

# 1972 PORSCHE COMPARISON TEST

BY PATRICK BEDARD

THE "T" "E" AND "S" ALL HAVE A NEW 2.4-LITER ENGINE BUT DIFFERENCES ARE VAST.

• Turn six at Riverside is an irregular U-bend at the top of a hill, lined on the outside by a solid white fence to keep errant racers out of the grandstands. The 911T was into six first, hard on the brakes, with the S Coupe and the E Targa tight on its tail.

Being in the rear car is like being in the caboose of a very short train and there is a kind of poetry to the motion of the cars ahead that a trackside spectator never sees. Everything

another driver, took a tangent off the esses at 60 mph and scooped up a half bushel of Southern California ice plants with its chin spoiler. On a race track, where a car can fall off the road without hurting itself or anybody, such incidents are not catastrophes and they're seldom mentioned afterward. But in that log book in the back of the mind they are entered as "driver error" . . . a miscalculation perhaps or a lapse of concentration. It happens to the best of men occasionally and some cars will cover for them. But not Porsches. They are not like most cars . . . or even some cars. They are unique. They have character and will admirably serve the man who is sensitive to them and with equal facility betray the one who isn't.

That is the Porsche nature and it has been so from the start. And Porsche engineering has carefully preserved it. Ferdinand Porsche set down the Teutonic teardrop shape before World War II, he hung the engine out behind the rear wheels where he thought it belonged and that is the way that the 911 is built today. Knowledgeable designers now agree that that is not the best way to build a car, not even second best in fact, and Porsche engineers wouldn't dream of such a layout for racing, but the 911 continues along because to do it any other way would not be a Porsche. Legions of breathless enthusiasts agree. Neither the performance nor the handling nor the braking nor the comfort nor the convenience can justify the great price, only the undissolving Porsche character can.

The 911 is a compact car, the same overall length as a Pinto although the wheelbase is four inches shorter. Its sensations to the driver are immediate and clear: initially it is the flood of noise—engine noise. It's loud—as air-cooled powerplants usually are—with the tone and tempo of an enraged Volkswagen. As awareness of the strange sounds subsides with familiarity you discover that its ride quality is soft; broken concrete and cobblestone roads can be swallowed with no loss of aplomb. Sooner or later you realize Porsches are nervous about straight line travel, even in city driving. At high speed, particularly in crosswinds, they can be a handful. The steering is light at all times, the shifter is too rubbery for the price and you can't help but appreciate that the quality of fit and finish in the interior is first rate.

All of the attributes describe the 1972 911 just as accurately as they would the first ones to roll off the assembly line in 1964. The improvements since then have been many—but also subtle—so that the Porsche's character is fundamentally unchanged. That is the master plan. And while, in keeping with that plan, the changes for 1972 have been confined almost entirely to enlarging and retuning the engines, the transformation is tremendous. Never before could the 911 be classified as a high-powered car; now it can. For Porsche, 1972 is

Porsches are not created for an egalitarian world: they demand more than mere competence from a driver and have uncompromising personalities that inspire either love or hate.



happens in sequence: brake lights glow red, noses dive, car bodies gradually lean away from the turn, puffs of smoke balloon out of the exhausts as drivers downshift . . . it all seems so fluid, so continuous, almost artistic.

Suddenly it is chaos.

It's not the rear of the S that you are looking at but the side . . . blue smoke streams from where its rear tires are scraping along asphalt . . . then you see the front, headlights and the license plate . . . then the other side. As its gyrations die out your front fender slides by, inches from disaster, and it finally settles to become a stationary part of the panorama as it passes out of your peripheral vision.

Just a few minutes before, the same car, at the hands of



a vintage year, and for that reason we are reviewing the entire 911 line—comparing them side-by-side—so that their differences, their virtues, and their weaknesses, will be a matter of record.

The 911 is now produced in three versions, T, E and S, in ascending order of both performance and price. Since its introduction the T has had two 3-bbl. carburetors while the others were injected. Now all have Bosch fuel injection. But the big news is the increased displacement, up from 2195 to 2341cc, which was accomplished by a 0.17-inch increase in the stroke—not a complicated operation. The old crank forging is still used, with the rod journals ground to a smaller diameter and off center—farther away from the crank centerline. To make up for lost bearing area, the journals are also a little longer now. And the connecting rods are shorter, by the exact same distance the crank throws have been moved, to keep the pistons from clanging on the heads. This revision applies equally to all 911s because they all have the same displacement.

They do not, however, have the same power output. The T is rated at 157 SAE gross horsepower, the E at 185 and the S at 210—increases of 15, 10 and 10 over the last year. And this has been done even while the compression ratios have been lowered (so that all three can operate on 91 octane fuel). While each model does have a different compression

stronger engines. Both the 4- and 5-speeds are fundamentally the same, they use the same case . . . only the ratios and number of gears inside make the difference. And to the driver the difference between the new and the old is apparent only because of a new shift pattern. First gear has been moved from its former position off to the left of the "H" and down to the more common location on the top left of the H—like a typical Detroit 4-speed. And if you order a fifth it goes outside the H on the right and forward. This pattern makes more sense for U.S. driving where you spend entirely too much time making 1-2 shifts in traffic. The old style favored road racing where first gear is used for starting and after that you never go back to it until you drive on to the trailer after the flag.

But while Porsche has abandoned its road-course shift pattern, the 911 still contains as much pure racing technology as all of its competitors put together. The reasons are two. First, the fiber of Porsche's reputation is competition victories. It has been a racing-oriented company from the start and it remains that way yet—the engineers are comfortable with the discipline and they can easily apply to the street what they learn on the track. But secondly, and even more to the point, without a liberal dose of trackside technology the 911 would have become nothing more than a museum curiosity. Its basic mechanical layout is not that which any lesser group of engineers would undertake to make a \$10,000 sports car of. As you surely remember, the Corvair was crucified because of its handling, and its propensity for spontaneous changes in direction when that wasn't the driver's intention. Still, the last generation of Corvairs had a suspension system superior, in principle, to that of the Porsche. The 911's MacPherson struts in front and trailing arms in back have hopeless camber patterns. They allow the wheels to lean away from the turns as the body rolls and have no provision for anti-brake dive. And none of this is secret or recently discovered information. Everybody, including Porsche, has known the subtleties of it for years. But Porsche seems to view it as a challenge rather than a hindrance. What greater proof could there be of its engineering brilliance than to take a car which appears unwieldy on paper, make it capable and poised on the road, and do so without altering its fundamentally obtuse layout? No one has ever come closer to succeeding with such a premise than Porsche has with the 911.

It was done with sound (and expensive) engineering. The foremost problem, when the engine is in the tail, is weight distribution. Hundreds of compensations have been made. Everything in the rear is as light as possible. The engine block is magnesium as is the trans-axle case; the cylinder heads are aluminum. Anything that is heavy and not a part of the engine has been moved forward. Naturally the spare tire and fuel tank are in front. So are the batteries—a small one tucked into each front fender just behind the bumper. Every year the engineers try to shave a little more. This year the injection manifold is made of plastic. So is the air cleaner and it's even held together with plastic bolts. And the engine oil tank has been moved ahead of the rear wheel now, into the fender just behind the passenger-side door. Every little bit helps.

The same applies to the suspension. The disadvantages of a poor camber pattern can be partially offset by a system that keeps its wheels firmly in contact with the ground. Unsprung weight is a villain in this case. Ergo aluminum wheels are standard on the S, optional on the T and E, and they are forged instead of cast so that strength can be maintained with less weight. And they are held on by aluminum lug nuts. Yes, aluminum lug nuts.

If that strikes you as odd and you inquire of a factory repre-

The basic layout of a 911 is not that of a race car, but it still contains as much pure racing technology as all of its competitors put together.



ratio, the S being the highest, the variation in power output is primarily a function of engine breathing. Each has a different camshaft, with the S' being the most radical, and the timing of the mechanical fuel injection is different for each of the three versions. But perhaps the most interesting variations are the intake manifolding and cylinder head porting. All of the heads have the same valve sizes but the injection stacks (now molded of plastic) and the intake ports are of a larger diameter with each increasing stage of tune. That has much to do with positioning the torque curve, low and full in the T, high and peaky in the S.

The other major revision in the 1972 models is the new transmission, increased in torque capacity to handle the



sentative you will be told, in solemn tones, "they are lighter" and he won't understand why you asked. To him it is a perfectly logical way to hold the wheels on a sports car. It would seem that every technical soul at Porsche is afflicted with the same light-alloy, racer-hardware mania. The whole 911, from bumper to bumper, is a product of the Aluminum Lug Nut Syndrome. It's all unashamedly there; hemi heads, overhead cams, fuel injection, oil coolers, dry sump and the clincher half

Changes have been confined almost entirely to the engines—and the transformation is tremendous. Never before could a 911 be classified as a high powered car; now it can.

way down the option list—titanium connecting rods well worth their \$903.50 price. With a Porsche you at least get the excess you pay for.

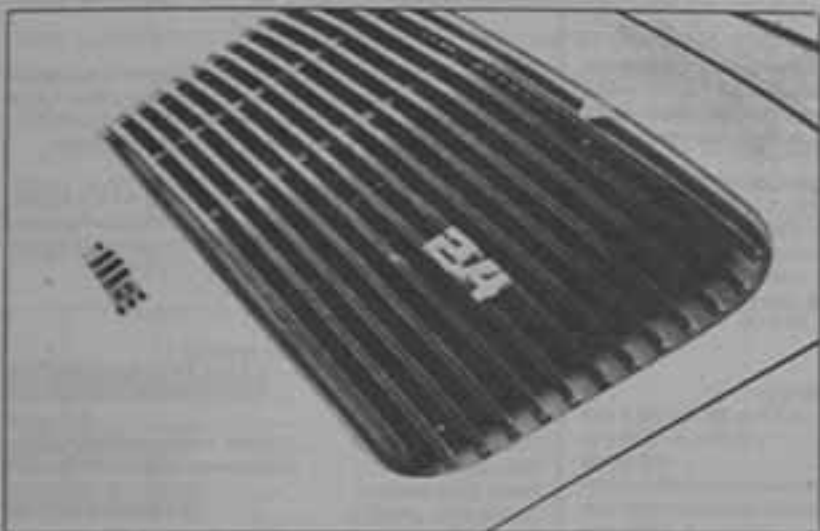
You also get a remarkable car, incredibly fast when you remember that the engine displaces only 143 cu. in. and runs

on regular gasoline. The 911s have an even further distinction in being among the very few cars of the 1972 crop that not only meet emission control laws but are *more* powerful than the models they replace. In fact the new 911T has exactly the same acceleration in the quarter-mile (15.1 seconds at 91.7 mph) as the 2.0-liter 911S of 1969 and is a whole lot less fussy about the way it's driven. The E is easy to get along with, too, and it turned out to be the fastest quarter-mile sprinter of the bunch—14.3 seconds at 96.9 mph in the quarter—which makes it a match for a number of Detroit's hot cars like the low compression Z28 Camaro and Boss Mustang. And the E doesn't even seem to breathe hard. It's smooth at low speeds, feels strong at 3000 rpm and it climbs up to its 6800 rpm redline with determination. On the other hand, the S is an altogether different kind of machine. It's a top speed car more than anything else. The engine doesn't feel capable until about 5000 and you usually end up shifting there even in routine traffic—to the accompaniment of the furious sound of the sharp, hard edge exhaust pulses rushing out the single stubby tail pipe. It is rough at low speeds, and wants to buck in traffic. The torque band is narrow, so much so that even though all of the 5-speed 911s have the same transmission ratios they feel too wide only in the S.

The S clearly makes more power than the E but acceleration is marginally poorer because it takes so long to get on top of the power peak. You only get your money's worth when



you can stuff your foot into it and leave it there . . . flat out down the Autobahn . . . or flat out toward jail in this country. On the long back straight at Riverside, the S topped 130 mph before braking for turn nine and the factory, which is seldom wrong, claims a top of 143. And if you still have any lingering doubt as to the factory's intention with this car, a look at some of its standard equipment should make the point. All 911s have an oil cooler back in the engine compartment but the S has an additional one in the right front fender just behind the headlight. (Air enters through the little chrome grille just in-board of the parking light and the oil lines are visible along the



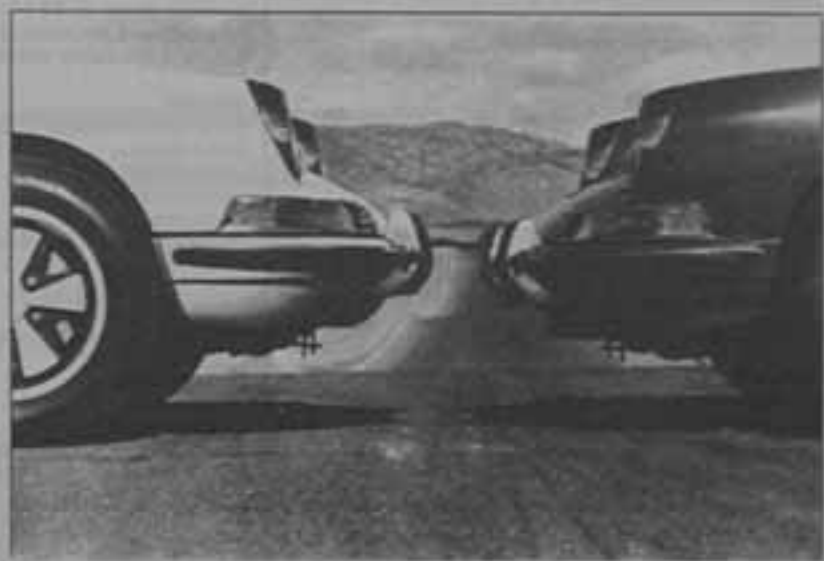
right-hand rocker panel—not a good choice of routing, we think, because that area is vulnerable to both road and hoist damage.) The S also has a front spoiler (optional on the others at \$210.35) shaped like that of the 908/03 racing cars tailored for Targa Florio and Nürburgring. Such a device to improve directional stability is particularly important on a 911—above 100 mph they have a way of narrowing an interstate highway down so that it feels like a sidewalk—but the effectiveness of a front spoiler depends almost entirely on how close it comes to the ground, and Porsche has allowed enough clearance to limit its over the road use. At Riverside the difference between the S and the other two cars without spoilers was not apparent.

Apart from these top-speed aides of the S, and of course the engines, there is very little difference between the 911s. They all have the same transmissions with the same gears and the same final drive ratios, the brakes are identical and so are the suspensions except that the S has front and rear anti-sway bars as standard equipment while the same bars are optional on the T and E. The other exception is wheels and tires. The S has 6-inch wide forged aluminum wheels with 185/70 VR 15 tires as standard equipment; the tires are the

same but 6-inch steel wheels are included with the E while the T comes with 5.5-inch steel wheels and 165 HR 15 tires. The S wheels and tires are optional on all models and all three test cars were so equipped. Each had the anti-sway bars too.

Knowing that, you would expect handling to be identical, but it wasn't. Part of the difference was because of tires—the E had Pirellis; the others, Michelins—and part of it due to subtle differences in weight distribution as a result of optional equipment. The cars are similar in that they behave with steady-state understeer and transient oversteer, which is a tricky combination . . . the same sort of thing you find in a loaded station wagon—although the Porsches are capable of much higher cornering speeds. What happens is that, once you're in a turn, you can go like hell and if there are no changes in radius or abrupt changes in elevation, a Porsche feels like it's on a tether.

Getting into the turn is a hassle, particularly the right-left or



left-right transition of an esse. As soon as you start to change directions the back end wants to come around and you had better be mighty quick with the steering and super gentle on the brakes. You also must be very careful about turns that cross the crest of a hill or any other situation that causes the cars to go light on the wheels. Otherwise, you won't be going the way you're pointed. And, considering how Porsches are made, it couldn't be any other way. Because the rear tires not only carry the bulk of the weight but provide the driving force as well, the cars are inherently oversteering in nature. By means of carefully chosen suspension rates (higher roll stiffness in front) they are artificially corrected to an understeer condition but the correction is a compromise and it really only works fully in steady states (constant speed, constant radius turns) and for whatever coefficient of friction the engineers had in mind when they did the chassis tuning—rain-slicked or icy pavement is a whole different deal than a dry race track. It is possible for cars with a rearward weight bias to work very well—Can-Am and Formula racers should suffice as proof—but the difference between them and a street Porsche is that the racers all use bigger tires on the rear than in front. That is the key. Porsches need the same kind of help and it's interesting to see that in the racing classes where the rules are loose enough—the FIA touring category at Le Mans for example—911s all end up with great wide wheels and tires in back.

As we said, the difference between the cars we drove at Riverside was purely a matter of production variation. The T was the lightest, it had the most forward weight distribution and we liked it best because it was the most predictable. The E, whose Targa roof probably gives it a fractionally higher



### PORSCHE 911 T COUPE

**Importer:** Porsche-Audi Division  
Volkswagen of America, Inc.  
Englewood Cliffs, N.J. 07632

**Vehicle type:** Rear engine, rear-wheel-drive, 2-passenger coupe

**Price as tested:** \$8804.36 (Manufacturer's suggested retail price, including all options listed below, Federal excise tax, dealer preparation and delivery charges, does not include state and local taxes, license or freight charges)

**Options on test car:** Base (East Coast) 911 T Coupe, \$7383.00; 5-sp transmission, \$162.00; Forged aluminum wheels, \$473.00; Appearance group, \$182.50; Tinted glass, \$124.00; AM/FM radio, \$85.75; Retractable antenna and speaker, \$62.50; Front and rear anti-sway bars, \$87.00; Dealer preparation, \$75.00

#### ENGINE

Type: Flat 6, air-cooled, 7 main bearings  
Bore x stroke ..... 3.31x2.77 in, 84.0 x 70.4 mm  
Displacement ..... 142.8 cu in, 2341 cc  
Compression ratio ..... 7.5 to one  
Carburetion ..... Bosch mechanical fuel injection  
Valve gear ..... Chain-driven single overhead cam  
Power (SAE gross) ..... 157 bhp @ 5600 rpm  
Torque (SAE gross) ..... 166 lb-ft @ 4000 rpm  
Specific power output ..... 1.10 bhp/cu in, 67.2 bhp/liter  
Max recommended engine speed ..... 6200 rpm

#### DRIVE TRAIN

Transmission ..... 5-speed, all-synchro  
Final drive ratio ..... 4.43 to one  
Gear Ratio Mph/1000rpm Max. test speed  
I 3.18 5.3 33 mph (6200 rpm)  
II 1.83 9.1 56 mph (6200 rpm)  
III 1.26 13.3 82 mph (6200 rpm)  
IV 0.96 17.4 108 mph (6200 rpm)  
V 0.76 22.0 115 mph (5250 rpm)

#### DIMENSIONS AND CAPACITIES

Wheelbase ..... 89.5 in  
Track, F/R ..... 54.1/53.3 in  
Length ..... 163.9 in  
Width ..... 63.4 in  
Height ..... 52.0 in  
Ground clearance ..... 5.9 in  
Curb weight ..... 2425 lbs  
Weight distribution, F/R ..... 44.3/55.7%  
Battery capacity ..... 12 volts, 72 amp-hr  
Alternator capacity ..... 770 watts  
Fuel capacity ..... 16.4 gal  
Oil capacity ..... 9.5 qts

#### SUSPENSION

F: Ind., MacPherson struts, torsion bars, anti-sway bar  
R: Ind., trailing arms, torsion bars, anti-sway bar

#### STEERING

Type ..... Rack and pinion  
Turns lock-to-lock ..... 3.1  
Turning circle curb-to-curb ..... 35.2 ft

#### BRAKES

F: ..... 11.1-in dia vented disc  
R: ..... 11.4-in dia vented disc

#### WHEELS AND TIRES

Wheel size ..... 15 x 6.0-in  
Wheel type ..... Forged aluminum alloy, 5-bolt  
Tire make and size ..... Michelin X 185/70 VR 15

#### PERFORMANCE

Zero to	Seconds
30 mph	1.9
40 mph	3.3
50 mph	4.8
60 mph	6.9
70 mph	9.1
80 mph	11.6
90 mph	14.5
100 mph	17.8
Standing 1/4-mile	15.1 sec @ 91.7 mph
Top speed (estimated)	125 mph
80-0 mph	27.1 ft (0.79 G)
Fuel mileage	16-20 mpg on regular fuel



### PORSCHE 911 E TARGA

**Importer:** Porsche-Audi Division  
Volkswagen of America, Inc.  
Englewood Cliffs, N.J. 07632

**Vehicle type:** Rear engine, rear-wheel-drive, 2-passenger convertible

**Price as tested:** \$10,506.63 (Manufacturer's suggested retail price, including all options listed below, Federal excise tax, dealer preparation and delivery charges, does not include state and local taxes, license or freight charges)

**Options on test car:** Base (East Coast) 911 E Targa, \$9087.00; 5-sp transmission, \$162.00; Forged aluminum wheels, \$360.00; Tinted glass, \$80.50; AM/FM radio, \$123.55; Retractable antenna and speaker, \$62.50; Appearance group, \$182.50; Silver metallic paint, \$235.00; Wheel opening moldings, \$51.58; Front and rear anti-sway bars, \$87.00; Dealer preparation, \$75.00

#### ENGINE

Type: Flat 6, air-cooled, 7 main bearings  
Bore x stroke ..... 3.31 x 2.77 in, 84.0 x 70.4 mm  
Displacement ..... 142.8 cu in, 2341 cc  
Compression ratio ..... 8.0 to one  
Carburetion ..... Bosch mechanical fuel injection  
Valve gear ..... Chain-driven single overhead cam  
Power (SAE gross) ..... 185 bhp @ 6200 rpm  
Torque (SAE gross) ..... 174 lb-ft @ 4800 rpm  
Specific power output ..... 1.30 bhp/cu in, 79.0 bhp/liter  
Max recommended engine speed ..... 6800 rpm

#### DRIVE TRAIN

Transmission ..... 5-speed, all-synchro  
Final drive ratio ..... 4.43 to one  
Gear Ratio Mph/1000rpm Max. test speed  
I 3.18 5.2 35 mph (6800 rpm)  
II 1.83 9.1 62 mph (6800 rpm)  
III 1.26 13.2 90 mph (6800 rpm)  
IV 0.96 17.3 118 mph (6800 rpm)  
V 0.76 21.8 122 mph (5600 rpm)

#### DIMENSIONS AND CAPACITIES

Wheelbase ..... 89.5 in  
Track, F/R ..... 54.1/53.3 in  
Length ..... 163.9 in  
Width ..... 63.4 in  
Height ..... 52.0 in  
Ground clearance ..... 5.9 in  
Curb weight ..... 2475 lbs  
Weight distribution, F/R ..... 42.7/57.3%  
Battery capacity ..... 12 volts, 72 amp-hr  
Alternator capacity ..... 770 watts  
Fuel capacity ..... 16.4 gal  
Oil capacity ..... 9.5 qts

#### SUSPENSION

F: Ind., MacPherson struts, torsion bars, anti-sway bar  
R: Ind., trailing arms, torsion bars, anti-sway bar

#### STEERING

Type ..... Rack and pinion  
Turns lock-to-lock ..... 3.1  
Turning circle curb-to-curb ..... 35.2 ft

#### BRAKES

F: ..... 11.1-in dia vented disc  
R: ..... 11.4-in dia vented disc

#### WHEELS AND TIRES

Wheel size ..... 15 x 6.0-in  
Wheel type ..... Forged aluminum alloy, 5-bolt  
Tire make and size ..... Pirelli 185/70 VR 15 Cinturato 72

#### PERFORMANCE

Zero to	Seconds
30 mph	1.7
40 mph	2.8
50 mph	4.2
60 mph	5.8
70 mph	7.7
80 mph	9.7
90 mph	12.2
100 mph	15.2
Standing 1/4-mile	14.3 sec @ 96.9 mph
Top speed (estimated)	135 mph
80-0 mph	234 ft (0.92G)
Fuel mileage	15-18 mpg on regular fuel



### PORSCHE 911 S COUPE

**Importer:** Porsche-Audi Division  
Volkswagen of America, Inc.  
Englewood Cliffs, N.J. 07632

**Vehicle type:** Rear engine, rear-wheel-drive, 2-passenger coupe

**Price as tested:** \$10,749.00 (Manufacturer's suggested retail price, including all options listed below, Federal excise tax, dealer preparation and delivery charges, does not include state and local taxes, license or freight charges)

**Options on test car:** Base (East Coast) 911 S Coupe, \$9755.00; 5-sp transmission, \$162.00; Towing hook, \$16.00; AM/FM radio, \$226.50; Tinted glass, \$124.00; Sun roof, \$390.50; Dealer preparation, \$75.00

#### ENGINE

Type: Flat 6, air-cooled, 7 main bearings  
Bore x stroke ..... 3.31x2.77 in, 84.0x70.4 mm  
Displacement ..... 142.8 cu in, 2341 cc  
Compression ratio ..... 8.5 to one  
Carburetion ..... Bosch mechanical fuel injection  
Valve gear ..... Chain-driven single overhead cam  
Power (SAE gross) ..... 210 bhp @ 6500 rpm  
Torque (SAE gross) ..... 181 lb-ft @ 5200 rpm  
Specific power output ..... 1.47 bhp/cu in, 89.7 bhp/liter  
Max recommended engine speed ..... 7200 rpm

#### DRIVE TRAIN

Transmission ..... 5-speed, all-synchro  
Final drive ratio ..... 4.43 to one  
Gear Ratio Mph/1000rpm Max. test speed  
I 3.18 5.3 38 mph (7200 rpm)  
II 1.83 9.1 65 mph (7200 rpm)  
III 1.26 13.3 96 mph (7200 rpm)  
IV 0.96 17.4 125 mph (7200 rpm)  
V 0.76 22.0 137 mph (6000 rpm)

#### DIMENSIONS AND CAPACITIES

Wheelbase ..... 89.5 in  
Track, F/R ..... 54.1/53.3 in  
Length ..... 163.9 in  
Width ..... 63.4 in  
Height ..... 52.0 in  
Ground clearance ..... 5.9 in  
Curb weight ..... 2455 lbs  
Weight distribution, F/R ..... 42.8/57.2%  
Battery capacity ..... 12 volts, 72 amp-hr  
Alternator capacity ..... 770 watts  
Fuel capacity ..... 16.4 gal  
Oil capacity ..... 10.6 qts

#### SUSPENSION

F: Ind., MacPherson struts, torsion bars, anti-sway bar  
R: Ind., trailing arms, torsion bars, anti-sway bar

#### STEERING

Type ..... Rack and pinion  
Turns lock-to-lock ..... 3.1  
Turning circle curb-to-curb ..... 35.2 ft

#### BRAKES

F: ..... 11.1-in dia vented disc  
R: ..... 11.4-in dia vented disc

#### WHEELS AND TIRES

Wheel size ..... 15 x 6.0-in  
Wheel type ..... Forged aluminum alloy, 5-bolt  
Tire make and size ..... Michelin X 185/70 VR 15

#### PERFORMANCE

Zero to	Seconds
30 mph	1.8
40 mph	3.0
50 mph	4.4
60 mph	6.0
70 mph	7.9
80 mph	10.0
90 mph	12.5
100 mph	15.7
Standing 1/4-mile	14.4 sec @ 96.8 mph
Top speed (estimated)	140 mph
80-0 mph	280 ft (0.77 G)
Fuel mileage	14-17 mpg on regular fuel

center of gravity, had slightly more steady state understeer and more vigorous tail wag in transients. Its most conspicuous trick, however, was its three-legged dog stance in turns. Typically, 911s lift the inside front wheel but few to the dizzy heights of this Targa.

And as a driver you can tell it too. The bruising thud you usually feel when you hang a wheel off the inside edge of a turn doesn't happen. You just glide over it like . . . well, like you were flying.

In handling the S was much like the E. Perhaps a little less understeer and an extra increment of twitch. Like the T, the S was a coupe, but its electric sun roof alters its weight distribution somewhat. There were extra pounds in the roof and the electric motor was back in the engine compartment. If handling is your goal, it's best to stick with the plain coupe.

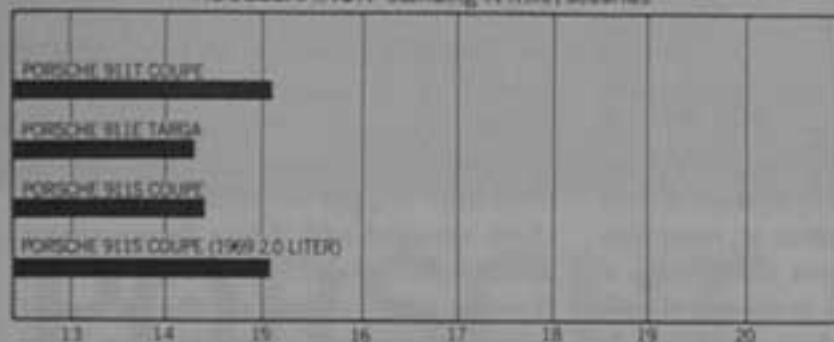
Another curious characteristic of all the 911s is the abundant and conspicuous degree of what the racers call "bump steer" built into the front suspension. Bump steer is a geo-

a quick transient. While racers are usually quick to eliminate any non-driver steering (Richie Ginther, Porsche's West Coast racemeister, manufactures a set of shims to relocate the steering gear) we're sure that it was intentionally designed into the 911, probably as an anti-wind wander device.

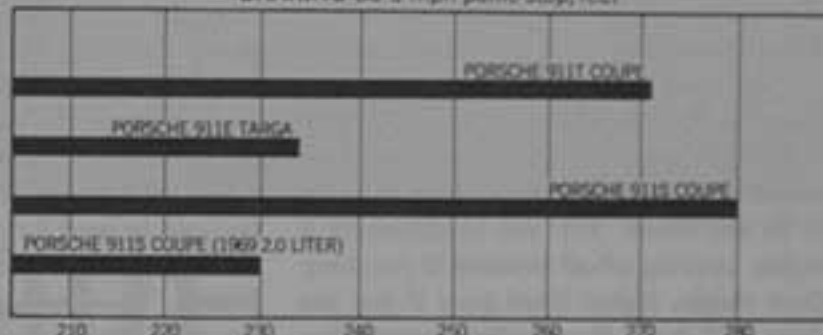
Earlier, handling was described as being subject to production variation and so, it turns out, is braking performance. One car, the E, stopped from 80 mph in 234 feet (0.92G). The other two required about 40 feet longer. And the difference in tires was not the substantial cause. Rather, the two difficult-to-stop cars had inconsistent brakes; one wheel would lock up well before the others. That is a trait that should have been engineered out of expensive cars like these. There are other areas where production tolerances are uncommonly generous too. Speedometer error for example. At 70 mph, of the three cars, one read five mph fast, another eight mph fast and the remaining one was two mph slow.

If you are serious about unrolling the required amount of

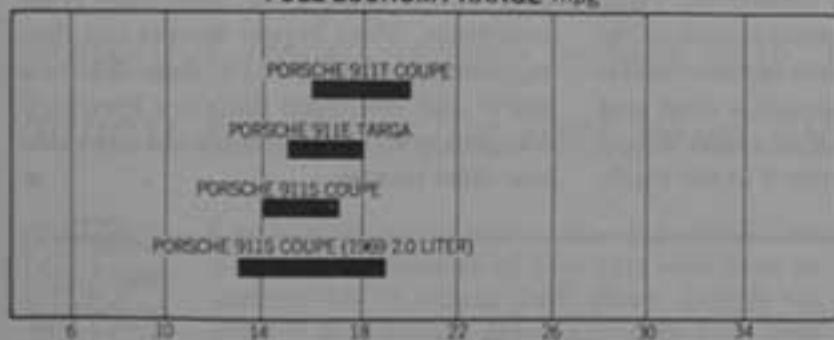
ACCELERATION standing 1/4 mile, seconds



BRAKING 80-0 mph panic stop, feet



FUEL ECONOMY RANGE mpg



PRICE AS TESTED dollars x 1000



metric condition that causes the front wheels to change direction of travel, or toe, as they move up and down through their suspension travel. Most production cars have it to a certain degree—Chevrolet's computer says it helps transients, makes them more manageable—but a driver rarely can detect it on the road. At its worst it can cause a car to dart slightly when one wheel hits a bump. In the Porsche the rack-and-pinion steering has so little friction that the bump steer manifests itself by a slight turning of the steering wheel on undulating expressways or when the car rolls suddenly, as in

paper for a Porsche you'd do well to look over the extras very carefully. The appearance group, at \$182.50, is a good idea for the T and E. It includes, among other things, rubber protective strips on the bumpers, a leather covered steering wheel and, most important, 911S instruments—a package made up of gauges for oil pressure, temperature and level. That last one is the hot tip because it allows you to check the quantity of oil in the dry sump tank without leaving the driver's seat. The other way is to use the dipstick . . . which is located



## 1972 PORSCHE COMPARISON

*inside* the oil tank and drenched from one end to the other with splashed up oil.

If you don't buy an S model we suggest the optional anti-sway bars and if you intend to carry heavy loads in the trunk, you should order the hydropneumatic front suspension which acts as a load leveler. This was standard equipment on the E up until 1972 but has been reduced to an optional status because it increased the price of the car when few customers wanted it. Koni shock absorbers are also available but their use should be confined to cars intended for competition.

Porsche also offers a series of options with an eye to the various sizes and shapes of its customers. You can special-order a higher steering wheel position if you have thick thighs, higher front seats if you are short and don't like peering through the steering wheel, or stronger front seat cushions if you are a football player. And if you don't like the standard seats, which are wide and offer little lateral support, you should seriously consider the Recaro Sportseats (\$46.00 each), deeply contoured

buckets very much in keeping with the nature of a Porsche.

In reality, this cornucopia of comfort and convenience options gives more of a clue to the Porsche's character than does all of the racer hardware. Even with its featherweight alloys, the 911s are fairly heavy—almost 2500 lbs.—and in no way lack creature comforts. It is this aspect that makes us suspect that all of the magnesium is solely to make a Volkswagen layout behave in the manner expected by an elitist society. The cars themselves are anything but spartan and the resemblance between the 911 and the low, ground-hugging 917 racer of international reputation exists only in the nametag. The 911s are draft-free coupes intended for two adults. There are a pair of folding buckets in back that can be used for children or, more likely, luggage since the front trunk space is limited. Those who seek communion with the open air have not been forgotten. In addition to the sun roof there is the Targa body style in which an entire section of the roof over the front seats is removable. Once it's off, since it's simply a vinyl skin stretched over a collapsible metal frame, you just fold it up and stow it in the trunk.

All that remains aloft, aside from the windshield, of course, is a stainless steel-covered roll bar and the fixed rear window. When the roof section is in place, the Targa is as weatherproof as the coupes. But it will cost you \$726 extra.

Which is the way it is with Porsches. Prices start at \$7383 for a naked 911T coupe on the East Coast and go all the way up to \$10,817 for the 911S Targa with the semi-automatic transmission. And then you start on the options. How about air conditioning for \$737?

The thing is, if you're hooked on Porsches (and you either are or you aren't, nobody is ambivalent) there is nowhere else to turn. If your ears perk up to the clatter of an air-cooled engine, if your reflexes need hair-trigger handling just to keep them amused and if you figure that a molded-jello shape that droops down in front so that you can see the pavement passing beneath the front bumper is the only way to build a car, then there is no substitute. Most Jaguar drivers can find happiness in a Mercedes, or if not that, in a BMW. But the closest thing to a Porsche is a Superbeetle . . . and that's not anywhere near close enough. ●