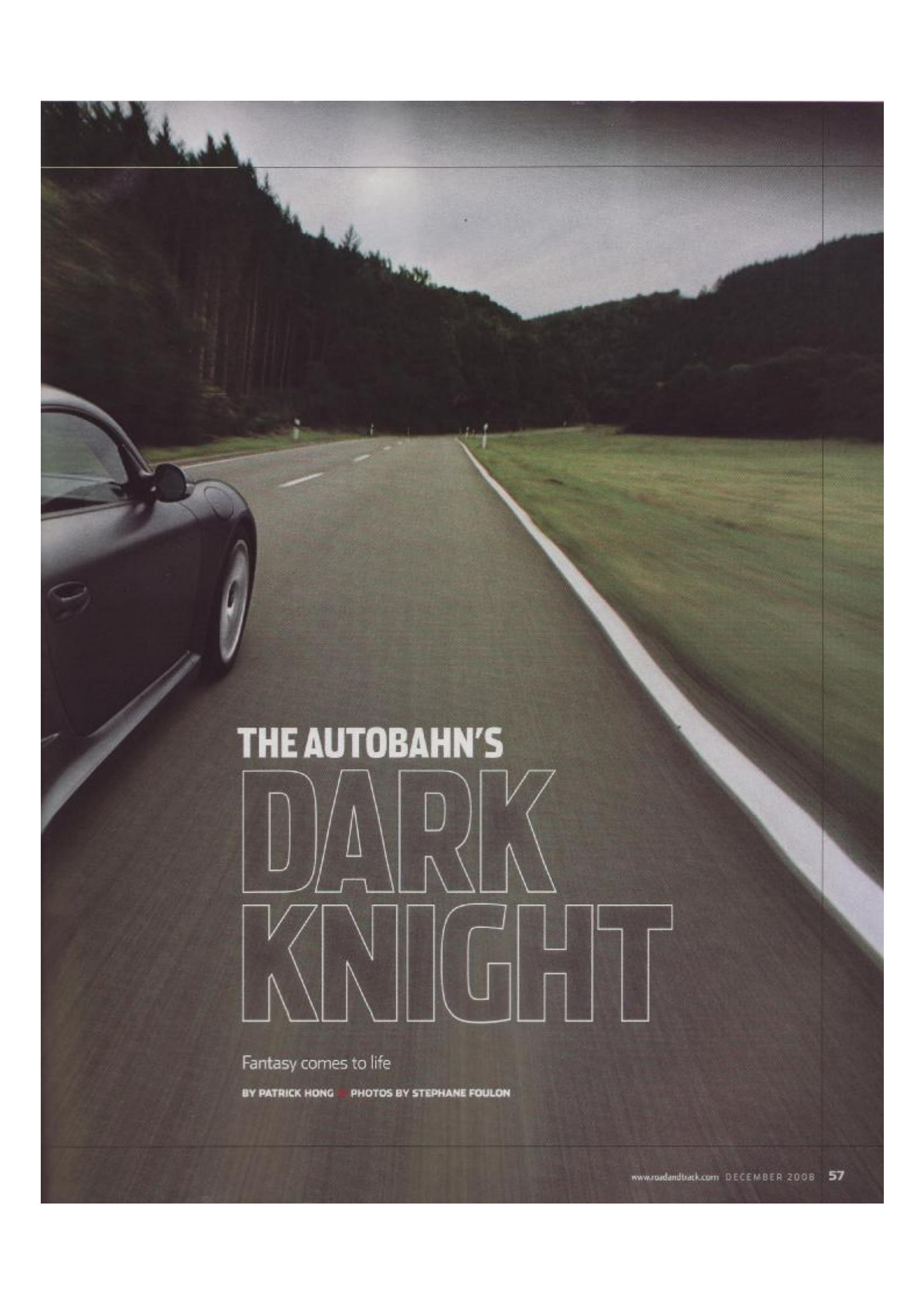
Lamborghini's
Surprise Sedan

DECEMBER 2008

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2008
RUF
CTR3





THE AUTOBAHN'S
DARK
KNIGHT

Fantasy comes to life

BY PATRICK HONG PHOTOS BY STEPHANE FOULON



NÜRBURG, GERMANY—We all know what Batman drives by night when he rockets around Gotham City saving people from villains such as the Joker and the Riddler. But by day, when he's back being Bruce Wayne the millionaire, what's his ride? Is he chauffeured around? Or is he a car enthusiast who climbs aboard a superhero-worthy sports car just for fun?

Sure, Bruce Wayne could probably afford the usual exotics like Ferrari, Lamborghini and Porsche, or even an Aston Martin like the one driven by a certain spy. But Bruce deserves to drive something more exclusive: the new Ruf CTR3.

Alois Ruf, a well-known small sports-car maker who made his name pumping Porsche 911s up to even higher performance levels, has entered the big leagues with his own car, the CTR3. Introduced last summer in Bahrain ("Pumped-Up Porsches," R&T, July 2007), the Ruf supercar is finally ready and we are fortunate enough to drive the first production version in the world.

The CTR3 is without doubt the perfect garage-mate to all the Batmobiles. And unlike the Batmobiles that exist only in the fantasy world, the CTR3 is real. In profile, the CTR3 looks like a squashed 911 with all four corners pushed out as far as possible. The front and rear fenders budge out to hold in the massive front 19-in. and rear 20-in. Michelin Pilot Sport tires. Ruf says the CTR3 styling was inspired by the 1953 Porsche 550 Le Mans Coupe driven by Paul Frère and Richard von Frankenberg. With the central air scoop on the roof, the CTR3 is also reminiscent of the Porsche 911 GT1 from the late 1990s. Overall, the Ruf is wider, taller and not as long as the Carrera GT.

The front's overall styling is similar to a

911's, with its exposed headlights flanking the sloping hoodline capped by a couple of blacked-out air vents. The bumper with the built-in foglamps and indicator lights, plus the low and wide air scoops, are Ruf originals, and match well with the large and bold air vents at the rear. From the back, the low-slung tail and the wing coupled to the paired slits on the roof speak loudly of the car's intense power and mystique.

Even though the CTR3 does not come equipped with a jet engine and afterburners, its 3.7-liter twin-turbo flat-6 comes pretty close. The engine delivers 700 bhp (DIN) at 7000 rpm and provides 657 lb.-ft. of thrust at 4000 rpm—enough to catapult the sub-3100-lb. mostly carbon-fiber-bodied machine up to 100 km/h (62 mph) in less than 3.2 seconds (according to Ruf). With a transverse 6-speed sequential racing gearbox, the CTR3 can reach a top speed of 233 mph. If there is any concern that this Ruf is simply a heavily modified version of the Porsche 911, Boxster or Cayman, raise the rear deck and you'll be treated to a beautifully—and uniquely—designed, race-inspired, tube-frame chassis complete with multilink suspension and horizontal coil-over shocks co-developed with Multimatic of Canada.

Climb aboard the CTR3 and cinch yourself tightly into the supportive carbon-fiber/leather-trimmed racing seat. Twist the igni-





» The CTR3 is the most radical Ruf ever created. The beautiful lever in the top photo works the sequential gearbox, which means no fussing with shift gates. The pleated pattern of the seats and headliner is both luxurious and stylish.





» The stunning tube-frame rear chassis and horizontal shock absorbers are proof the CTR3 is a RUF, not simply a modified Porsche Cayman or 911. Top left, the rearview camera is located above the air intake. RUF wheels house gigantic carbon-ceramic brakes.



2008 Ruf CTR3 Specifications

Price	420,000 Euros (est. \$613,000)
Curb weight	est. 3085 lb
Wheelbase	103.3 in.
Track, fr	59.3 in./52.4 in.
Length	175.0 in.
Width	75.5 in.
Height	47.2 in.
Fuel capacity	23.5 gal.

ENGINE & DRIVETRAIN

Engine	twin-turbo dohc 24V flat-6
Bore x stroke	102.0 mm x 75.4 mm
Displacement	3746 cc
Compression ratio	9.4:1
Horsepower (DIN)	700 bhp @ 7000 rpm
Torque	657 lb-ft @ 4000 rpm
Fuel delivery	elect. sequential port
Transmission	6-speed sequential manual


CHASSIS & BODY

Layout	mid-engine/rear drive
Brakes, fr	15.0-in. drilled & vented discs, ABS
Wheels	19 x 8 1/2 f, 20 x 12 1/2 r
Tires	Michelin Pilot Sport; 265/35ZR-19 f, 335/30ZR-20 r
Steering type	rack & pinion
Suspension, fr	MacPherson struts, tube shocks & coil springs, anti-roll bar/multilink, tube shocks & coil springs, anti-roll bar

tion key and the Ruf comes to life without much drama. The sequential shifter takes a little bit of time to get used to, especially since its straight-cut racing gears rattle when you're in neutral. Pull back to shift into 1st. And you'd better be forceful with it or the gearbox will howl back for lack of engagement. Clutch out as you feed in the gas. The startup is quite dramatic as the tires dig into the asphalt and you feel the acceleration come on strongly. Just when you think you are going at a pretty good clip, the engine revs hit 4000 rpm where the twin turbos become significant. The turbos blow at a gale-force 17.4 psi to further catapult you forward. It's warp speed ahead!

On any straight road without traffic, the CTR3's acceleration rate is mind-boggling. With the corner ahead fast approaching, the Batmobile's grappling hook seems like a good idea. Fortunately, standing on the brakes lets the 6-piston calipers clamp down on 15.0-in. ceramic composite discs at each wheel. The car scrubs off speed immediately, aided by ABS and traction control. The CTR3 turns in quickly and sharply toward the apex with minimal fuss, thanks to its nicely weighted steering and taut front MacPherson and rear multilink suspension. Built into the chassis tuning is slight understeer, good for road use. But it is apparent that at the track and fully unleashed, the CTR3 can be easily balanced with steering and throttle inputs. Off the corner, the CTR3 picks up speed quickly as you ease in the throttle. Too heavy on the gas and the rear wiggles just a touch to remind you of the 700 bhp on tap. The Ruf likes and needs to be run at speed. That's when you'll appreciate the power and the engine at full song with its aggressive growl.

Around town at low speeds, heavier-than-usual upshifting effort on the sequential gearbox becomes more noticeable. Surprisingly, there is enough compliance in the suspension's damping so that you don't feel like you're getting beat up every time you crest a bump on the road. Inside the CTR3, sitting low and tucked toward the center makes you feel like you're part of the car. The vision forward and to the sides is excellent. However, don't look for anything through the back because you can't see a thing. A backup camera helps. Parking in tight quarters is a challenge, but what the heck, have Alfred do it.

Priced at the present currency exchange rate of around \$613,000, the Ruf CTR3 is definitely a supercar for the select few. Its exotic looks and awesome performance easily qualify it to live in both the fantasy world of Gotham and in real life in the hands of any performance-crazed car enthusiast. Alois Ruf has proven he can take on the big manufacturers and construct a supercar that is just as good, if not even better and more exclusive. 

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PHOTOS

2008

E-RUF CONCEPT MODEL A

9-ELECTRIC!

Ruf electrifies the sports-car world

BY PATRICK HONG ■ PHOTOS BY CHRISTIAN BITTMANN





PFAFFENHAUSEN, GERMANY—Just as we are wrapping up the details with Alois Ruf regarding our long-awaited drive of his 700-bhp CTR3 supercar (see page 56 of this issue), he drops a bombshell before he hangs up the phone, “How would you like to drive a top-secret Ruf that has been under development?”

Huh? Could this be a Ruf even more powerful than the already frighteningly potent CTR3? Without hesitation, I said an emphatic “Yes!”—not waiting to even begin guessing what the secret Ruf project could be. Several follow-up phone calls and a couple of weeks later, I arrived at Pfaffenhausen to sample Ruf’s latest creation: the E-Ruf, an all-electric concept car based on the Porsche 997.

After an early morning appointment with Ruf at his headquarters, we take a short drive to his skunk works, a nearby location he calls Gmünd—the city in Austria where Ferry Porsche first set up shop and built the famed 356. It’s a foggy morning, and Ruf’s secret R&D location emerges among a nondescript cluster of other buildings. As the garage door rolls up, a standard black 997 appears, wearing four large orange stickers with the word “Erprobungsfahrt,” that is, “Test Drive,” on the front and rear bumpers. Look closely and you’ll notice that all the air scoops in the front, sides and back of the 997 are now filled in and smoothed over. Peering into the cockpit, you’ll see a dash filled with test gauges and a center stack equipped with several switches and connectors. Gone are the rear seats, replaced with a big hump just touching the back of the front seats.

It was about two years ago that Ruf decided to partner with Calmotors of Ca-

marillo, California, to develop an all-electric powertrain package for the Porsche 997. At the heart of the E-Ruf is a 200-lb. electric motor built by UQM Technologies in the U.S. The drum-shaped, brushless a.c. motor—15.9 in. in diameter and 9.5 in. in length—resides right where the internal-combustion flat-6 normally would. Its system voltage is between 300 to 420 volts at 550 amperes; the motor peaks at 5000 rpm. It generates 150 kW (200 horsepower) and 479 lb.-ft. of torque. Energy storage onboard comes in the form of 96 lithium-ion batteries manufactured by Axion of Great Britain. Each of these 3.3-volt cells has a life cycle of 3000 charges. In total, the battery pack takes 10 hours to fully charge at 16 amps.


Like many concept cars, the E-Ruf is an early prototype, by no means a production-ready car. Subsequent models will follow as the development progresses. In fact, this E-Ruf still retains the 997 clutch and the 6-speed manual transmission. In its final iteration, only one gear is necessary because an electric motor’s torque output is instant and the speed is easily reached without multiple gears. And further, there is no need for a reverse gear because you can simply reverse the current and spin the electric motor backward.

But unlike many concept cars, the E-

Ruf is driveable. With 479 lb.-ft. of torque available the instant you tip in on the accelerator, the E-Ruf moves off quickly with minimal fuss. As the mechanical sound you hear is the whine from the electric motor, wind and tire noise suddenly become more noticeable. In fact, you feel like you're in a spaceship blasting through the galaxy (especially in the thick fog). To slow down, regenerative braking is currently set at about 25 percent, pending final evaluations to achieve optimal brake feel.

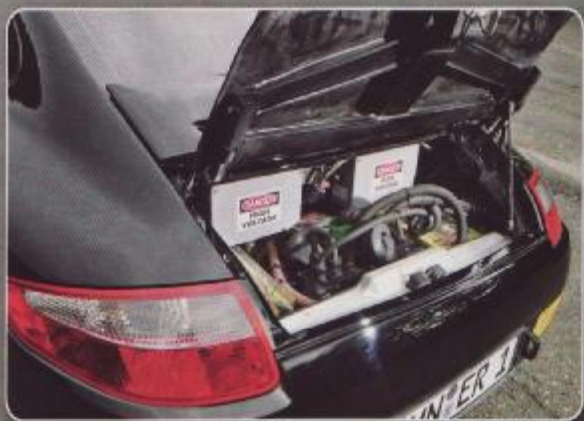
On winding roads, the E-Ruf's 4200-lb. weight is apparent as soon as you make a quick steering input. The batteries alone weigh some 1200 lb., and occupy all of the trunk space up front and all of the room inside the big hump where the back seat used to be. Naturally, the balance of the car is not nearly (nor is expected to be) the same as the

standard 997's. Ruf would like the E-Ruf to hit 60 mph in under 7 seconds, reach a top speed of 160 mph and have a maximum range of between 155 to 200 miles depending on driving conditions. We can also expect improved handling worthy of the Ruf name.

Alternative power must be on all car enthusiasts' minds. Will electric, or other sources of energy, take away the excitement, speed and handling we've long associated with internal-combustion gasoline-burning sports cars? Nobody knows for sure, but it's reassuring to know that Alois Ruf doesn't think car enthusiasm and environmental friendliness are on divergent paths. And people like Ruf keep large manufacturers on their toes by accomplishing something without a huge budget. We can't wait to drive the E-Ruf in its final form. 



“Ruf doesn’t think **car enthusiasm and environmental friendliness** are on divergent paths.”



» With an electric motor where the flat-6 normally resides, and batteries filling the trunk and rear-seat area, the E-Ruf is far from practical. But for Alois Ruf, standing next to his generating station, this concept is just a beginning.