

comes out too high, but that's both adjustable and a matter of taste.

Power is what you'd expect from one of the late big displacement DME sixes of the normally aspirated persuasion, only better. There is an immediacy shortly crowned by a surge at around 4000; persistence exuberance will quickly find the rev limiter at about 40 mph, time for a quick transition through the notchy but very easy and competent feeling box into second, which is adequate for violation of the majority of posted speed limits. And it'll get you there quicker than a C2, C4, or America Roadster (for \$10,000, \$22,000, and \$34,000 less, respectively).

The 911 never really needed power steering, and its absence here is barely noticeable. The ride on the super-low profile tires — 50 front and 40 rear — is firm but seldom harsh. The extra 30 mm of rubber on each of the rear tires plants the rear end firmly and should reduce some of the relatively rapid rear tire wear that the rear engine cars have typically enjoyed. Make no mistake, though, oversteer is still available; if you want it to, the rear end will go out. Not your own, however; the seats are comfortable and fit wonderfully well.

You know its a red-tailed shark, when, at the

edge of your consciousness you are admiring the way the engine pulls in third gear only to drop your hand to the shift lever and find that you've been in fourth all along. Or when those retro-rocket brakes repeatedly stop you short of the mark you meant to hit. But it's the way all of these things work together which makes this car what it is, which is to say, right.

Finally, looking for another opinion, I turned the car over to an old friend from the 911S/Elva Porsche/904/908 days. Currently a bit removed from that era, he fell into the RS America like he'd never been away. Following a few maneuvers that had me wondering if we'd be allowed even one phone call between us, he fell silent for a time then opined: "You know, I told myself I don't need this anymore, that I've outgrown it. Wrong. I lied."

So. In an automotive world of amenities, automation, and affectation, where one manufacturer's idea of a suitable ad for their car is a picture of its climate control set on the same temperature every day for seven days, is there a place for a daily-driver red-tailed shark, for a raging bull without the BS? You decide. I know the answer.

— Leonard Turner

(12/92)



Analyzing the dazzling array of contemporary 911 permutations

By Betty Jo Turner

THEME AND VARIATIONS: The Nine-Elevens of the Nineties

The standard-bearer of the breed, the 911 Carrera 2 features Porsche's legendary air-cooled boxer six, now producing 247 horsepower out of 3.6 liters.



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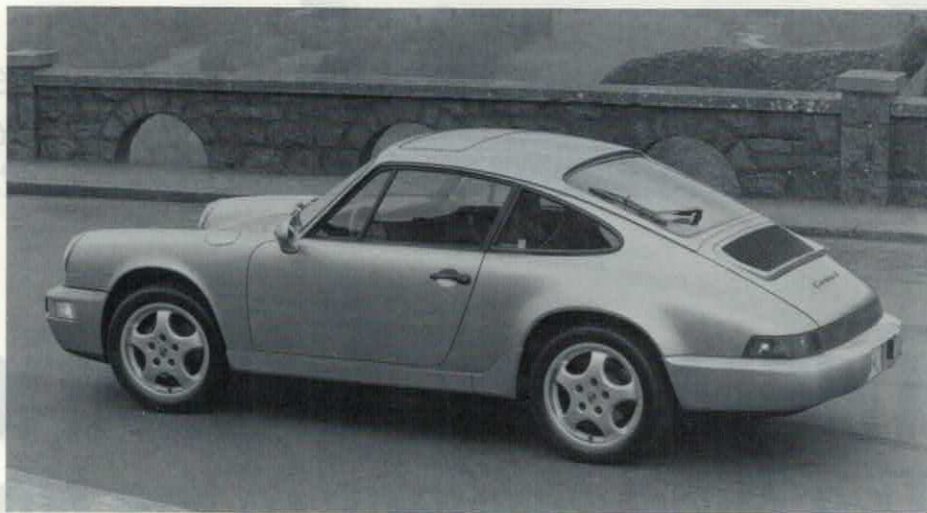
How would you like your 911? Coupe, cabriolet or Targa are traditional options that doubled in 1989 with the advent of the new-generation four-wheel-drive 911 Carrera 4, followed shortly by the 911 Carrera 2. Then came last year's reintroduction of the 911 Turbo. This year Zuffenhausen is building an even dozen variations on the 911 theme: the three Carrera 2 models, their Carrera 4 counterparts, the limited edition 911 America Roadster, the back-to-basics 911 RS America, the 911 Turbo, a 911 Carrera RS not available in the United States, and two versions (U.S. and European) of the for-racing-only 911 Carrera Cup car.

Our object here is to provide a ready reference, a guide to what's what in 911 specifications today and perhaps a glimpse into 911 futures.

911 Carrera 2

The standard-bearer of the breed, the 911 Carrera 2 is the artful evolution of Porsche's original air-cooled two-liter. Nearly 30 years after the 911's momentous 1963 debut at Frankfurt, the Carrera 2 takes that original concept toward the year 2000. The legendary flat six-cylinder powerplant is now up to 3.6 liters, producing 247 horsepower. Though it retains the classic 911 shape, the Carrera 2 is the bene-

The 911 Carrera 4 is the only Porsche besides the 959, the company's revolutionary supercar, to offer computer-controlled, full-time all-wheel drive.



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SPECIFICATIONS: 911 CARRERA 2

BODY: Galvanized steel, electrically-extendible, speed-dependent rear spoiler

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 247 hp at 6100 rpm

Maximum torque (ft. lb.): 228 ft. lbs. at 4800 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, five-speed transaxle or four-speed Tiptronic dual-function transmission

SUSPENSION:

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, 20 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum-alloy, semi-trailing arms, self-stabilizing toe characteristics, coil springs, 20 mm stabilizer bar (19 mm with Tiptronic)

BRAKES: Power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented discs (298 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/55ZR16 on 6J16
rear: 225/50ZR16 on 8J16

WEIGHT: 3031 pounds (manual); 3097 pounds (Tiptronic)

PERFORMANCE:	Manual	Tiptronic
0-60 mph	5.5 sec. (Porsche)	6.4 sec. (Porsche)
	5.4 sec. (R & T)	
	4.8 sec. (C & D)	

Top track speed	162 mph (Porsche)	159 mph (Porsche)
	162 mph (R & T)	
	161 mph (C & D)	

Coefficient of drag .32

SPECIFICATIONS: 911 CARRERA 4

BODY: Galvanized steel, electrically-extendible, speed-dependent rear spoiler

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 247 hp at 6100 rpm

Maximum torque (ft. lb.): 228 ft. lbs. at 4800 rpm

DRIVETRAIN: Rear-engine, five-speed transmission, electronically controlled, hydraulically actuated full-time all-wheel drive with automatic front-to-rear and side-to-side torque split

SUSPENSION:

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, 20 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum alloy semi-trailing arms, self-stabilizing toe characteristics, coil springs, 20 mm stabilizer bar

BRAKES: Hydraulically power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented discs (298 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/55ZR16 on 6J16
rear: 225/50ZR16 on 8J16

WEIGHT: 3252 pounds

PERFORMANCE:	
0-60 mph	5.5 sec. (Porsche)
	4.9 sec. (R & T)
	5.1 sec. (C & D)

Top track speed	162 mph (Porsche)
	161 mph (R & T)
	157 mph (C & D)

Coefficient of drag .32

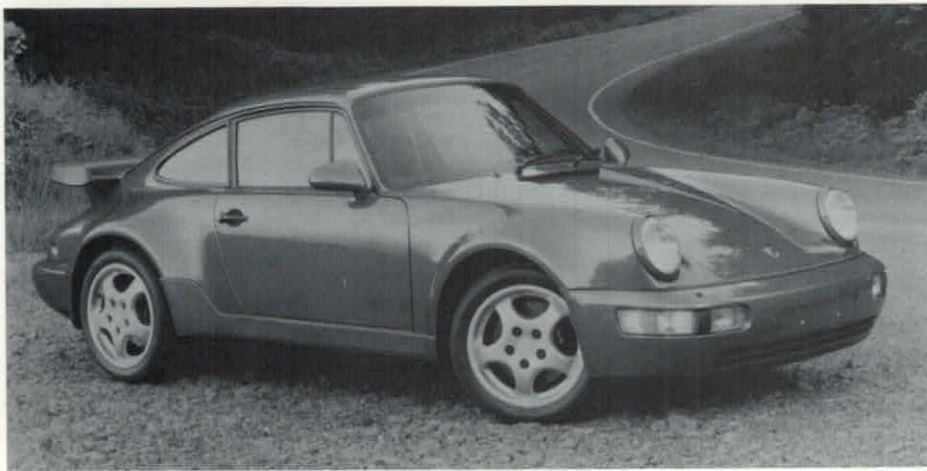
fiary of decades of aerodynamic refinement, including its speed-dependent movable rear spoiler, flush-mounted windshield and full undertray, bringing the 911's drag coefficient down to .32 and reducing lift to near zero.

In spite of modern safety equipment and comfort appointments (airbags, ABS, air conditioning, power steering, power windows and sunroof, reclining electric seats and more) which bring its weight to 3031 pounds, the Carrera 2 is quicker than ever. Porsche

conservatively claims zero-to-60 times of 5.5 seconds, while *Car & Driver's* test crew clocked the Carrera 2 at 4.8 seconds to 60.

911 Carrera 4

The 911 Carrera 4 is everything mentioned above with the addition of computer-controlled, full-time all-wheel drive, a concept first explored by Porsche in the legendary 959. The system measures slip and electronically reroutes power flow; one clutch system



The ultimate performance variation on the 911 theme is the Turbo; it delivers 315 horsepower and massive torque (332 foot-pounds) from its boosted 3.3-liter engine.

controls power flow front-to-rear, while a second serves as an automatic, variable-ratio, limited slip differential between the rear wheels. Power flow is rerouted in less than a tenth of a second — three times faster than on the 959.

The Carrera 4 system also senses conditions at the tire contact patch and automatically responds to enhance handling — a further advance over the 959 which required drivers to select from four traction programs manually. Combine all this with the Carrera 4's light-alloy, all-independent coil-spring suspension with self-stabilizing rear wheel toe-change characteristics and you have one of the

world's greatest handling vehicles. The C4 is 221 pounds heavier than its rear-drive counterpart, but it is plenty fast — *Car & Driver* got zero to 60 times of 5.1 seconds for the all-wheel-drive 911.

911 Turbo

The ultimate performance variation of the 911 is the turbocharged version. Reintroduced in 1991, the Turbo gets its motive force from an uprated version of the old 3.3-liter boosted powerplant. It delivers 315 horsepower and massive torque (332 foot pounds) that produces a breathtaking 4.8 seconds from zero to 60 and a top speed of 168 mph by

SPECIFICATIONS: 911 TURBO

BODY: Galvanized steel, wide fenders, wing type fixed rear spoiler

ENGINE: Air-cooled, turbocharged six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter, separate catalyst for wastegate exhaust

Displacement: 3.3 liters

Horsepower (SAE Net): 315 hp at 5750 rpm

Maximum torque (ft. lb.): 332 ft. lbs. at 4500 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, 5-speed transaxle with torque-control, variable-ratio limited slip differential

SUSPENSION:

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, 21 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum-alloy, semi-trailing arms, coil springs, self-stabilizing toe characteristics, 22 mm stabilizer bar

BRAKES: Hydraulically power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented cross-drilled discs (322 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/50ZR17 on 7J17
rear: 255/40ZR17 on 9J17

WEIGHT: 3274 pounds

PERFORMANCE:

0-60 mph 4.8 sec. (Porsche)
4.6 sec. (R & T)
4.4 sec. (C & D)

Top track speed 168 mph (Porsche)
168 mph (R & T)
166 mph (C & D)

Coefficient of drag .36

SPECIFICATIONS: 911 AMERICA ROADSTER

BODY: Galvanized steel, wide fenders, electrically-extendible, speed-dependent rear spoiler

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 247 hp at 6100 rpm

Maximum torque (ft. lb.): 228 ft. lbs. at 4800 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, five-speed transaxle or four-speed Tiptronic dual-function transmission

SUSPENSION:

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, 21 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum-alloy, semi-trailing arms, self-stabilizing toe characteristics, coil springs, 22 mm stabilizer bar (21 mm with Tiptronic)

BRAKES: Hydraulically power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented cross drilled discs (322 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/50ZR17 on 7J17

rear: 255/40ZR17 on 9J17

WEIGHT: 3164 pounds (manual); 3230 pounds (Tiptronic)

PERFORMANCE:	Manual	Tiptronic
0-60 mph	5.5 sec. (Porsche)	6.4 sec. (Porsche)

Top track speed	158 mph (Porsche)	156 mph (Porsche)
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Coefficient of drag .36

SPECIFICATIONS: 911 RS AMERICA

BODY: Galvanized steel, wing-type fixed rear spoiler, elimination of rear seat unit and sound-deadening material

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 247 hp at 6100 rpm

Maximum torque (ft. lb.): 228 ft. lbs. at 4800 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, five-speed transaxle

SUSPENSION: Mechanical steering, rack and pinion

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, uprated shock absorbers, 22 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum-alloy, semi-trailing arms, uprated coil springs with toe correction, uprated shock absorbers, 20 mm stabilizer bar

BRAKES: Power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented discs (298 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/50ZR17 on 7J17

rear: 255/40ZR17 on 8J17

WEIGHT: 2954 pounds

PERFORMANCE:		
0-60 mph	5.4 sec. (Porsche)	

Top track speed	162 mph (Porsche)
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Coefficient of drag .34

Porsche's conservative statistics (*Car & Driver* got the Turbo to 60 in 4.4 seconds).

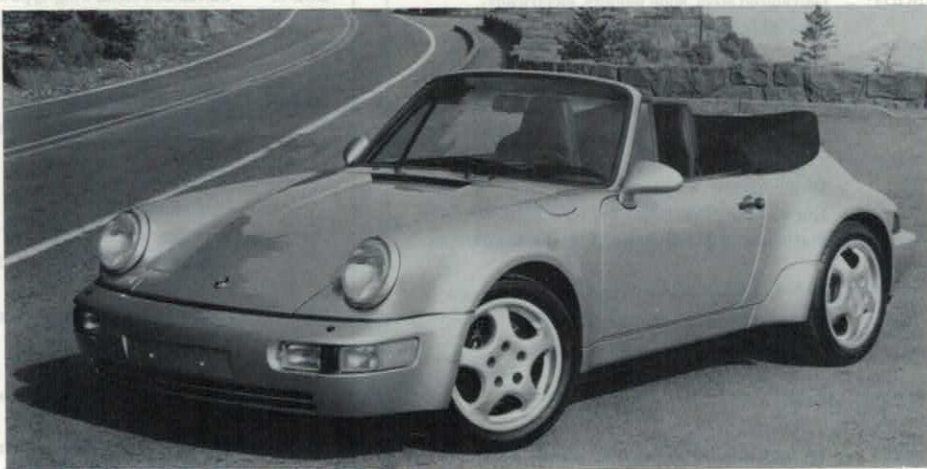
Bodywise the 911 Turbo is a combination of Carrera 2/4 shapeliness and the flared and winged look (to make room for big brakes and wheels and the engine intercooler) that are hallmarks of turbo 911 design. Available only as a coupe, the 911 Turbo boasts a C_d of .36 (down from the .39 of its predecessor thanks to the aerodynamic sophistication of the new generation Carrera 2/4 platform on which it is built) and weighs in at 3274 pounds.

911 America Roadster

For 1992, Porsche offers a limited edition model that is essentially a cabriolet version of the 911 Turbo body fitted with the normally-aspirated 3.6-liter boxer six powerplant of the Carrera 2/4. In the United States, it is called the 911 America Roadster, in honor of the 356 model that came to be known by that name — an aluminum-bodied, curvaceous, open two-seater built in tiny numbers during 1952 as a raceable production Porsche for the United States.

In addition to the wide body, the 1992 America Roadster has the brakes, beefed up suspension and

The 911 America Roadster is a cabriolet version of the wide-fendered 911 Turbo fitted with the normally-aspirated 3.6-liter engine of the Carrera 2 and 4.



PORSCHE CARS NORTH AMERICA

wheels of the 911 Turbo. It features a fully automatic folding top and the extendible rear spoiler of the Carrera 2 and 4 models. It is available with five-speed manual gearbox or the Tiptronic dual function transmission. The 911 America Roadster offers the full array of Porsche standard features and options. It weighs 3164 pounds (3230 with Tiptronic). Only 250 examples are expected to be brought to the States.

911 RS America

Porsche describes this new back-to-basics model as "a pure 911 that redefines the fun of driving a 911 — for about \$10,000 less than a Carrera coupe." Here the idea is to tip the 911 scales back toward the race track through reduced weight, modified steering

and firmer suspension. To save weight the air conditioning is gone, along with the power steering pump, sunroof and rear seats. The retractable rear spoiler, motor and mechanism are replaced with a lightweight fixed tail spoiler. Armrest/storage compartments are replaced with door panels from the European Carrera RS and a simple pull strap, though the electric windows remain. Luggage compartment carpeting is replaced with lightweight black fabric and sound deadening has been removed from the firewall and rear quarter panels. The result is a weight of 2954 pounds for the RS America.

The RS America is more than a delete-option car, however. Shock absorbers, front stabilizer bar and rear springs have been upgraded and 17-inch tires and Turbo design wheels (sevens in front, eights in



The 911 Carrera RS, not available in the United States because it doesn't comply with federal regulations, weighs ten percent less than the Carrera 2 and boasts ten extra horses.

PORSCHE WERKFOTO

SPECIFICATIONS: 911 CARRERA RS (NOT AVAILABLE IN U.S.)

BODY: Galvanized steel, electrically-extendible, speed-dependent rear spoiler, two pro-class bucket seats, elimination of rear seat unit and sound-deadening material, aluminum front hood, thin glass

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 256 hp at 6100 rpm

Maximum torque (ft. lb.): 232 ft. lbs. at 5000 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, five-speed transaxle, limited slip differential

SUSPENSION: Vehicle lowered by 40 mm, mechanical steering

FRONT: Independent MacPherson struts with aluminum alloy lower control arms, coil springs, uprated shock absorbers, 24 mm stabilizer bar, negative steering roll radius

REAR: Independent with aluminum-alloy, semi-trailing arms, uprated coil springs with toe correction, uprated shock absorbers, 18 mm stabilizer bar

BRAKES: Power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented crossdrilled discs (322 mm front, 299 mm rear), ABS

WHEELS & TIRES: front: 205/50ZR17 on 7.5J17
rear: 255/40ZR17 on 9J17

WEIGHT: 2690 pounds

PERFORMANCE:

0-100 kph (62 mph) 5.3 sec. (Porsche)
5.2 sec. (Auto Motor und Sport)

Top track speed 162 mph (Porsche)
163 mph (Auto Motor und Sport)

Coefficient of drag .32

the rear) are fitted. With its 3.6-liter, 247-hp Carrera 2 engine, Porsche says the RS America will deliver 60 mph in 5.4 seconds and has a 162-mph top speed. It will be interesting to see road test results from the U.S. auto magazines.

Limited slip, radio, air conditioning and electric sunroof are optional on the RS America which is available in black, guards red and grand prix white (silver and midnight blue metallic optional). Available beginning in April as a 1993 model, it will be built in limited quantities for the U.S. market only.

911 Carrera RS

And now, for the 911 that you can't have in the United States. The European Carrera RS is a close relation of the for-racing-only Carrera Cup car. Weighing nearly ten percent less than the Carrera 2 and with its engine modified to produce about ten extra horses, the Carrera RS is the quickest normally-aspirated 911 currently in production: zero to 100 kph (62 mph) in about 5.3 seconds according to Porsche. To get the Carrera RS down to 2690 pounds, all the comfort options are deleted including



Spartan interior of the European Carrera RS features lightweight bucket seats, hand-cranked windows and a simple pull strap to open the door. Luxury options are omitted.

SPECIFICATIONS: 911 CARRERA CUP NORTH AMERICA

BODY: Galvanized steel, electrically-extendible, speed-dependent rear spoiler, Recaro racing seat, elimination of passenger seat, rear seat unit and sound-deadening material, welded-in roll cage, cross member in luggage compartment, aluminum front lid without gas springs

ENGINE: Air-cooled six cylinder boxer engine, dry sump lubrication, regulated three-way metal catalytic converter

Displacement: 3.6 liters

Horsepower (SAE Net): 271 hp at 6100 rpm

Maximum torque (ft. lb.): 232 ft. lbs. at 5000 rpm

DRIVETRAIN: Rear-engine, rear-wheel drive, five-speed transaxle, locked differential, dual mass flywheel replaced by racing type, racing clutch disc

SUSPENSION: Mechanical steering, rack and pinion. Camber adjustable to more than -3 degrees

FRONT: Independent MacPherson struts with lower control arms, coil springs, five-way adjustable stabilizer bar (24 mm), stiffer springs and shock absorbers

REAR: Independent with semi-trailing arms, coil springs, three-way adjustable stabilizer bar (18 mm), stiffer springs and shock absorbers

BRAKES: Power-assisted, dual circuit, four-piston aluminum alloy fixed calipers, vented crossdrilled discs (322 mm front, 299 mm rear), ABS with ABS emergency switch and ABS override switch

WHEELS & TIRES: front: 245/17 (235/17 rain) on 8x17
rear: 265/17 (255/17 rain) on 9.5x17

WEIGHT: 2500 pounds (approximate)

PERFORMANCE:

0-60 mph not available

Top track speed not available

Coefficient of drag .32

electric windows, central locking, alarm, air conditioning, rear seats, sound-deadening, power steering and electric seats. An aluminum front hood, thin glass windshield and windows and lightweight bucket seats also contribute to weight reduction, as does a manually adjusted "Turbo" mirror.

The Carrera RS body is lowered by 40 millimeters, with firmer springs and shock absorbers. The front axle is fitted with the big brakes of the 911 Turbo, while the rear axle uses a race-tested brake system

from the Carrera Cup car. Wheels are 7.5Jx17 in front with 205/50ZR17 tires, with 9J17s in the rear on 225/40ZR17 tires. Tire dimensions were chosen with an eye to homologation in the European Group N/GT class where racing tires can be used in competition but must be mounted on standard rim sizes.

The 911 Carrera RS began production in the summer of 1991 with a total of some 2000 cars planned. In Germany the Carrera RS costs DM 145,000 in its basic version. Consideration was given to bringing



The for-racing-only 911 Carrera Cup car weighs in at about 2500 pounds and produces 271 horsepower from its competition-tuned 3.6-liter six cylinder.

the car to the States but the changes necessary for compliance with U.S. regulations (door beams, regular window and windshield glass, etc.) would have added back most of the weight loss which makes this such an attractive and potent normally-aspirated Porsche.

911 Carrera Cup North America

This speedster you can buy, but only if you plan to race it in Porsche's inaugural eight-race North American Carrera Cup series. Patterned after the highly successful European Carrera Cup series, the U. S. title chase features identically prepared 911 coupes based on the European Carrera RS. The engine is, in fact, identical to the RS, with horsepower upped by about 15 from the installation of a different chip and the fact that the cars can race here with unmuffled exhaust.

Chief differences between the U.S. and European Cup cars stem from federal regulations that require door beams and regular glass. Electric windows (disabled for racing) are mandated since Porsche has not tested airbag deployment with roll-crank window lift mechanisms and, as it turns out, the roll crank han-

dle would have interfered with the knee bar in the Carrera Cup car. The alarm system remains because of federal regulations which require that cars not equipped with alarms have VIN numbers stamped on all components.

Despite the concessions made to federalization, the U.S. Carrera Cup car, which utilizes a locked differential, weighs in at about 2500 pounds, making it less than 100 pounds heavier than the Euro version. Price tag for the Carrera Cup 911 is \$100,000, plus a \$10,000 performance bond returnable at the end of the racing season. Porsche has produced 45 Carrera Cup 911s for this season.

What next?

Sooner, rather than later, you can expect another revitalization of Porsche's evergreen air-cooled legend. Look for the changes to be on the order of magnitude of, perhaps even greater than, those that transformed the 944 S2 into the new 968. And look for them to happen before 1995. In the meantime, enthusiasts have an abundance of 911 possibilities to ponder — from the fully-optioned, four-wheel-drive Carrera 4 to the no frills, just thrills RS America. ☼

(3/92)



PORSCHE WERKFOTO

968 Club Sport

NEW FROM PARIS

Porsche unveils two variations on the 911 theme and a light-weight 968 Club Sport **By Michael Cotton**