

# Project 911S

**Part 2:** A green 1970 911S coupe —  
an automotive love affair

by **Mitchell Sam Rossi**

PHOTOS BY LES BIDRAWN



**1982:** A Sunday drive on an empty California highway.

"Keep your foot in it! Keep your foot in it," the driving instructor encouraged with a firm, commanding voice. Yet, even through my helmet, I could hear a twinge of concern. Who could blame him? The speedometer needle was edging 90 mph, and ahead of us loomed the fast, right-hand sweeper that opened onto the front straight of Riverside International Speedway.

It was 1979, and not only was this the first time I had ever been on a legitimate racing circuit, but at the moment I was white-knuckle terrified. And as if my sweat glands needed more stimuli, the reflection in the rearview mirror was Otis Chandler's monstrous 917K, complete with Gulf Oil livery.

"Hold your line. Let him go." Those were his words. Let him go. It was an excellent suggestion and I graciously gave Chandler the pass. The 917 darted left and lunged forward with such hellish voracity that I prayed we would not be sucked into its vortex.

We weren't. The S held its line firmly and sped down the straight, feeling as brick solid at 120 mph as the 917 probably felt at 190 mph. But I wondered why it occurred to the instructor that I might challenge the legendary brute. Though my S was quick and agile, it hardly had the gumption to hold off the 580-bhp flat 12 attached to Chandler's right foot.

Perhaps my instructor thought otherwise. After all, his personal ride was a stock 911T, and he had jumped at the chance to take the helm of an S even though it was brandished by a student with so little seat time that I was still trying to figure out the awkward locking device of my brand new, race-required safety belts.

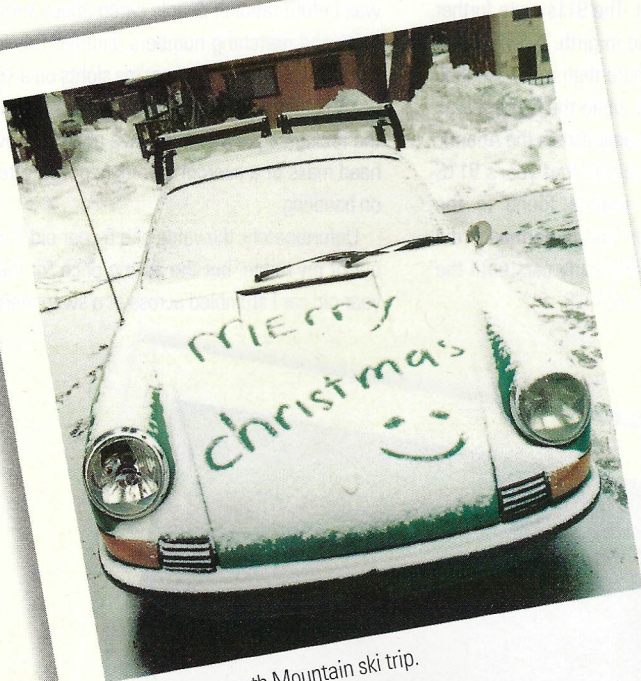
I understood the instructor's curiosity. As the top-of-the-line of the pre-1974 cars, the S had earned a cult-like following. At some point in their lives, most Porsches taste competition; the 911S, however, was destined for it.

The first of these high-performance 911s were introduced in 1967 and had been expected to do well. The cars did not let the factory down, as they took top honors in a variety of international events, including the notorious Monte Carlo Rally in '69 and '70. In 1971, at the 24 Hours of Le Mans, a 911S seized the GT class win while taking 6th place overall.

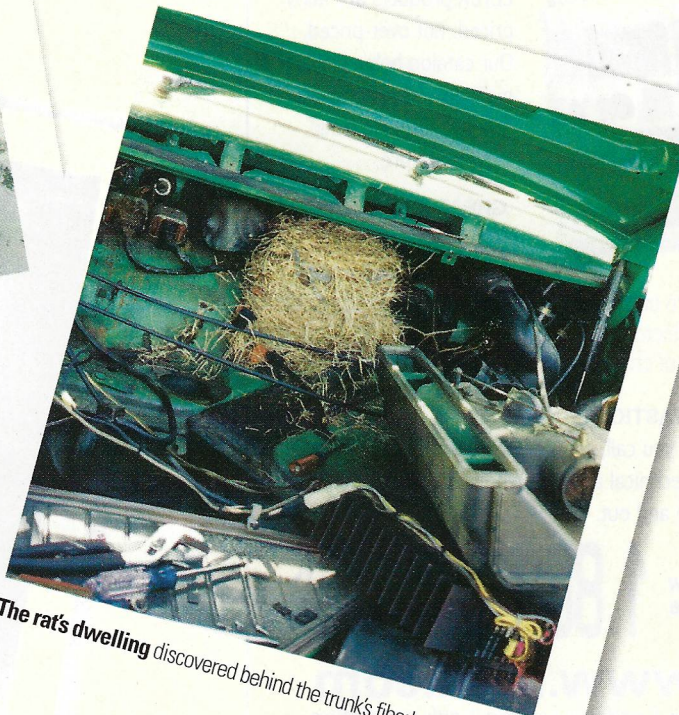
But it was the seemingly endless string of victories in the hands of privateers that the 911S earned its clout and helped the factory gain distinction as a builder of uncompromising road cars. This complemented Porsche's ever-growing prestige in the world of international motorsports. In the late '60s and early '70s a number of automakers produced cars capable of race duty. None, however, were as competitive off the showroom floor as the 911, and definitely not as race-ready as the 911S.

The major enhancements of the S were primarily embellished on the 901 engine. The compression ratio leaped from 9.0:1 to 9.8:1. The cam profile changed to allow for more overlap. The heads obtained larger valves and better porting; the Weber carburetors received larger jets. These changes resulted in 160 bhp at a high-revving 6600 rpm, a 30-bhp increase over the entry-level 911. By 1970, after the engine displacement had grown to 2.2 liters across the model line, the gap between the S and the 911T was a significant 55 bhp.

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1984: A Mammoth Mountain ski trip.



The rat's dwelling discovered behind the trunk's fiberboard partition.

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The cars also received ventilated disc brakes at each corner, a rear anti-roll bar, Koni shock absorbers and, for the first time, forged aluminum wheels. These were the now famous five-spoke Fuchs that would become synonymous with Porsche.

In 1979, the early cars still reigned supreme at club racing events. The 911s produced between 1974-77 were required to meet stringent fuel economy and pollution requirements, both of which took a decisive toll on performance. Although engine displacement grew to 2.7 liters, power output dropped to 150 bhp and 175 bhp, depending on the model. The 911s were further penalized by an increase in girth. A 1977 911S weighed about 275 lb more than a 1970 model.

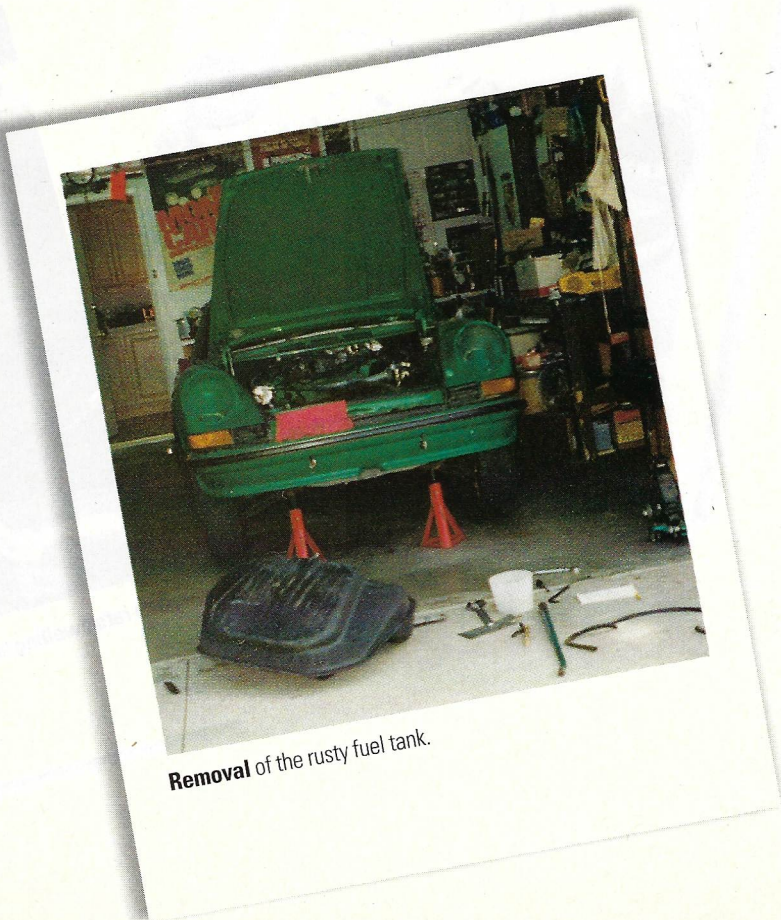
It must be noted that while the Carrera was offered in the States, it came across the Atlantic with the same power unit as that year's 911S and not the 210-bhp engine found in the European models. Power and performance did not begin to challenge the early cars until the appearance of the 911SC in 1978.

By the time I decided to shop for a 911S, I was well embraced by the Porsche enigma, having already owned a 1966 912 and a 1968 911. Both were enjoyable sports cars, but I kept hearing about the S. At club events, even in the hands of mediocre drivers, they were the cars with the best timed runs. The S seemed to take the corners flatter and faster, and their raspy exhaust screamed with an angrier tone.

In the pits, the S was descended upon, scrutinized and debated. A 911T did not have its power-to-weight ratio, but it certainly had the edge on the power-per-dollar scale. Still, the 911S held a mythical status, especially among weekend warriors. It was as if it had a closer connection to Zuffenhausen and Porsche's professional racing community.

It took 9 months for me to find the right car—not because I was being overly particular, as this was before rational people cared about authenticity and matching numbers. Limited finances kept me searching. I had set my sights on a 1973 911S coupe with a sunroof. Although bitten by the racing bug, I was still naive about the overhead mass of a sunroof and its negative effects on handling.

Unfortunately, the value of a 5-year-old S was out of my range, but the asking price for the 8-year-old car I stumbled across at a swap meet in



Removal of the rusty fuel tank.



Replacement of refurbished fuel tank.

San Juan Capistrano matched the sum of my bank account.

Dressed in not-so-popular Conda Green, the 1970 911S had 78,741 miles on the clock, no sunroof and only a few dings and dents. A quick checkout drive, and I immediately understood the obsession with these select Porsches.

While the off-the-line torque of the 2.2-liter was not much different from my '68, when the tach needle swept 5000 rpm in second gear, the flat six leaped forward as if the quarter horses had passed the bit to the thoroughbreds. It was the same through third and fourth, exponential acceleration all the way to the 7200-rpm redline. From the right seat, the car's owner sighed heavily. He was going to miss that, he said.

I bought the car the next day.

I tried to buy it sooner but couldn't get access to my bank account on a Sunday. The people who run financial institutions have no concept of what it means to find an affordable 911S. It was just as well, as I had promised myself to have the car inspected before cash changed hands. I had not done so with the '68, which became a pricy lesson.

The mechanic did find a few minor ailments. The idle circuit was inoperative. The front seal leaked as did the rear. So did the return tubes, the intermediate bearing seal, the fuel injection pump and the left cam line. The front wheel

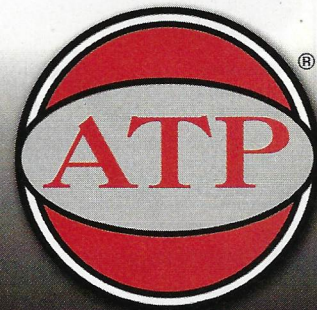
bearings were bad and so were the rears. The pedal linkage was stiff, and the turn signals would not cancel—all insignificant as far as I was concerned.

What was important was the perfect compression in all six cans. There was no major damage and no rust. A small collision had prompted the replacement of the car's original aluminum rear deck with a steel version, and for cosmetic reasons the front end was equipped with a fiberglass replica of the lip spoiler that came standard on the 1971 911S. Both were minor assaults on originality, but in 1978 that was of little consequence.

By the afternoon, I had swapped \$6,500 for a pink slip and was suddenly the owner of one of the most highly regarded sports cars in the world. Little did I know that after 22 years I would still be cherishing that green 911S, if not more so.

Our first year together was a wild affair. With a bit of ingenuity and planning, the 911 could easily be packed for long weekend trips to San Francisco or a blast to the mountains for skiing. I also discovered that between the front trunk and cargo space atop the folded down rear seats, the 911 could accommodate four scuba tanks and enough diving gear for myself and a friend to travel any SoCal beach for a full day of underwater exploration.

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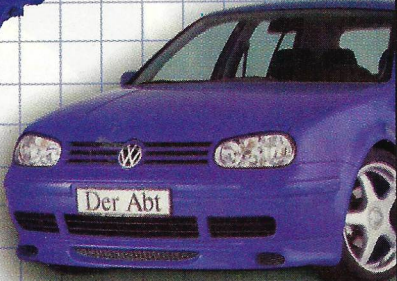
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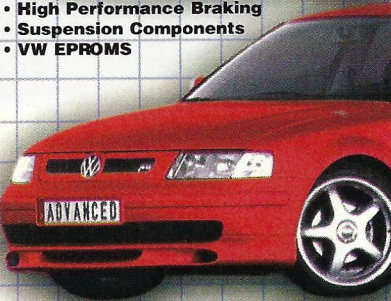
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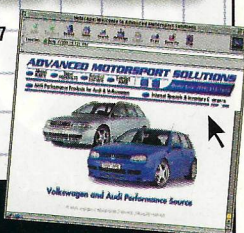
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Removal of the passenger seat offered ample room for my dismantled bicycle on the occasions I had to drop the S off at the repair shop or was just looking for a new trail to tour. And, of course, there were those occasional flings at the slalom and race track.

But 16 months and 30,000 miles later, the 2.2-liter boxer engine was beginning to reveal its age and wear. The spunk was gone, and colorful little metal flakes were starting to accumulate in the oil filter. These were omens of failing main bearings and an intermediate shaft ready to walk out.

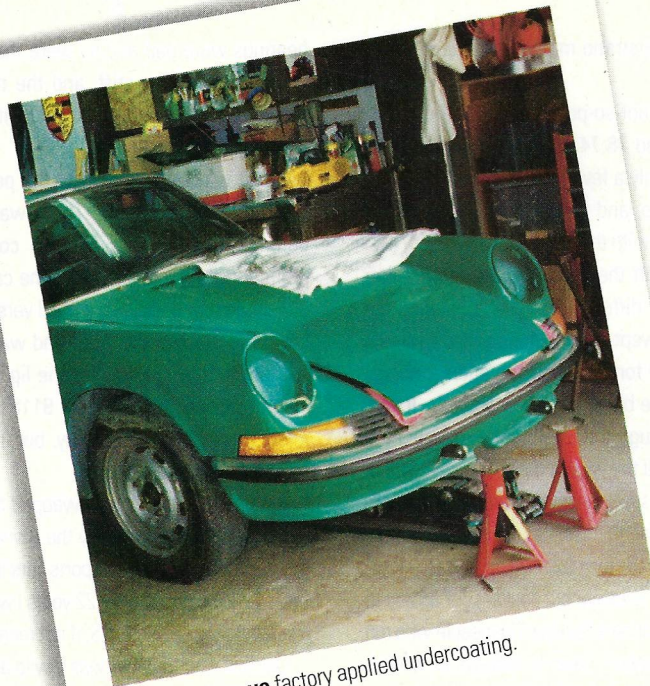
Although I had little knowledge of the engine's inner workings, I knew a pre-emptive rebuild was the only cure against the inevitable, and extremely expensive, motor meltdown. Another lesson well-learned from my first 911.

My savings had barely recovered from the ini-

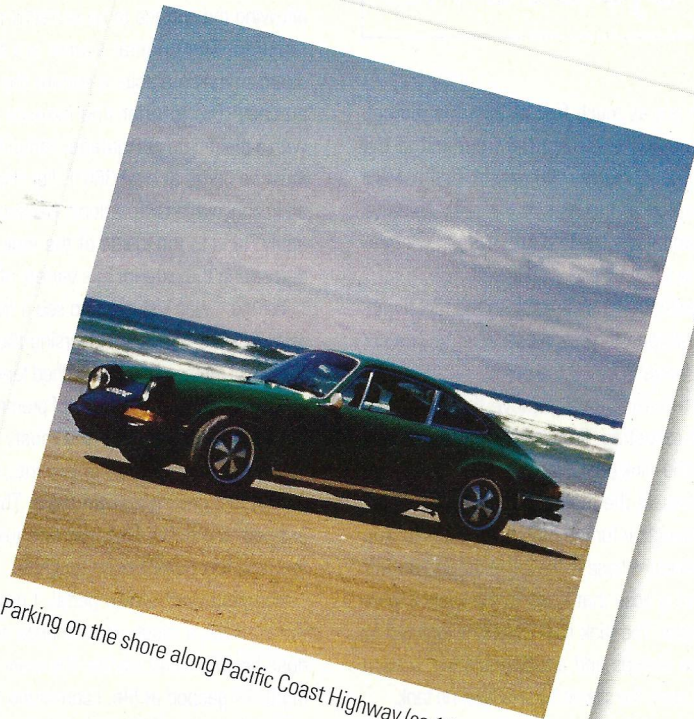
tial purchase when I received the \$4,800 estimate for the refurbishment. The moment is somewhat blurred, but I remember the mechanic telling me how happy I was going to be with a fresh motor. He kept saying that as I was helped to a chair and brought a paper bag to combat my hyperventilation.

A month later, when the S and I pulled out of the shop, I was indeed happy. There was more power underfoot than ever and the promise of at least another 100,000 miles before I would have to raid the bank again.

Unfortunately, life accelerated faster than the S, even with the new engine. Family and career took precedence over forays at the track or blitzkriegs up the coast. Soon the S was parked more than it was driven. It found shelter in my mother's garage for a year or so. Then it was shuttled to my aunt's house. For a few years it sat undisturbed in a rented garage until I had my own home and a proper side yard. That's where it lay as car cover after car cover dissolved under the sun. The paint faded, its tires cracked and the spiders' webs thickened in the wheel wells.



Trying to remove factory applied undercoating.



Parking on the shore along Pacific Coast Highway (ca 1985).

Finally, it was the family dog that convinced me my poor old S had suffered enough dejection. Late one night, I heard him running madly about the car. With his tail wagging feverishly, he jammed his head into the rear fender. I pulled him away only for him to dash to the front left wheel, then back to rear. It didn't take bloodhound instincts to know something small and vile had made a German condominium out of my Porsche.

Holding the dog's collar with one hand and clutching a flashlight in the other, I inched open the hood. A fuzzy black beast with a pink tail scurried out of the trunk, over the fender and disappeared into the bougainvillea.

"What was that?" My wife was suddenly behind me. "A field mouse," I lied, as the dog pulled away and tore through the bushes. "It was a rat," she said, cringing. "In your car."

I shook my head. "Field mouse," I insisted, refusing to believe vermin populated my beloved S.

She went back in the house disgusted. The dog continued to romp happily through the thorn bushes while I stared at my car feeling horrified and depressed.

The next day I put the battery charger to cables and tried to crank it over. It responded with labored grunts but never woke. Digging through a stack of old business cards, I found the telephone number to the last Porsche shop I frequented.

"You shouldn't try to start it before changing the fuel and oil," said Jeff Erickson of Randall Aase Motors in Fullerton. "You probably have rust in the tank, and you don't want to push that into the fuel filter."

No, wouldn't want to do that, I thought. Jeff explained how to check for corrosion in the tank and, as he suspected, the fuel loitering in the depths was the color of cappuccino.

#### Removal of the 911 Fuel Tank

The removal of a 911 fuel tank is a simple, straightforward affair. Taking safety as the first consideration, be sure to place the car in a well-ventilated area. No matter how careful you are, you are going to spill fuel. Disconnect the positive cables from both batteries, making certain the heavy wires do not fall back against the posts.



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Siphon out as much fuel as possible through the filler hose. Next, hoist the front end of the car high enough to run the excess fuel toward the drain plug at the rear of the tank. Remove the plug and drain the fuel into a clean container. A 10- to 12-qt oil pan works well.

Disconnect the lines leading to the fuel pump. It is a good idea to plug these lines to prevent fuel from seeping out of the pump.

Inside the trunk area, remove the spare tire, tools and carpeting. From the upper right-hand corner of the tank (looking toward the rear of the car), disconnect the multi-pin socket. This is the wiring connection for the fuel gauge sending unit.

Disconnect the hose to the left of the socket. This is the venting hose that leads to the vapor expansion chamber. The tank filler hose is connected by large hose clamps and a rubber sleeve. Loosen these and work the sleeve back to free the tank.

The fuel tank is constructed from two halves, with a thick seam running along the outside. There are three triangular clamps held with Allen bolts at the edge of this seam securing the tank to the chassis. Remove them completely.

At this point the tank is free, but you may not be able to lift it from the trunk. The factory-installed foam rubber seal encircling the tank has probably degraded to the extent that it literally glues the tank in place.

If this has occurred, the tank needs to be "popped" out from underneath. Return the car to its static position on the ground. To push the tank upward, use a floor jack and a broad piece of wood. Be sure the wood is wide enough to distribute the jack's hydraulic force across the tank bottom and protect the undercoating.

Raising the jack slowly applies extensive pressure to the seal, but do not expect it to do all the work. You will need to use a bit of muscle here to wrestle the tank loose as the jack pushes from the bottom.

After eliminating the rat's base camp from behind the fiberboard partition in the trunk, I removed the fuel tank using this procedure. Concerned about the amount of rust on the tank's outer skin, I tried to clean away the rubbery undercoating. To Porsche's credit, the coating was as tough as asphalt. Before long, I had given up the effort and was searching the telephone book for a professional.

I found Mattson's Radiator, a gas tank and radiator restoration shop in Stanton, Calif. Mattson's does not simply steam clean and

paint old fuel tanks. They remove the corrosion by using high pressure to blast the tanks with steel grit. This tears away even minor pitting, allowing the surface to be correctly patched and repaired. The original seams are then re-soldered so they are able to endure the final baking process. The interior and exterior are coated with a plastic-based material called Renu, which must be cured at over 360°F. For those interested in concours restorations, Mattson's can also apply Renu to the inside of the tank while powdercoating the exterior in a variety of colors.

For me, I was just eager to see if the old flat six was going to kick over. Reversing the order of its removal, I replaced the refurbished tank into the car and added a couple of gallons of premium gasoline.

I slipped eagerly into the musty leatherette driver's seat, wiggled the key into the ignition switch and gave it a slight twist. The oil needle jumped, the lights flickered and just under my feet, the fuel pump began to whine.

Pumping the throttle pedal, I turned the key further. With a cough and a sneeze and a horrendous belch of blue smoke, the once awe-inspiring 911S gasped at life. I continued to pump the throttle as the 2.2L cleared its throats and growled angrily as if startled from a sound sleep. Then amidst the engine's swelling roar, I heard a faint whisper: "Keep your foot in it."

Who says you can never go home again?

*Author's note: In last month's article, the 911S was inadvertently referred to as the sport model. It was a mistake of epic proportions. The "S" insignia, of course, denotes "Super," and while first hung on the hottest version of the 911 in 1967, its pedigree comes from a series of high-output 356 engines from the '50s and '60s. ☞*

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