

964 Cup



The Unrecognized Carrera RS

The Magazine **11** About Porsche excellence

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America's Cup

LARGELY FORGOTTEN, THE 1992 911 CARRERA CUP EDITION IS LITTLE MORE THAN A THINLY VEILED CARRERA RS — MAKING IT THE ONLY REAL RS IMPORTED HERE. WE TRACK DOWN THE FIRST OF THESE 45 RARE BIRDS AND DRIVE IT. **STORY BY KARL GLYNN. PHOTOS BY JOHN KIRIKOS.**





The object of our attention this morning has the distinction of being car #1 of just 45 964-based 911 Carrera Cup Editions produced in 1992. Not to be confused with the comparatively common RS America, this 911 is essentially a true-blue Carrera RS in all but name. In fact, Porsche AG elected to augment its owner's manual with the same *Carrera RS Supplement* leaflet that came with European 964 Carrera RSs.

While art man Kirikos is still busy snapping pix for posterity, I can't help reflecting on the unusual story behind this particular car. I always thought Porsche didn't bother importing its homologation specials. Until recently. Very recently, as in starting with the 996 GT2. So we've missed every real RS. Yet this car — like its 44 siblings — was sold through Porsche's U.S. dealer network and legally registered without any gray-import shenanigans. So how, exactly, did this 911 "homologation special" slip through?

The Roundabout RS

To answer the question, you must go back to 1989. Ulrich Bez — then technical director at Porsche — led a charge to replace Porsche's popular 944 Turbo Cup racing series with one based around 1989's 3.6-liter, 964-based 911. His argument: If your strategy is to race on Sunday and sell on Monday, then you should do it with your premier model — rather than one nearing the end of its life.

Reviving the famous RS moniker after a long hiatus, Porsche released the road-legal 3.6-liter 964 Carrera RS in 1992 for FIA N/GT homologation purposes. Built only in 1992, it was derived from the Carrera Cup racer. It had the same upgraded engine, suspension, special construction, and lightweight features of the Cup car while adding a small amount of creature comforts to make it livable on the road. It came in three versions — the minimalist Basic, the well-equipped Touring, and a Sport version not intended for road use. Total production was 2,398 units with the Basic version accounting for about 80 percent of the total.

A more powerful 964 Carrera RS 3.8 was released in 1993. This one-year-only model sported a 3.8-liter, flat-six engine and was also available in a Club Sport configuration. The full-race version was called the RSR 3.8 and it won the Production GT class in privateer hands at Le Mans in 1993 and 1994. It's thought that around 90-100

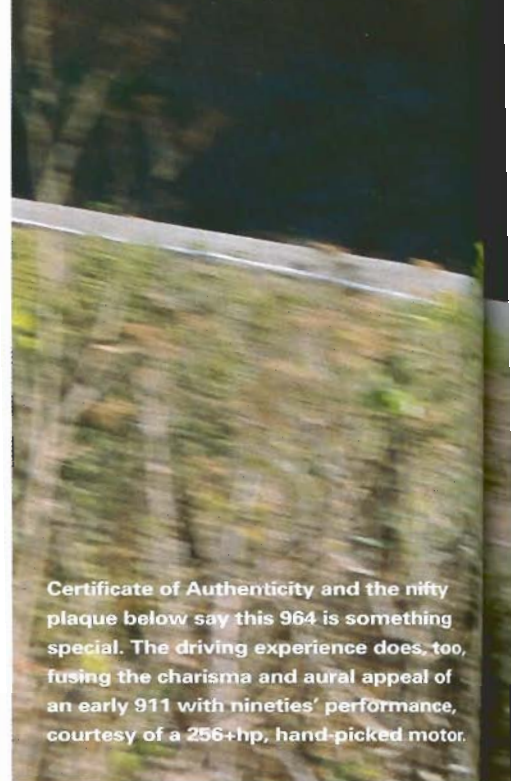
RS/RSR 3.8 cars were made in total, but Porsche didn't import any 3.6-liter or 3.8-liter Carrera RS street cars into the United States. The RS we *did* see in numbers, the RS America, was more decontented C2 than true RS.

Anxious to improve sagging sales in the early nineties, Porsche wanted to bring a Carrera Cup racing series to North America. Usually, Porsche could have imported a number of Carrera Cup race cars into the U.S. The problem? Porsche was on the DOT/EPA's blackball list, largely because of the fiasco Porsche got into when it tried to import a number of 959 "race cars" into the U.S. (*Excellence* October, 1990). The DOT/EPA suspected the 959s would be converted to road use, thus circumventing the normal certification process. The 959s were sent back to Germany and Porsche had its knuckles severely rapped — so it was understandably shy about history repeating itself with the Carrera Cup cars.

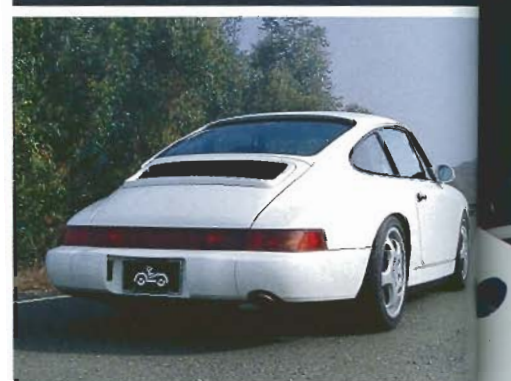
The solution Porsche came up with was the 964 Carrera Cup Edition, based on the 1992 3.6-liter Carrera RS Basic and made specifically for the U.S. market. More than mere homologation specials, however, these 911s were intended to be converted into race cars as soon as they cleared customs. The bare minimum changes from their Carrera RS basis would allow them to be imported as road-legal, U.S.-spec cars, then they would be shipped to Andial in Santa Ana, California for conversion into true race cars.

"Andial was involved because we had a very close partnership with Porsche Motorsport at that time. We handled most competitive-related matters in North America for them," says Dieter Inzenhofer today, one of three founding partners of Andial. As part of the conversion, Andial would remove all equipment that made the cars road-legal in the U.S. In due course, 45 Carrera Cup Editions were assembled and shipped to the U.S. But then, after 25 cars were modified by Andial to full U.S. Carrera Cup race specifications, things went awry.

"We did not find enough customers to start a competitive series," explains Alwin Springer, General Manager of Porsche Motorsport North America at that time. "The time for a Cup series in the U.S.A. was right and I really believe that the series would have become a super-contender. Maybe in hindsight, we should have covered some of the cost to get the Cup series going, but

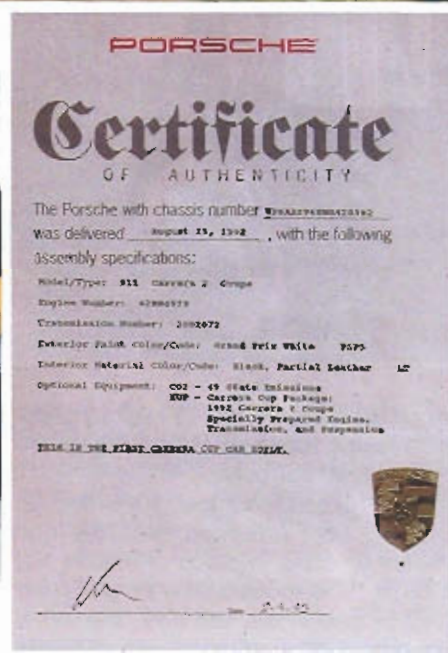
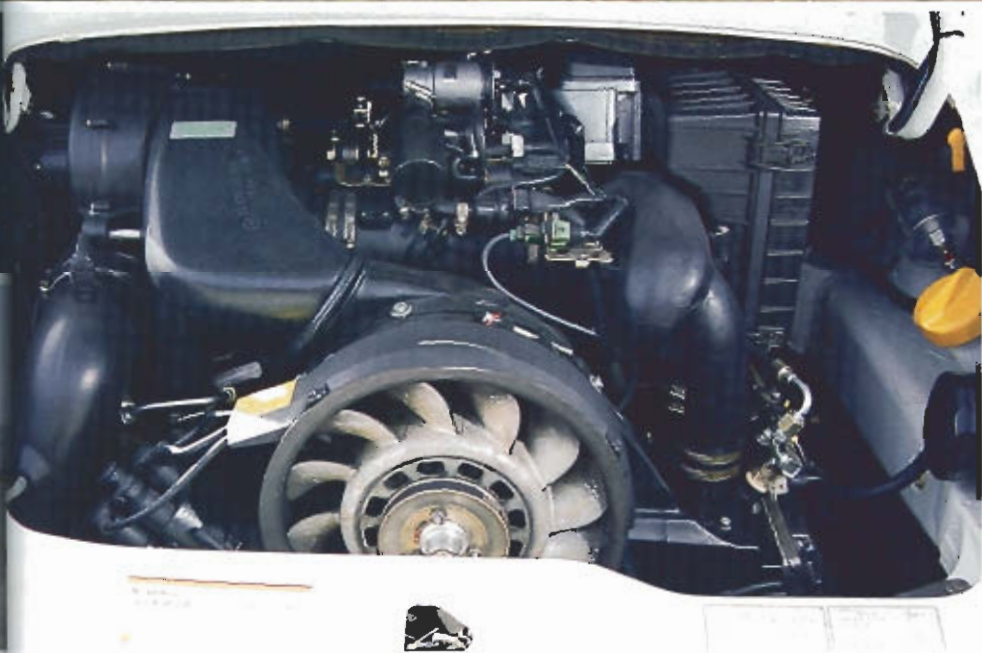


Certificate of Authenticity and the nifty plaque below say this 964 is something special. The driving experience does, too, fusing the charisma and aural appeal of an early 911 with nineties' performance, courtesy of a 256-hp, hand-picked motor.



we did not. It delayed the rebirth of GT race cars in the U.S. for a couple of years. Unfortunately, after the cancellation announcement, more than 20 customers wanted to sign up and participate. Very ironic!"

After the series cancellation, all of the converted cars were painstakingly converted back to their original road-legal configuration. They — along with the other 20 as-yet unmodified cars — were sold off through the dealer network, meaning 45 seriously focussed and fully street-legal 911s trickled into private hands for the first time ever in the United States...



Plain-Wrapped Performance

WP0AB2968NS420392, currently owned by a Northern California enthusiast, was never modified by Andial and looks as fresh today as it might have when it came off of the assembly line. Seen in the flesh, the thing that strikes you is how simple and unadorned this 911 appears. Painted in Grand Prix White without any external emblems or decals, it looks the business — but only to those in the know. Everyone else that drove past our near-the-Golden Gate photo location didn't even bat an eye.

Walking around this 964, though, it's remarkable how the appearance of the

car is affected by its low-down ride height. It has the effect of making the car look far more compact and taut than a stock U.S. 964. After seeing this Cup car, our normal Carrera 2/4s look like they're set up to run the Paris-Dakar Rally. Finally released from photo duties, editor Stout and I bolt for the Marin Headlands to get some seat time.

North of San Francisco, a gaggle of second- and third-gear corners with sweeping views of the Pacific Ocean await us. It may be picture-postcard stuff, but it's also a great place to get to know this U.S. RS on a post-summer weekday. When the European motoring

press drove the Carrera RS Basic this car's based on back in the day, they didn't give it the warmest reception. Some liked it, but the majority view was that it was too raw for roads — the press describing it as too harsh, too stiff, and too raucous. My first reaction when I drove this car was "What were they thinking? It's a brilliant car."

The U.S. Cup combines excellent driveability with wonderfully direct controls. True, the suspension is firm, but not so hard that you'll crack your teeth. It's got enough give that I could live with it day to day. Mid-corner bumps cause the car to skip sideways, but

As always, ride height and stance will do wonders for a car's looks, but the stripped interior, 1.2-liter washer bottle, and bare-bones trunk make this 911's purpose obvious. Don't miss the aluminum stick holding the aluminum hood up, the short trunk carpet, or the strut brace, either...



predictably so — and there's no problem making haste on Marin's less-than-perfect road surfaces.

At the time of our test, #392 had fat 235-mm tires mounted on 17x8-inch wheels up front, in place of the original 205s on 17x7 inchers. The Euro RS had 17x7.5s and 17x9s, but even it retained 205-mm fronts combined with 255s out back. Combine 235 fronts with no power steering and low-speed turns require a *lot* of muscle. The aftermarket Momo steering wheel installed by a previous owner isn't helping. The large-diameter stock wheel, for more mechanical leverage in slow corners, would be a plus.

As it is, turn-in is direct but by no means fast. This is due to a lack of bushing compliance in the suspension and relatively low gearing in the rack. A good setup for high-speed track work, maybe, but the steering remains awkward at slower speeds, making us wish for proper 205s to regain some of the delicate feedback and adjustability that's clearly missing with this setup.

Plus, there's very little body roll with the Cup suspension — so there isn't much of a feeling that the car is taking a set.

Stout drove the car in dense traffic across San Francisco, and there's no better test of a car's driveability than scooting up and down this city's steep hills. His description out the driver's window at the first red light: "A pussycat! It has one of the sweetest clutches and easiest shifters I've come across. This thing's not GT3 fast, but what it *does* have is throttle response."

And he's right. The Cup feels sharp and there's great flexibility pulling out of second-gear corners from amazingly low engine speeds. Even though torque peaks at 4800 rpm, there's a feeling of coming on the cam around 6000 rpm. In terms of outright speed, it feels a mite quicker than a stock 993 Carrera. In the stopping department, the cross-drilled and vented brakes are excellent, no doubt helped by the car's low weight. Even on long track days, expect fade-free performance.

With no interior sound insulation, the flat six sounds flat amazing and is a big part of this car's huge appeal. But noise levels never get out of hand, so we never had a problem holding a conversation. Blasting through tunnels with the windows down brings grins all around as the flat six reverberates off the walls. Meanwhile, details around the cockpit catch your eye. There *is* that slightly hokey "Carrera Cup USA" dash plaque, but that plate is lighter than the radio that would normally be there. Stout's gazing upward and mumbling. I listen closer: "This perforated vinyl headliner looks like something out of a 911 from the seventies — and probably is, for that matter."

Rennsport Fingerprints

The interior carpets are loose to expedite that racing conversion; I can lift almost all of the sections with just two fingers! The doors have lightweight interior panels with pull-straps. The DME computer is mounted on a bracket in clear view behind the driver's



seat. Normally, it's under the seat, but this interferes with race-harness installation. These U.S. Cup cars used stock seats for importation purposes, but they've been replaced in this car with replicas of those installed in the Carrera RS Basic. Considerably lighter, these buckets anchor you to the car. There's fore-aft adjustment, but tilt and height changes require a wrench.

Detailed descriptions of the 964 Carrera RS Basic can be found in the "Service Information Technik 1992 911 Carrera RS" and the Carrera 2/4 workshop manual, fifth volume, sections 50-53. Construction highlights include the same seam-welded chassis as the Carrera Cup racer with its additional strengthening in the floor and suspension mounting points, a lack of body undercoating, no sunroof, rolled fenders, thinner side and rear glass, and a special lightweight rear bumper. In the front trunk, there's a smaller, 1.2-liter windscreen water bottle, shortened carpet, and an electrical kill switch, all covered by an

aluminum hood with a simple stick that pokes into a bolt for the driver's side strut.

The interior's sound insulation is missing and simple, lightweight carpet is everywhere. A lightweight electrical wiring harness is fitted because the alarm, central locking, airbag system, radio, heated rear window, fog lamps, interior lighting, electric windows, and electric mirrors were all removed. Strangely, the glove-box light was retained. A smaller, 36-AH battery replaced the normal 75-AH version.

The Carrera RS Basic used the same M64/03 engine as the Cup cars. The pistons and cylinders were selectively matched to optimize power output, the air-conditioning and power-steering pumps were removed, and a sport flywheel replaced the dual-mass flywheel, saving 15 pounds of rotating mass. Solid rubber engine mounts replaced hydraulic ones and the DME engine computer had more aggressive ignition-timing advance. This engine was rated at 256 bhp at 6100 rpm, up from the

stock 247 bhp of the Carrera 2/4. Maximum torque was 240 lb-ft at 4800 rpm. It's interesting to note race engines for the Carrera Cup series were selected by picking the best of these "blueprinted" engines. They were dynoed to make sure they were all within a small range at 6700 rpm with their catalytic converters in place and the air filters removed.

A new spring-damped clutch driveplate mated the engine to a modified Rest of World five-speed G50/10 transmission. Stock U.S. Carrera 2s used a G50/05. The important changes were longer gear ratios for first and second gears, steel synchro rings on the first four gears for improved synchronization during fast shifting, and a limited-slip differential. The LSD's low 20-percent locking on acceleration helped reduce understeer when powering through curves. The high 100-percent locking on deceleration minimized lift-off oversteer. The shift linkage from the Carrera Cup race car was used, resulting in a 16-percent shorter throw.

The Ones That Did Race

THE CARRERA CUP and Supercup race series were highly competitive, the latter attracting famous guest-drivers such as Mika Häkkinen, Walter Röhrl, and many more because it ran as a support race for F1. In either case, the cars were identical and teams were only allowed to make suspension adjustments. DME computers, engines, and transmissions were sealed at the factory to prevent any tampering and Porsche reserved the right to scrutinize the cars for rules violations. Competition was fierce and the quality of the driving was so high that hot-shoe guests rarely beat the regular series drivers.

Mika Häkkinen was a notable exception, racing in two Supercup events at Monaco and Budapest in 1993. He won both. The actual car driven by Häkkinen now resides in Florida. Owner Fran Cosentino approached FvD's Willy Brombacher to see about locating such a car. Says Brombacher: "After Fran asked me to find him a Cup car, I came across this one. It was built in 1992 and had a fully documented race history. Häkkinen, Wayne Gardner, and Nick Ham drove it in the 1993 Supercup series."

In late 2000, Cosentino purchased the car

sight unseen. Fortunately, it was in good shape, never having been wrecked or seriously damaged. Even so, explains Bryan Roth of FvD North America, the car was restored: "It was essentially put back to a body-in-white. Every single nut and bolt was refurbished." After the car was painted in its current livery of blue (rear) and white (front), the decals worn during its Supercup days were restored from log-book photos and other sources.

We spoke to Nick Ham about driving the car in 1993. Says Ham: "I was driving a 911 Turbo in the IMSA Supercar series and arranged a VIP



Ex-Häkkinen 911 remains active in U.S.

drive at the last race of the Supercup season at Hockenheim. I drove the white Tag Heuer car, which Mika had driven earlier in the season. An interesting thing was that the Porsche crew was in absolute awe of

Mika's driving ability. They showed me scratches on the driver-side mirror, where they said Mika had repeatedly clipped the Armco on one corner at Monaco. I found the car easy to drive. Perhaps you had to be a bit more sensitive on downshifts because of the weight out back. Otherwise, I drove it exactly the same way I've driven other cars. It was a really good car."

Today, Fran Cosentino races the car at Sebring, Daytona, and Watkins Glen in historic and PCA club races. Minor mods help him keep up, but it's great to see this largely original and historic Porsche active in its "retirement." —KG

The running gear was completely revised for the Carrera RS. Unassisted rack-and-pinion steering was fitted to save weight and improve road feel. The front brakes came from the 911 Turbo, with 322x32-mm rotors and four-piston calipers. The rears were from the Cup racer, with 299x24-mm rotors and four-pot clampers. ABS was standard. Magnesium wheels measuring 17x7.5 and 17x9 saved 23 pounds in unsprung weight and mounted 205/50ZR17 and 255/40ZR17 tires. The height-adjustable Bilstein Cup suspension is set 40 mm lower than a European Carrera 2's ride height and 50 mm lower than U.S. cars.

The front and rear springs have linear and progressive compression responses, respectively. The front anti-roll bar is a 24-mm, five-way adjustable design that's four millimeters larger than stock. The rear anti-roll bar is an 18-mm, three-way adjustable design. Interestingly, it's two millimeters smaller than stock. To

reduce compliance and improve feel, suspension bushings are harder all around and the struts are bolted to the bodywork via solid metal, uniball-type strut mounts. The rear suspension had a few extra-special modifications: Rear struts modified to achieve larger negative camber settings suitable for track conditions and semi-trailing rear-arm mounts fitted with special washers to limit axial movement.

Of course, some of these changes — such as airbag or safety equipment deletions — would never make it past the DOT, so when it came time to build the 964 Carrera Cup Edition, Porsche retained the chassis, engine, transmission, and suspension of the RS Basic. Then it added dual airbags, door beams, U.S. bumpers, standard side and rear glass, a center-mounted rear brake light, and the standard U.S. 20.3-gallon gas tank. The interior had electric windows (due to crash-test

requirements), stock Carrera 2 seats, rear-seat mounting brackets, and a rear parcel shelf without doors (the RS America had a shelf with doors).

The standard wiring harness was fitted to support the additional electrical equipment and, because it didn't support the 1.2-liter windscreen water bottle, the normal 7.4-liter bottle was mounted in the left fender. 17x7- and 17x8-inch aluminum wheels were substituted for the magnesium RS rims. All of the U.S. Cup cars were painted Grand Prix White except for a single India Red car, which was earmarked to become a pace car. This Carrera Cup Edition package was listed as option code KUP, adding \$13,740 to the base price of a 1992 Carrera 2 coupe's \$63,900 MSRP.

How much extra weight did all that required-for-U.S.-importation equipment add to the Cup car? To get a better understanding, it helps to plot a map of relative 964 weights. A base 964 Carrera 2 in Rest of World specification weighs 2,976 pounds, while its U.S. cousin weighs in at 3,031. By comparison, the Euro RS Basic came in at 2,690 pounds — roughly 100 pounds more than a Carrera Cup race car. The RS Touring version is a more portly 2,910 pounds because its equipment levels are similar to a standard Carrera 2. As for the Carrera Cup Edition, Porsche never published an official curb weight. But the first owner of #392, David Mohlman from Coconut Grove, Florida, weighed the car at Moroso Raceway in 1992. With four gallons of gas, the interior parcel shelf removed, and no spare tire or tools, the car weighed in at 2,710 pounds. If you put everything back and filled the gas tank, I estimate the original curb weight of the car to be 2,845 lbs.

Car #392 has a few small differences not seen in the other 44 U.S. Cup cars. It has the smaller, 1.2-liter windscreen water bottle in the front trunk and the rear seat brackets were not installed. The VIN history shows this car was an early production unit. This car's VIN ends in 0392 and there's a 117-unit jump to the second car, with a VIN ending in 0509. After that, the remaining 43 cars are made within 93 units — with the final, 45th car's VIN ending in 0602.

With their RS pedigree and a unique history born out of the trials and tribulations of Porsche in the early nineties, these 45 Carrera Cup Editions will remain among the most intriguing 911s ever offered for sale in the U.S. ■