



PORSCHE
911SC
turbo

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911SC

turbo

Porsche's World of Sports Cars

Many have already tasted the delights of the sports car world. They know the sensation of an open-road turn taken with balance and assurance, of a steering wheel that seems to pilot itself through every corner, of powerful and arrow-straight braking, of acceleration with punch, and of being seen in an automobile that speaks of its owner's style and taste. Others have yet to come to know this world – Porsche's world. In every part of the world where sports cars are owned and driven, the Porsche name commands respect. This is so for several reasons. One is that it stands for sensational success

in racing. Porsche cars have won races and championships in every branch of sports car racing and in some single-seater classes as well. What's more, they've done it -- in accord with Porsche principles -- with engines, transmissions, chassis and bodies that are directly related to the company's production cars. Another reason is that Porsche has become synonymous with quality. The name represents quality in design, engineering and execution.

Porsche is also respected in the sports car world because that's the only kind of car the company builds. The Porsche engineers have designed every kind of motor vehicle known to modern man. For almost thirty years, however, the cars they've

chosen to produce themselves and identify with the Porsche name have been sports cars. By concentrating on what they know best and love most, the Porsche men have become the world's largest independent makers of sports cars. In the eyes of many experts their cars represent the highest refinement of the sports car art. Porsche enters 1979 with a most versatile range of sports cars. The classical Porsche formula, air-cooled and rear-engined, is continued by the 911 SC and Turbo. The new look in Porsche is represented by the V-8 928 and its four-cylinder companion, the 924. Each meets the demanding standards that Porsche has set for entry into its sports car world.



Porsche 911 SC, Targa and Turbo: Classic Shapes that Stir the Soul

These brilliant new cars may represent the most powerful affirmation yet of the distinctive model policy that has served Porsche and the owners of Porsche cars so successfully for so many years. That policy has two complementary and interlocking precepts:

1. Each Porsche model is maintained through a long production run, to assure its development to a high standard of quality and sustain its value in the hands of a large family of owners.

2. During that long run, each type of Porsche car is relentlessly, aggressively improved, year by year, to make each new model notably better than its predecessor.

As the most compelling examples to date of the effectiveness of this policy, Porsche presents the 3-liter 911SC Coupe, 911SC Targa, and 3.3-liter Turbo.

The longevity and vitality of the Porsche 911 are already legendary. First shown at Frankfurt in 1963, it entered production in 1964. Since then more than 130,000 sports cars of this type have left the Porsche fac-

tory at Zuffenhausen — few enough so that the 911 is not an everyday sight on the highway, and a sufficiently large number to achieve that quality of maturity that sets a Porsche apart from other sports cars. For it is becoming better known in automotive circles that the myth of the excellence of the "hand-built car" is just that: a myth. True precision in machining and assembly is only achieved in a car when enough of them are produced to allow the use of high-quality modern industrial tooling. This, in combination with time-consuming hand assembly is the case at Porsche.

As for Porsche's policy of continuous improvement, no better illustration than the new 911 SC and Turbo models could be drawn. Its new "SC" designation hints that the 911 SC has more than a touch of Carrera in its makeup, for it is powered by a full 3-liter engine. To match its punch, the 911 SC chassis now has wide rear rims and tires, torsion antiroll bars at both front and rear, and, again, a 5-speed transmission — all as standard equipment.

The ultimate roadgoing Porsche, the Turbo, has an engine of 3.3 liters, in excess of 200 cubic inches. A special cooler for its induction air, developed from those used by the racing Turbos, helps boost its peak output to more than 250 net horsepower. Its breathtaking performance is controlled by powerful brakes and a rear spoiler.



The Porsche 911 Family: Heirs to a Great Sporting Tradition

Remarkably enough, the Porsche 911 was not originally designed for racing. The engineers at Zuffenhausen who conceived it in the early 1960's dedicated their efforts to the design of the best possible roadgoing grand touring car, a machine built to provide transport for two people and their luggage that was fast, reliable, comfortable and safe. They did not think of racing. They had other cars then, the lovely 904 and the aggressive 906, that were created for racing. The 911 was to be for the road. But the Porsche planners overlooked one thing: The designs they thought of as suitable for road use were as good as those other makers devised just for racing. Be-

fore they knew it, 911 owners were racing their cars. And they continue to race them.

Since then millions of miles of asphalt, dirt, gravel and concrete have passed under the wheels of racing and rallying 911 Porsches. Many of those miles have been rolled up by cars built and entered in competition by Porsche itself. Motor sports participation is a Porsche policy too. Porsche takes part in competition for many reasons. The fast pace of development seasons its engineers. Racing successes raise the spirits of the builders and owners of Porsches. They show before the eyes of a critical public how fast and tough Porsches are. Porsche

people enjoy races and rallies. And because Porsche always competes with cars that are related in some way to those that are in production, the owners of Porsche sports cars are the direct beneficiaries of the technical advances and discoveries made on the race track.

Over more than a decade the family of 911 models has been at the heart of that development for competition and has benefited dramatically from it. Every part of these cars has been tempered in the crucible of motor sport. Racing led the steady increase in engine size from the original two liters to today's three liters in the 911SC and

3.3 liters in the Turbo. Racing has improved the design and geometry of the suspension, the power and durability of the brakes, the robustness of the transmission, and the strength of the body. Stabilizing front and rear spoilers came from racing, as did the wide, low tires that gear the Porsche to the road. Exhaust turbocharging, that exotic technique that gives the Turbo its breathtaking performance, was first perfected for the racing Porsches.

The 911SC and the Turbo were created on the drawing boards of the same designers who also engineered five Manufacturers' World Championships for Porsche. They

were styled in the same studio, and tested in the same wind tunnels. They were put through the same research and development program, and were submitted to rugged testing on the same test stands, durability roads and race tracks by the same test drivers. Is it any wonder that every production Porsche is the proud bearer of a competition pedigree?



The 911 SC: The Essence of fine Porsche Engineering

The lineage of all the great 911 Porsches – 911L, 911S, 911E or T, Carrera RS – finds its culmination in the newest offspring of this respected family, the 911SC. Offered in both Coupe and Targa body styles, the 911SC represents the ultimate refinement of fifteen years of 911's, fifteen years of perfection of an idea that has always been far ahead of its time.

Porsche cars have always used the most advanced type of body and frame construction known: an integral or monocoque structure in which the platform frame and the steel body are welded into a rugged, rigid whole. The massive strength of this body accounts for the 911SC's stubborn resistance to the formation of squeaks and rattles over a very long lifetime. Porsche has also taken extraordinary steps to block the corrosion that can mar and weaken an ordinary steel auto body. If sheet steel is hot dip galvanized, protected on both sides by a coating of zinc, it is extremely resistant to rust. But galvanizing, with the special methods needed to work with gal-

vanized parts, is costly. If they use it at all, most makers apply it to only a few parts. Porsche accepts the cost in the interest of long body life and makes the 911SC's steel lower body parts of material hot dip galvanized by the Thyssen process. And that is merely the first step of the many Porsche takes against corrosion that include dipping in an electrically-charged bath of rich prime coating and the baking on of a thick layer of a Polymer undercoating. Few cars are better armored against the invasion of rust.

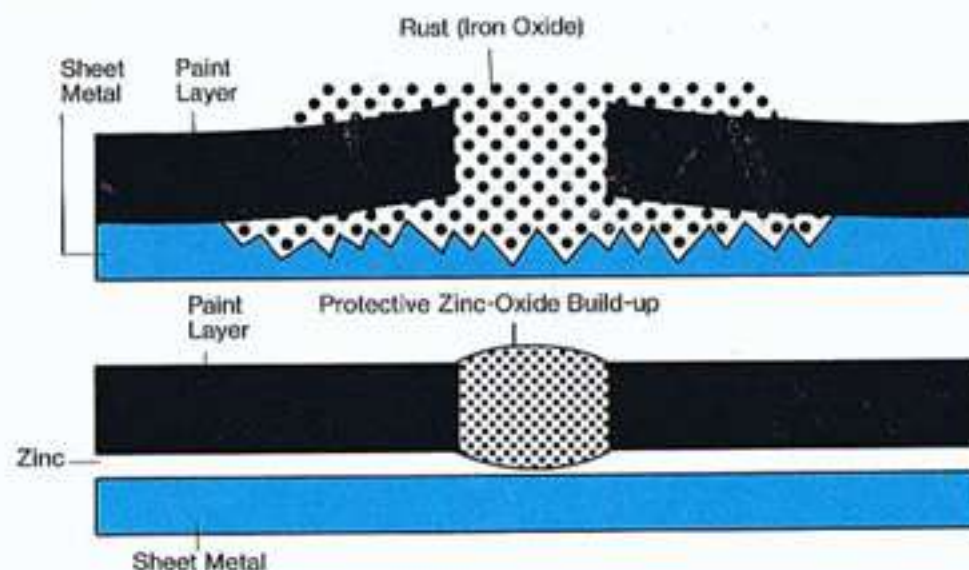
The 911SC's rear-mounted air-cooled engine, with its horizontally opposed cylin-



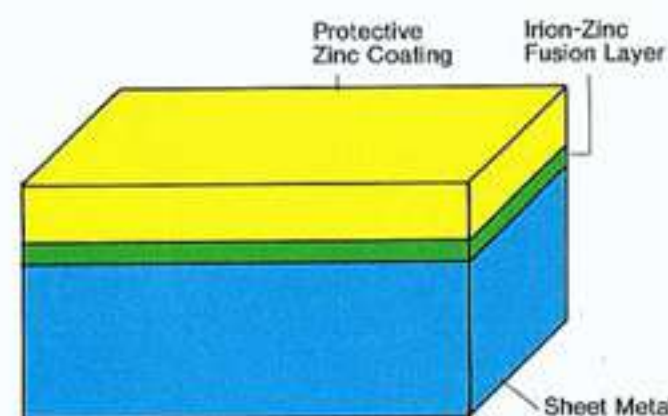
Paint Alone Is No Protection Against Rust.

Rust forms through pin holes on painted sheet metal.

Porsche hot dip galvanizing produces zinc oxide that plugs pin holes and prevents corrosion.



Hot Dip Galvanizing. Corrosion protection for parts in the "splash" zone.

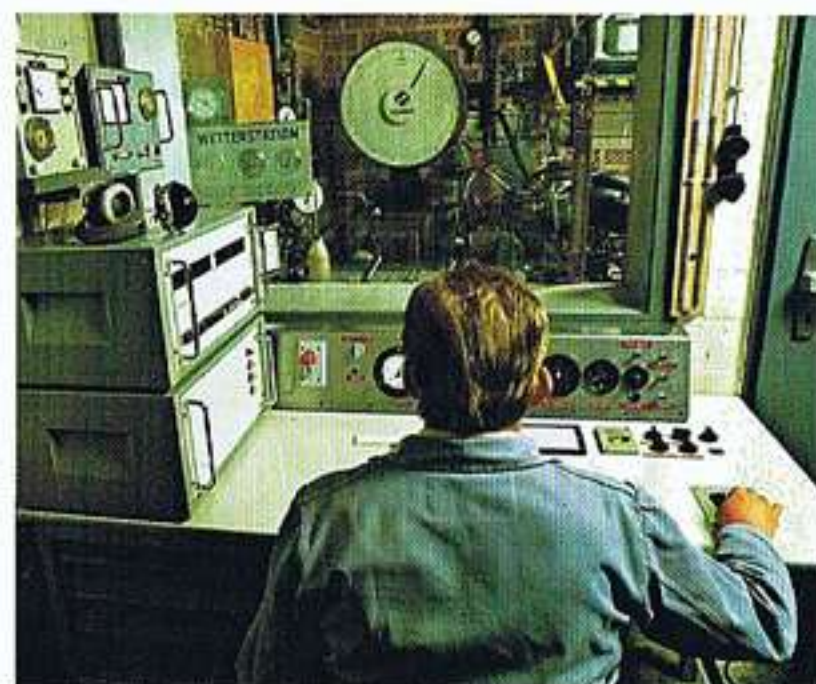
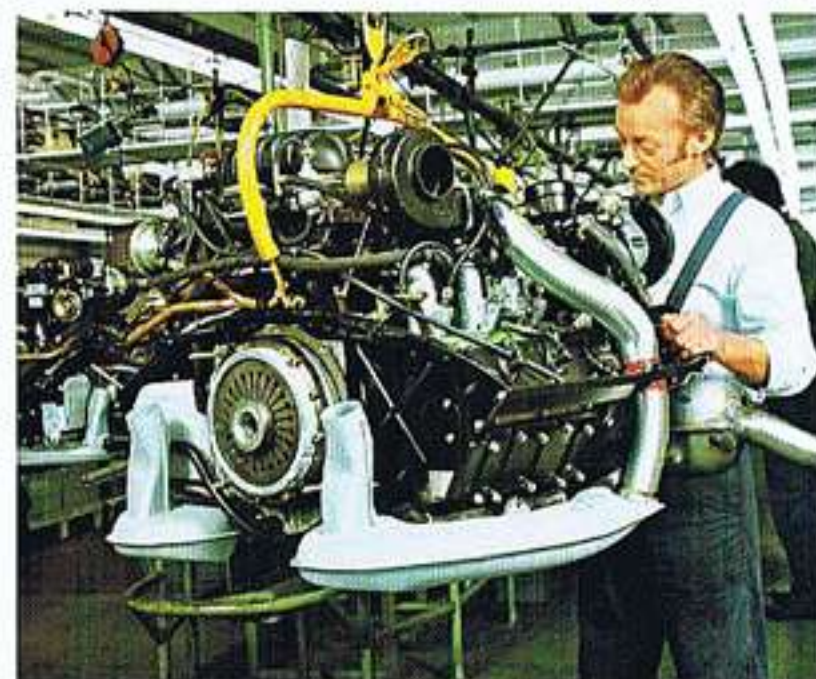


ders, overhead cam and inclined overhead valves in hemispherical combustion chambers, is the same basic type of power unit that has brought so many World Championships to Porsche. Some sports car engines are built for short bursts of speed, and no more. With its racing background, the 911SC engine is designed to sustain its maximum power for long periods of time. Like the body, it is built for the long run. Several of its features contribute to this. One is its fully-counterbalanced forged steel crankshaft, which is supported by eight main bearings. Another is its dry-sump lubrication system. It carries an extra margin of oil in a separate

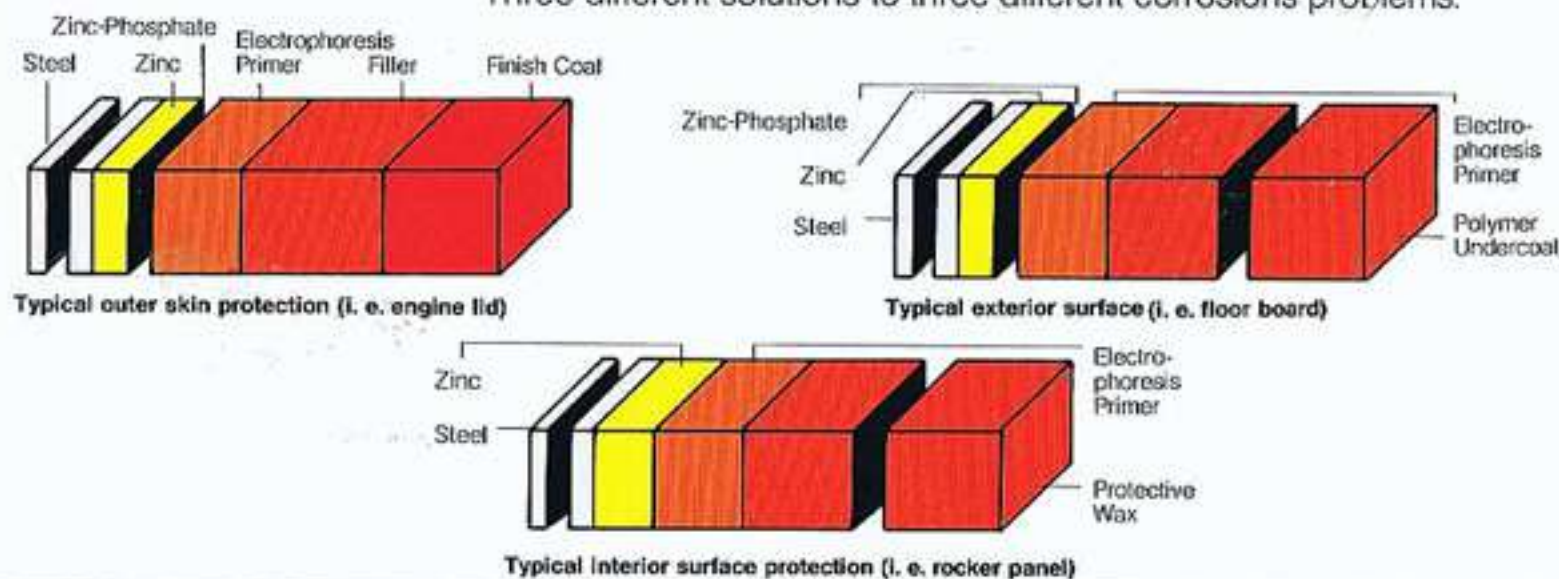
tank and cools the engine oil with a special coil at the front of the 911 SC. Chain-driven overhead camshafts also add to the durability of this six-cylinder engine. A larger cylinder bore makes the 911SC the first normal 911 model to have an engine of full three-liter capacity. This 11 percent increase in displacement has been used to raise both power and torque throughout the engine speed range, up to the maximum output of 172 SAE net horsepower at 5500 rpm. The new engine gains markedly in its flexibility and in its pulling power from low and medium speeds, for safe passing and merging. As a kindness to the environment it achieves

this fine performance more quietly, with changes to the exhaust muffler and cooling fan.

Carried over from earlier 911 models is the CIS fuel injection system and the maintenance-free breakerless transistor ignition. After assembly each 911SC engine is run for a full hour on the test bench to assure that it meets all of Porsche's expectations for it. Then in the completed car it is run again for some ten minutes on a chassis dynamometer, and finally over a 20-mile road test route during which the experienced driver checks 180 items. Only after all points are cleared is a 911SC ready for sale.



Different Protection For Different Parts.
Three different solutions to three different corrosion problems.



Running Gear of the 911 SC: Balance is the Key

Though tradition is a powerful guiding force at Porsche, it does not dominate. No element of the 911 SC's chassis is present for reasons of sentiment. Over years of development a ruthless Darwinian selection process has forced the survival of only the fittest features of the design. One characteristic that Prof. Ferdinand Porsche pioneered in the world motor industry is the use of compact, efficient torsion bars to spring all four wheels of the 911SC. These springs are closely integrated with the suspension, which guides the front wheels with shock absorber struts and the rear wheels by means of rigid yet light and corrosion-resistant aluminum trailing arms.

At each wheel the suspension geometry is planned with care to assure that the tires will run at the right camber angles for optimum cornering through the full range of loads the 911SC may carry. Long-travel tubular shock absorbers are part of the design. The 911 SC is tuned to suit the sporting driver with the addition of an 18 mm rear anti-roll bar and the enlargement of the front bar diameter to 20 mm.

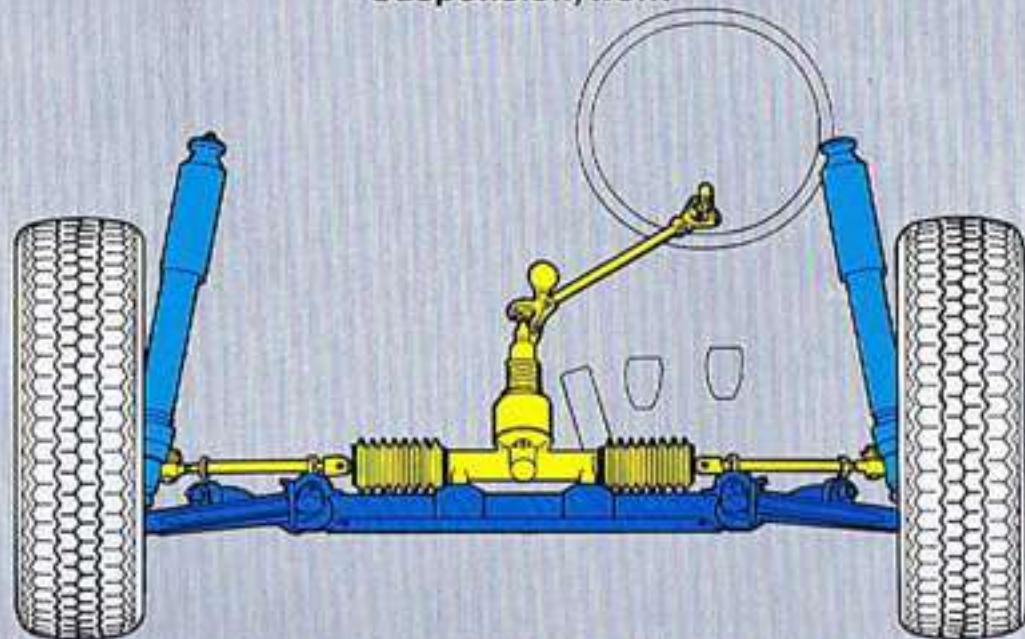
With the more powerful three-liter engine, the balance of the 911SC chassis is preserved by giving it rear wheels and tires that are wider than those in front. The front wheels continue to carry 185/70 VR15



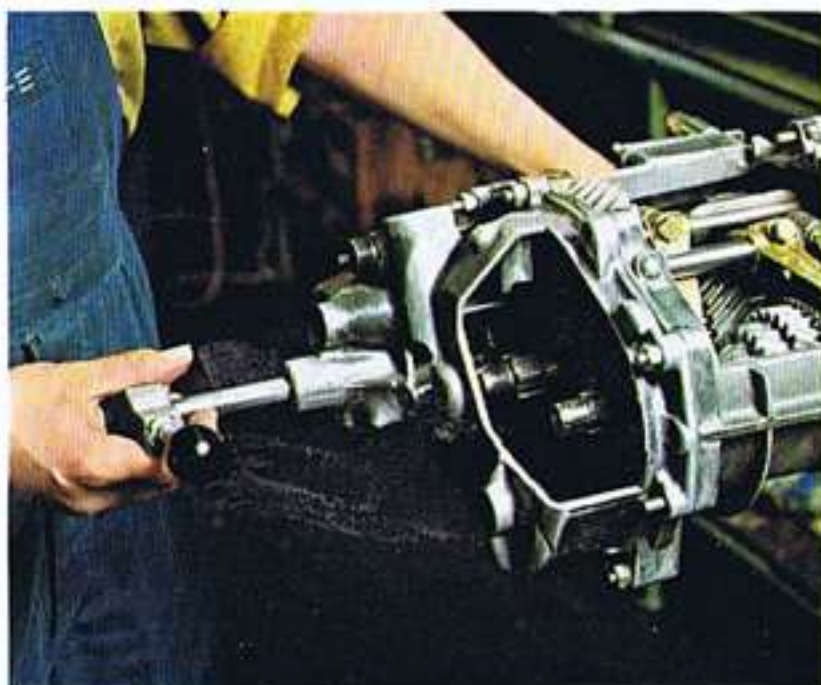
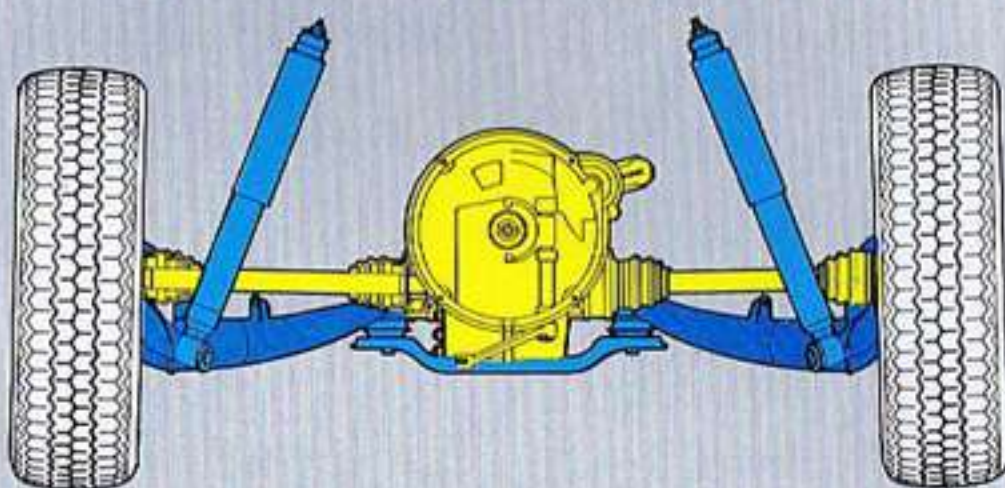
tires on 6-inch rims, and the rear wheels are widened to 7-inch rims to accept 215/60 VR15 belted radial-ply tires. These add both cornering and drive traction at the rear of the car. To make room for the wider tires, the rear fenders are more deeply flared. The optional forged light alloy wheels for the 911SC have the same rim widths but are larger in diameter, 16 inches, to carry the ultra-low-profile radial tires that were originally introduced on the Turbo Carrera. They may provide the finest road grip under all weather conditions now available in a sports car tire. A modern Porsche tradition that continues to prove its worth is the use of a servo-ring

synchromesh of Porsche's own design to make it easier to shift the transmission. Experts consider the patented Porsche synchromesh to be the best in the world for sports cars. All 911SC models are again equipped as standard with a five-speed transmission that offers the driver the right gear ratio for every road situation. To stand up to the larger engine a stronger differential is fitted, identical to that in the Turbo and the 928. A limited-slip differential with a 40 percent locking effect may be supplied as an option. Another drive train refinement in the 911SC is a cushioned clutch disc that smooths the engagement of the spring-assisted clutch action.

Suspension, front



Suspension, rear

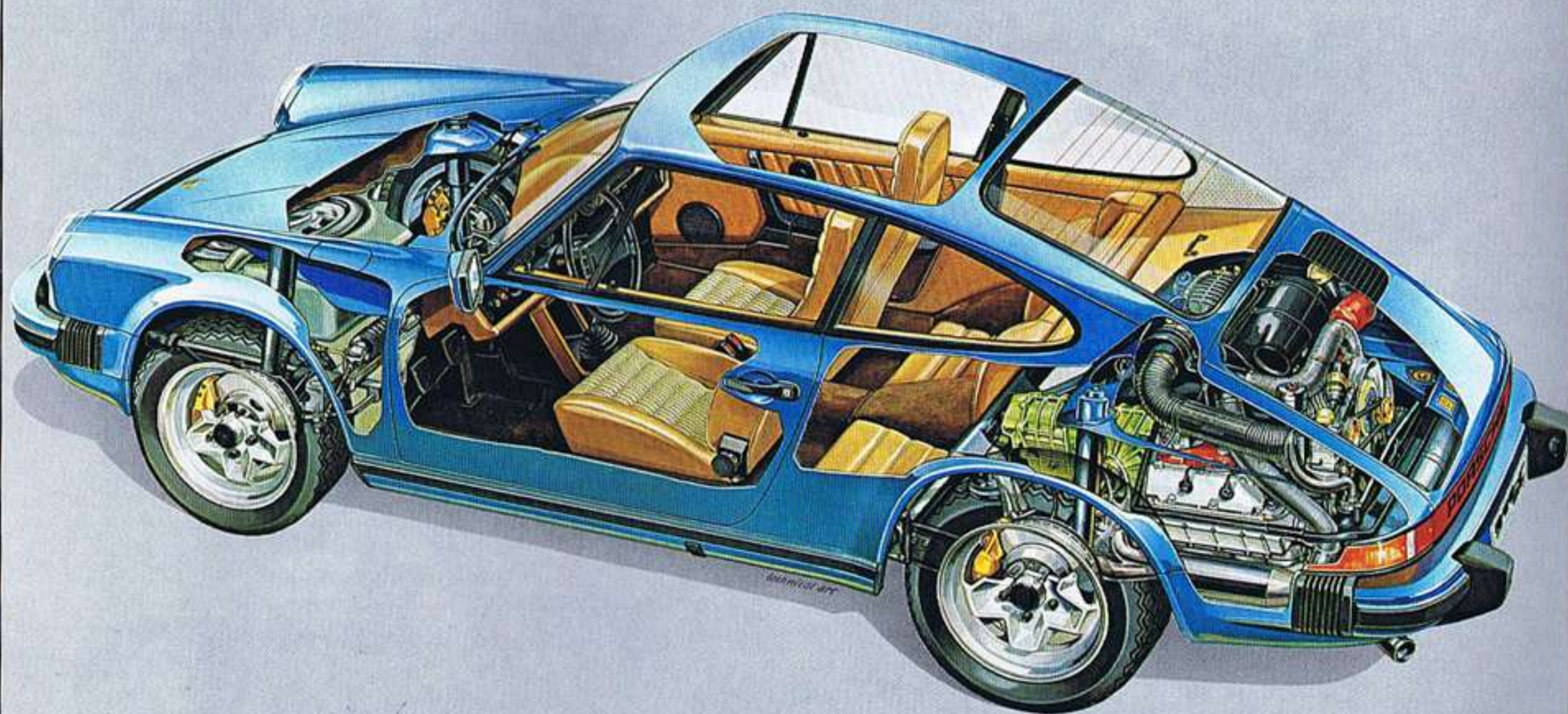




Reserves of Active and Passive Safety in the 911 SC

What is safety to the people who ride in an automobile? It is an assurance that the chosen vehicle will aid them in avoiding an accident and, in the event of an accident, will help them minimize injury. Auto engineers make a distinction between these two kinds of safety. They call "passive safety" the things a car does, without action by the occupants, to keep them from being hurt in a crash. Both on the drawing board and in the test cells of the Weissach Research Center the Porsche engineers have used every proven technique to heighten the passive safety of the 911SC.

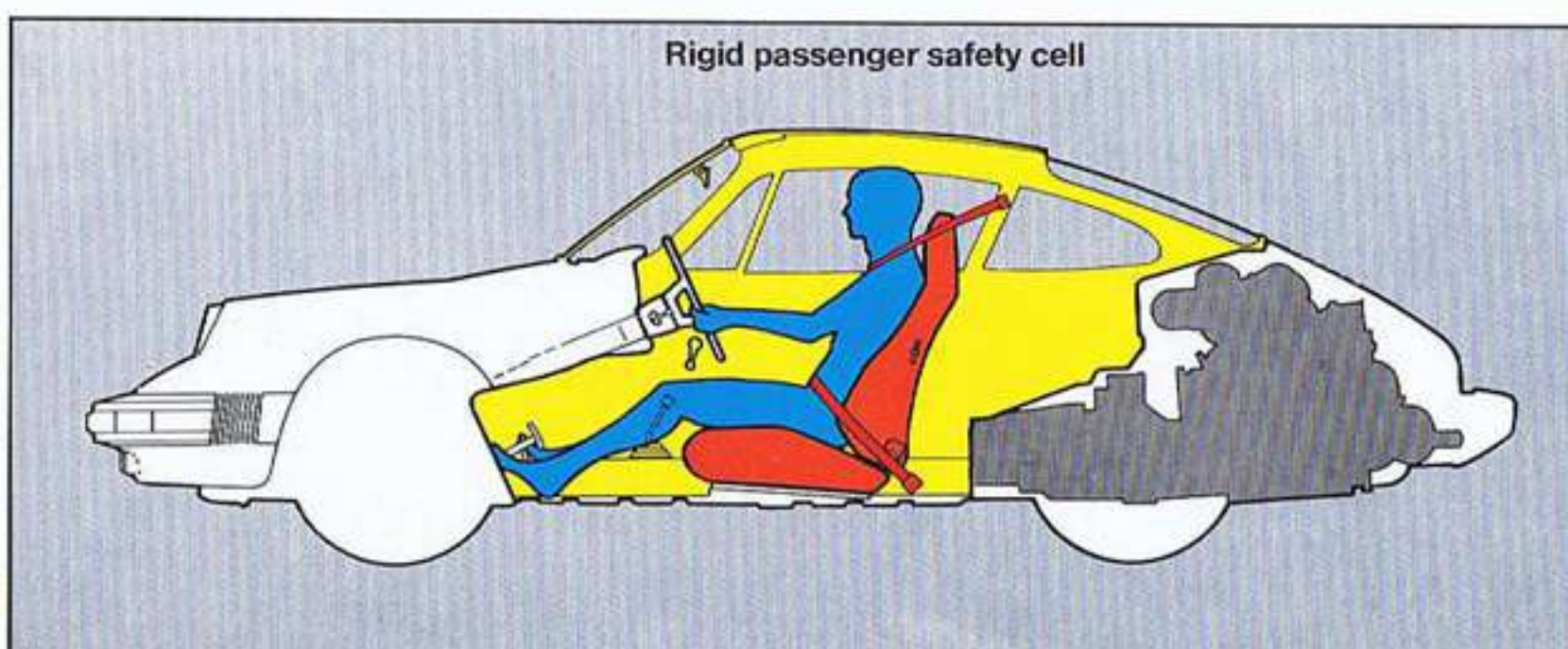
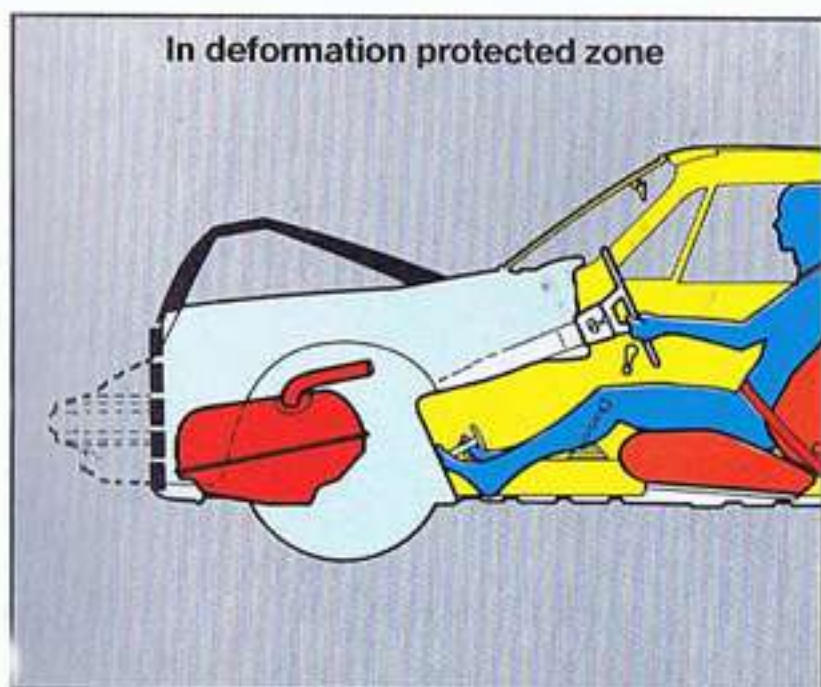
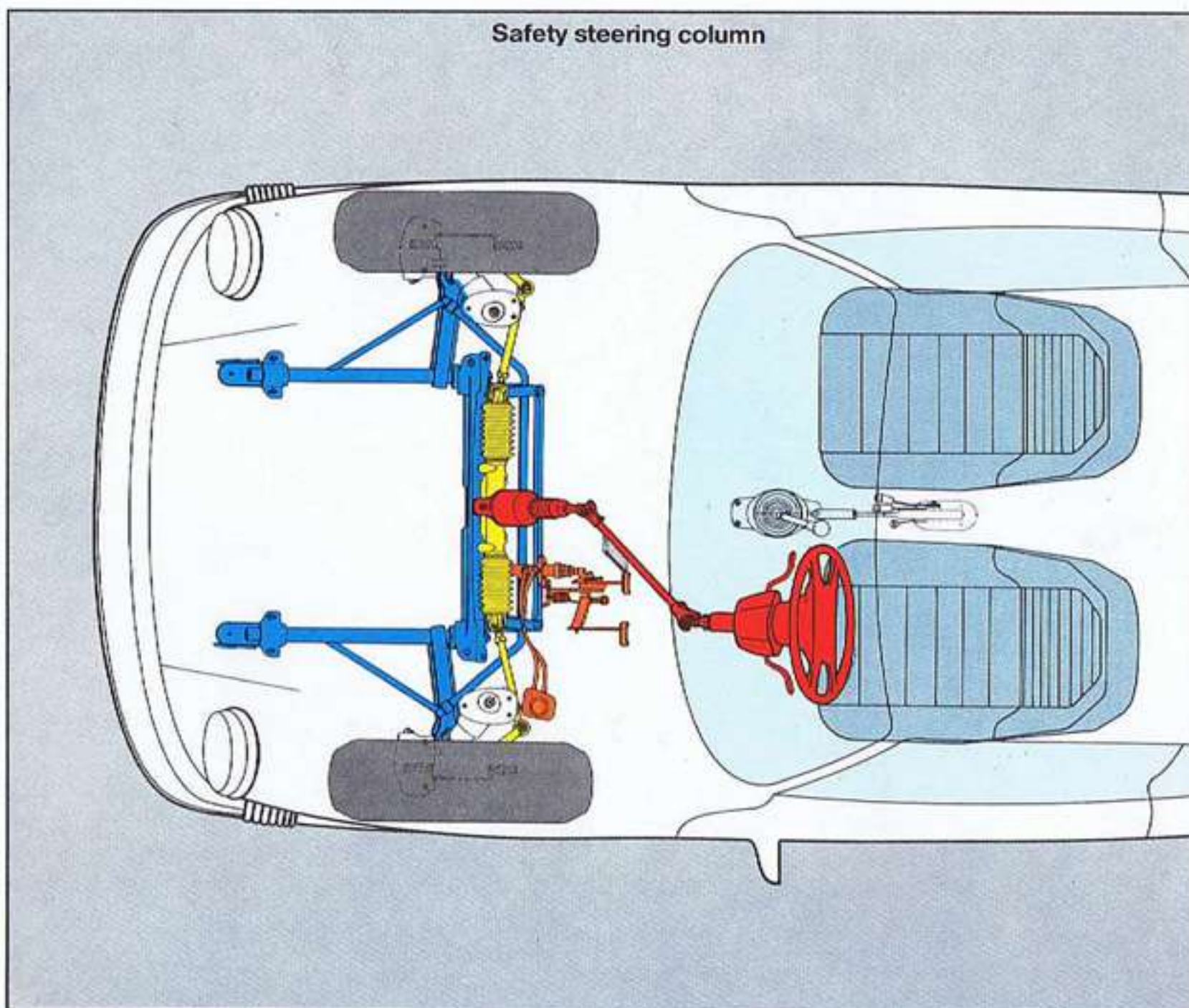
Passive protective systems at the front and rear of the 911SC are the unique Porsche bumpers, which are designed to assure that the vital running lights are not damaged in minor accidents. The bumpers are made of light yet rigid aluminum, with protective rubber moldings and bumperettes at the rear. Hydraulic energy absorbers allow them to move back in moderate impacts of up to 5 mph, and then restore the bumpers to their original position.



Passive safety is considered in the design of every part of the 911SC's body. Heavy reinforcements around the passenger compartment brace it against impacts from nearly all directions. The steering column is articulated, with universal joints, minimizing rearward displacement toward the driver in the event of an accident.

Inside the 911SC its occupants are protected from injury in subtle ways. The instruments, switches and controls are positioned and cushioned to make them as benign as possible. Shoulder/lap harnesses with inertia retracting reels are provided. To keep loose objects from behaving like

unguided missiles in an accident or under hard braking, ample storage space is provided in a large glove compartment, two map compartments, and two open and two closed door pockets. Each bucket seat back has a built-in headrest. These and other safety provisions are always present, but only noticeable when you need them -- the essence of passive safety.



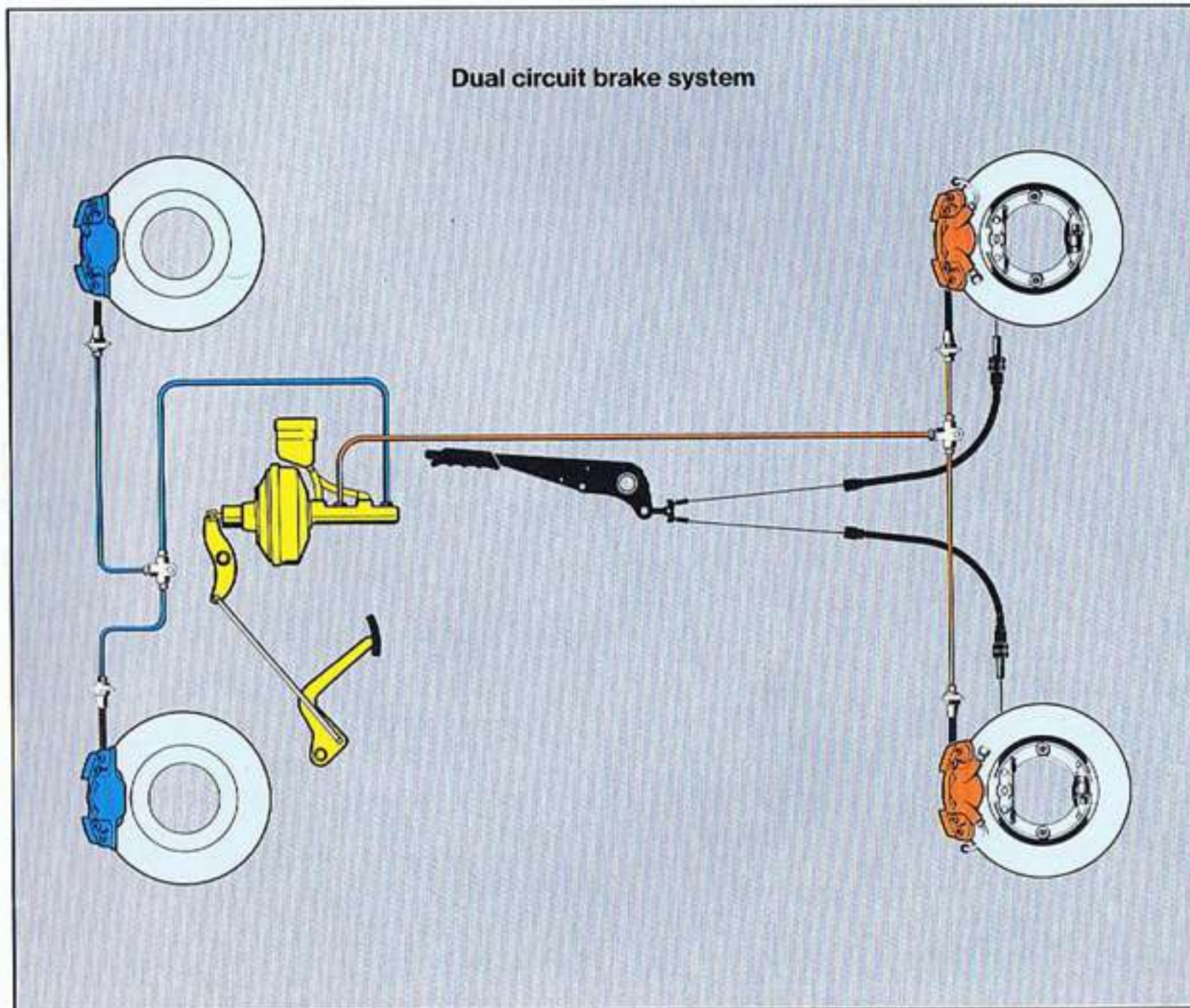
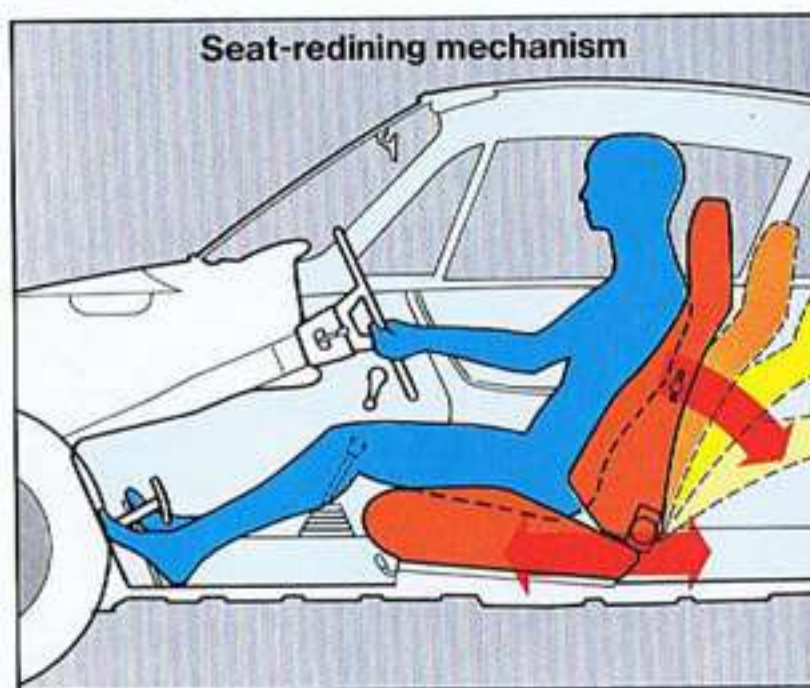
Standard in the 911 SC: The Power to Prevent an Accident

Active safety, the ability to get through situations that might cause an accident in a lesser car, is part and parcel of the Porsche design philosophy. The responsive steering, high cornering power, lively acceleration and powerful braking of the 911SC are the alert driver's most valued allies. Once he has summed up a traffic situation, this Porsche gives him the tools he needs to cope with it.

The attentiveness needed to avoid accidents is more easily sustained in a 911SC because it provides such a pleasurable driving experience. It gives the driver a professional workplace that is a gentle reminder of the tasks he is obliged to perform. Facing him is a full complement of instruments, designed to be free of the glare that might make them difficult to read. Seats that serve as a measure of excellence for other cars hold him in an alert position and offer adjustment that gives a variety of postures during a long trip. Visibility is excellent, especially forward over the downsloping hood that is a Porsche design trademark.

Another aid to the driver's responsiveness is the 911SC's heating and ventilation system. It offers individual occupant control and effective heating under all weather conditions. Dashboard outlets provide face-level ventilation, with a positive flow of air assured by a three-speed blower.

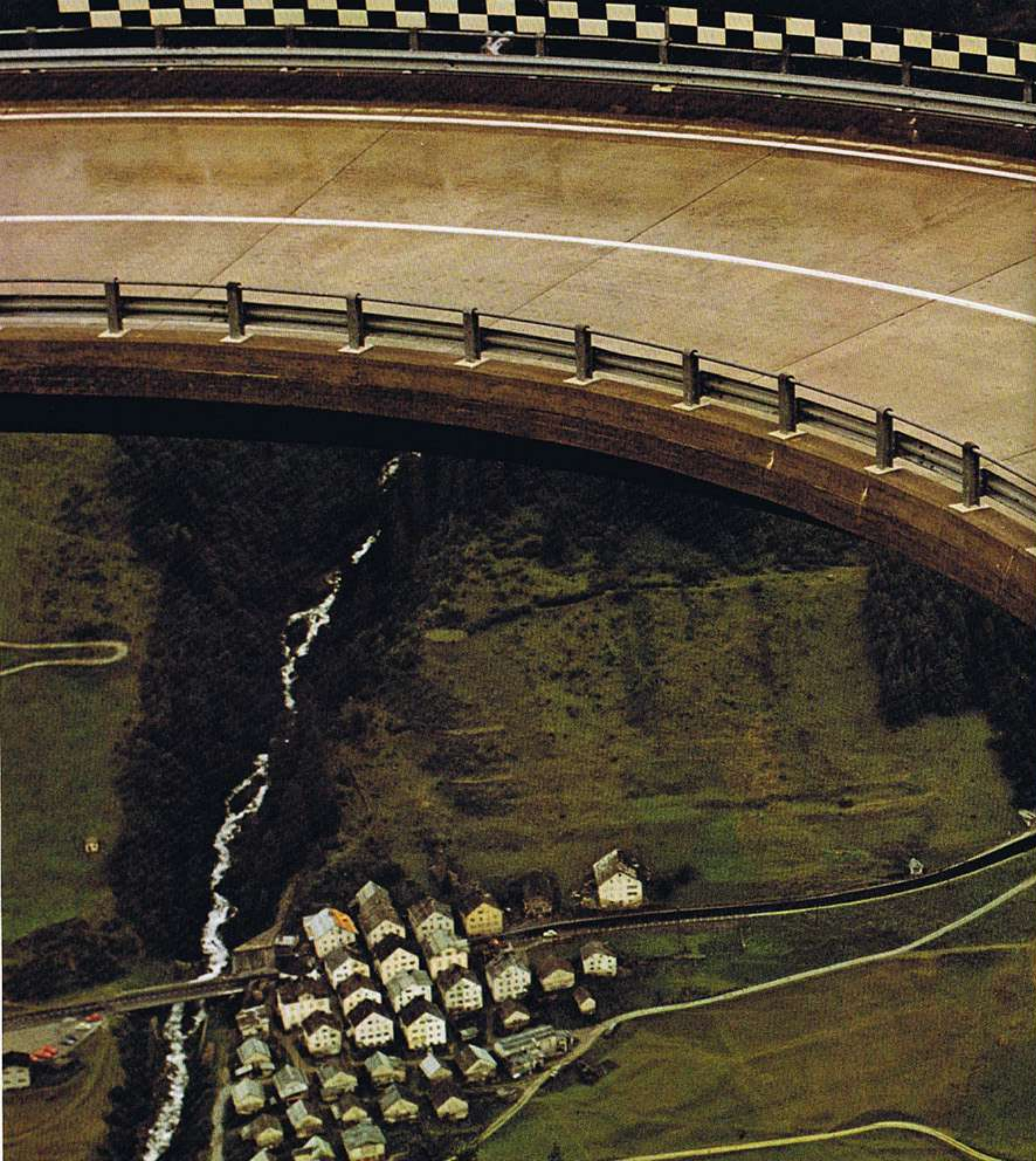
Perhaps no part of a car plays a greater role in its active safety than the braking system. In this respect the 911SC remains outstanding. It carries disc brakes at all four wheels. All the discs are internally ventilated to keep them and their linings cool, to ward off brake fade, a technique





that Porsche pioneered among European cars. A vacuum power assist unit permits any driver to draw upon the full potency of this braking installation. The weight distribution of the 911SC assures that all four wheels contribute to the maximum extent possible to stopping the car. The result? The 911SC Porsche can come to a full stop from 60 mph on a dry road in about 3.2 seconds — about the time it just took you to read about it. To Porsche's engineers, that means safety you can count on.

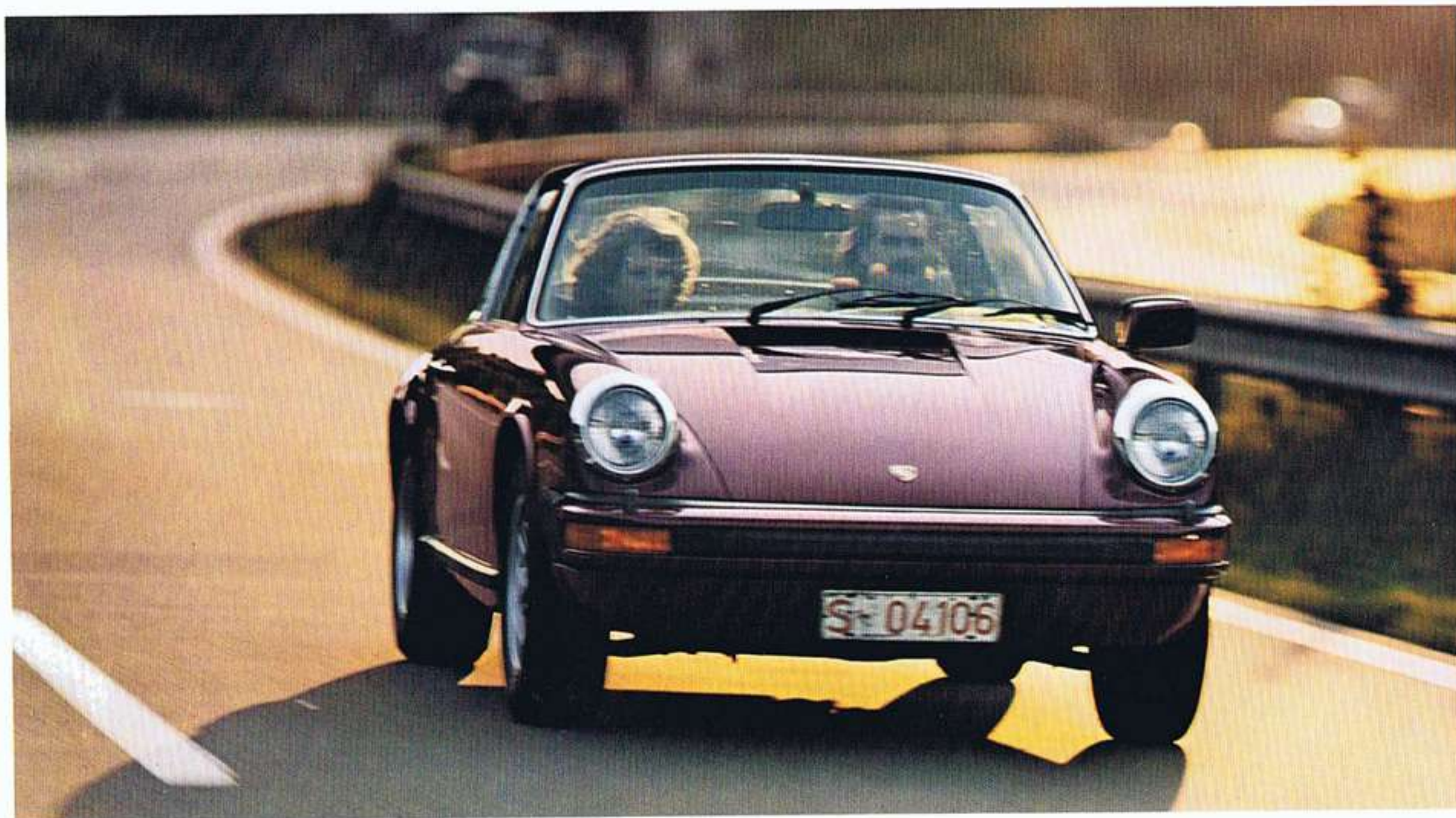




Open Skies for the 911 SC: The Targa Way of Life

Driving with no roof over your head, feeling the movement of the car, enjoying every ray of the sun, breathing the sweet scent of the outdoors, recapturing a sense of freedom, bathing in the warm air stream -- this is the way driving used to be, and it is still the most pleasurable. Porsche offers it today in the 911SC Targa.

More than a decade ago Porsche introduced the unique Targa style of sports car driving. Since then it has been imitated, but not equaled. The Targa complies fully with Government standards for safety in collisions and rollovers. In the security of its occupant cell and the passive protection given its passengers, the Targa uses its integrated rollover bar to meet the same high standards as the 911SC Coupe.



Though they sense the security the design provides, most Targa buyers have their thoughts on other topics when they choose this most extrovert of Porsches. They appreciate the ease with which the light yet rigid folding roof can be removed and stored away inside the car. The roof requires no special maintenance, and it is less likely to be broken into than a normal convertible. It doesn't leak in the rain or when being run through a car wash. Fresh air and sun flood in without annoyingly harsh windblast or draft. The fixed rear window has tinted glass and a two-stage electrical defroster, as standard.

Targa enthusiasts don't overlook this open Porsche's distinctive appearance. Its trademark is the brushed stainless steel Targa rollbar that contrasts with the rest of the car's finish to display its function. It may also be ordered in a matte black finish. Either way, a glimpse of that distinctive bar is a sure sign that a 911 SC Targa has just passed by.



Inside the 911 SC: The Commodious Sports Car

For a pure sports car, the 911SC is almost embarrassingly practical. Somehow it would seem that a sports car should pose more problems for its owner, in return for the great pleasure it provides. The 911 family of Porsches has always disproved that notion, and does so now more than ever before. The 911SC is built to run happily on unleaded fuel. It requires, after its first 1000 miles maintenance, major servicing and oil changes only every 15,000 miles. (See owners' manual for full details.) With its staunch resistance to corrosion, the 911 SC is a surprisingly practical car to own.

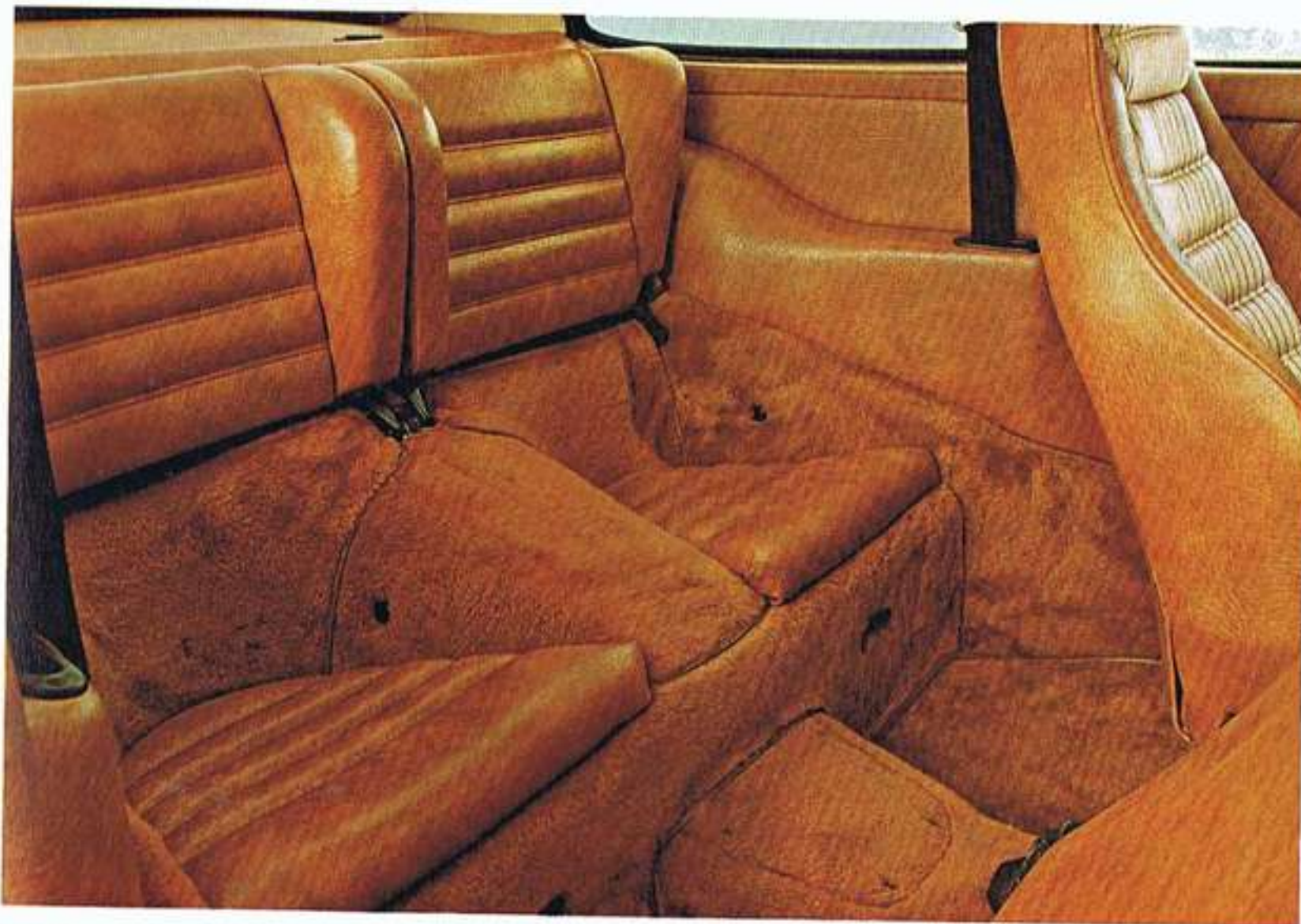
The 911SC driver enjoys full control of all his car's functions through one of the most legible instrument displays ever designed. At the center, where the sports car driver prefers it, is the 7000 rpm tachometer. Other dials tell car speed, fuel level, oil pressure, oil temperature, oil level and time of day, with an adjustable elapsed time monitor. The resettable trip odometer allows easy checking of the fine economy from the Porsche's generous 21-gallon fuel tank. A toggle control on the door electrically adjusts the position of the outside rear-view mirror, and electric heating keeps that mirror clear under all weather conditions. In each door is a knurled knob that

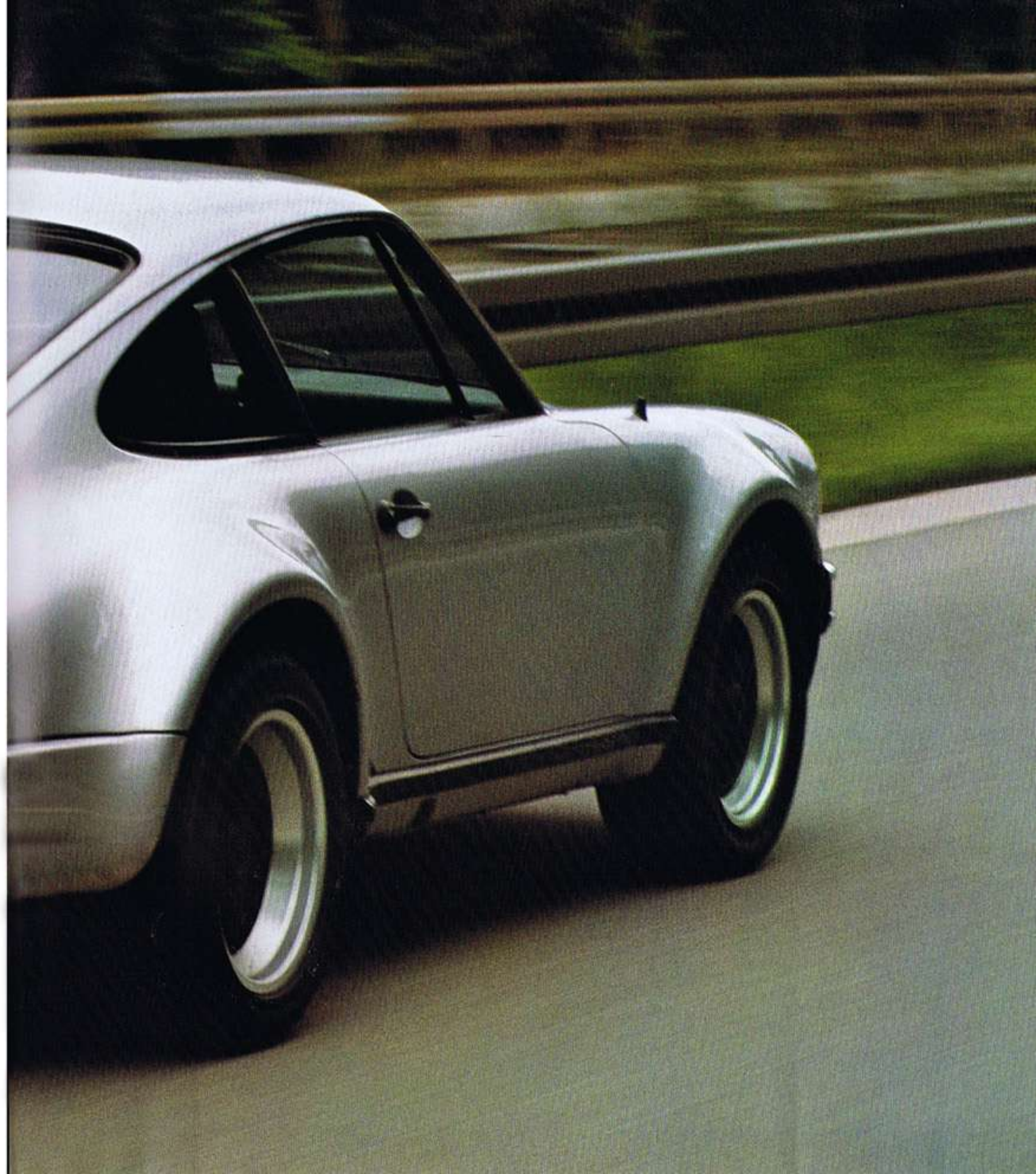


can be turned to lower the lock button flush with the surrounding trim.

Like the rear deck lid and the fuel tank filler cap, the trunk up front can only be opened from the inside of the 911SC. It offers a spacious concealed volume for luggage. More stowage space is available inside the car. The 911SC's luggage areas are so positioned that the car's weight distribution stays much the same whether it's running light or fully loaded. This preserves its consistency of handling.

Other design details that make the 911SC a practical sports car include a portable electric compressor provided with each car to fill the collapsible space-saver spare. It can also be used to inflate rubber boats, sports balls and air mattresses. The rear window of the Coupe has two-stage electric defrosting. A radio antenna and a pair of speakers is built into every 911SC. All the Coupe's windows have tinted glass as standard. The ashtray is illuminated at night, and two coat hooks are built in.

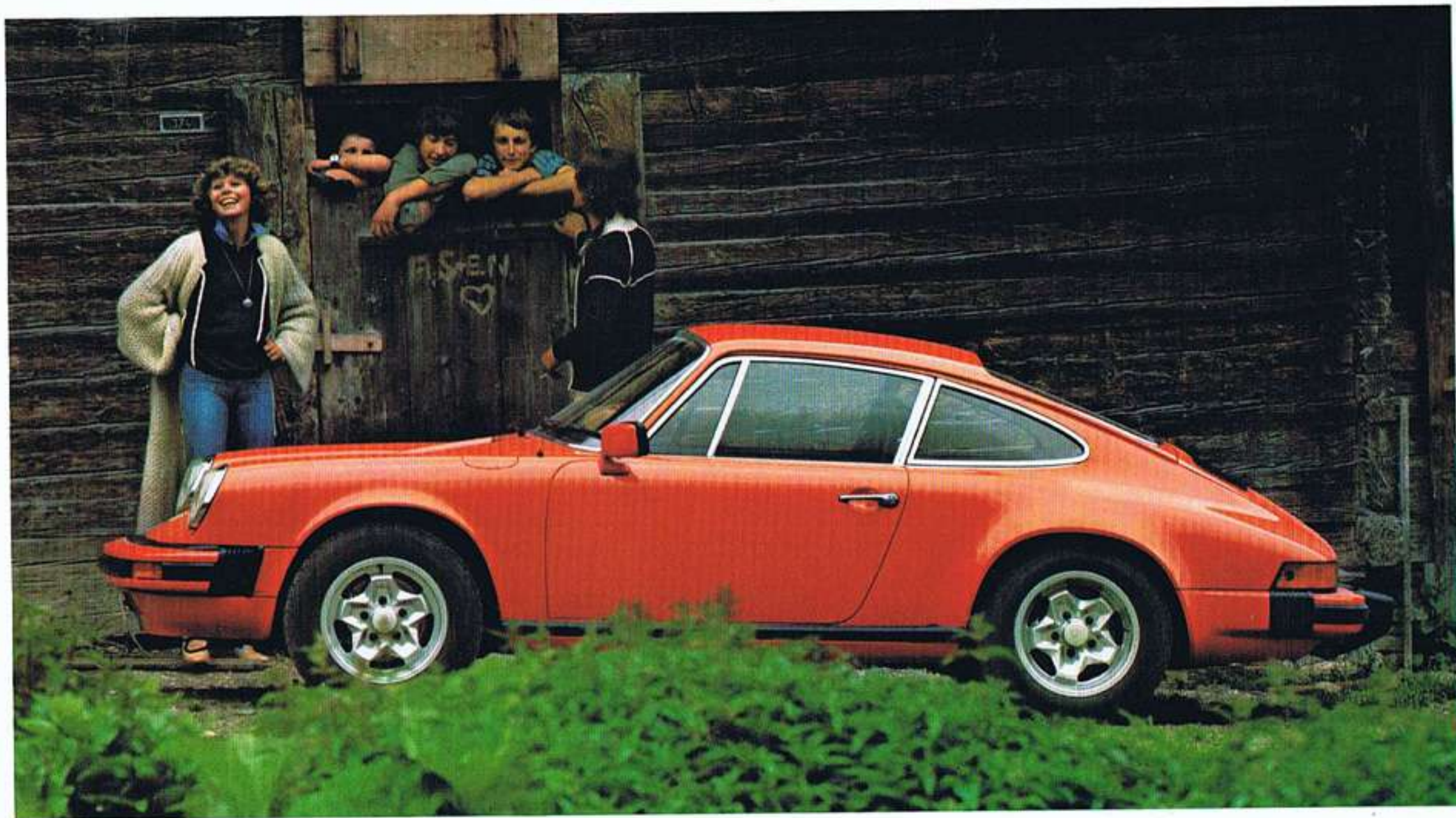




911 SC Options: Personal Tailoring the Porsche Way



Each person who meets a 911 SC Porsche sees it differently. One may find it the perfect commuting car. Another may see in it the embodiment of every racing Porsche. Another owner might feel a 911SC is the car in which to be seen. Each may tailor his or her 911SC to that personal vision by choosing from a wide range of options. Some choices have already been mentioned, such as that between Coupe and Targa. Another choice is always difficult: selecting the just-right body and interior trim colors from the spectacular Porsche palette. The lower-profile tires and forged aluminum wheels may be chosen, as may special gas-pressurized shock absorbers like those



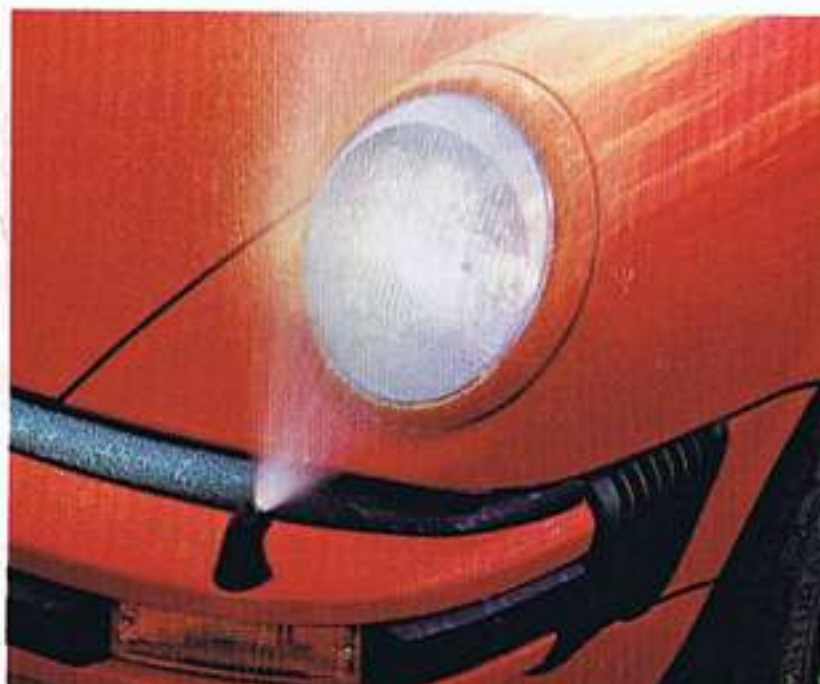
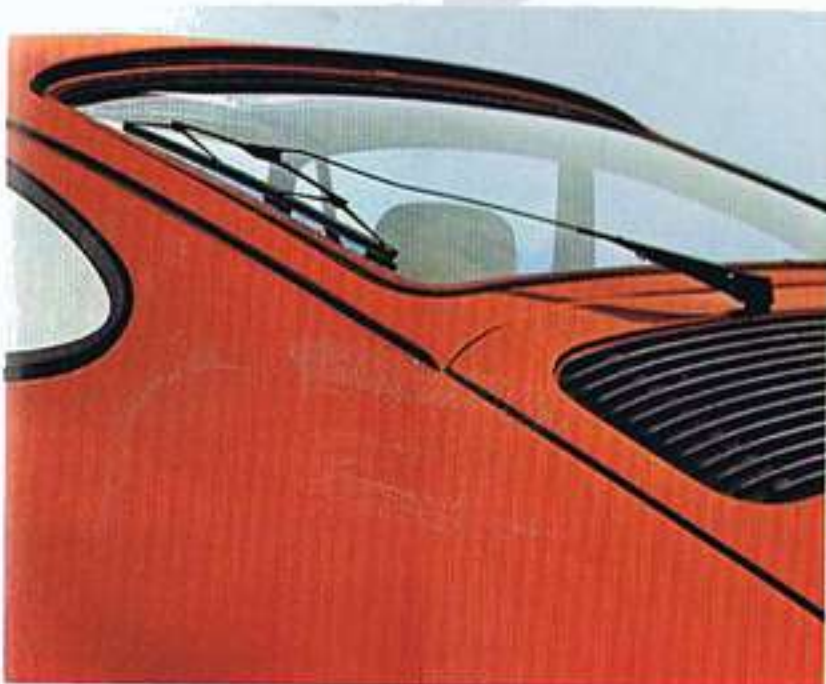
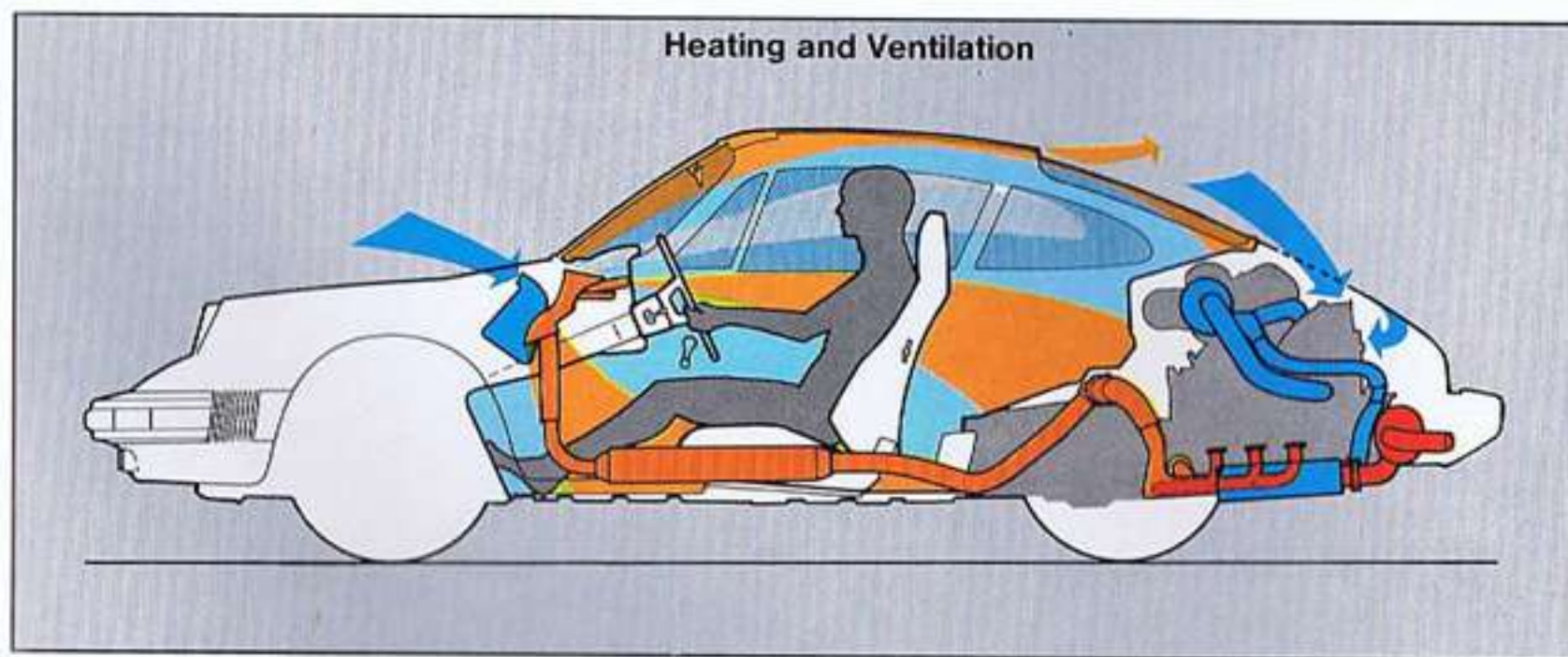
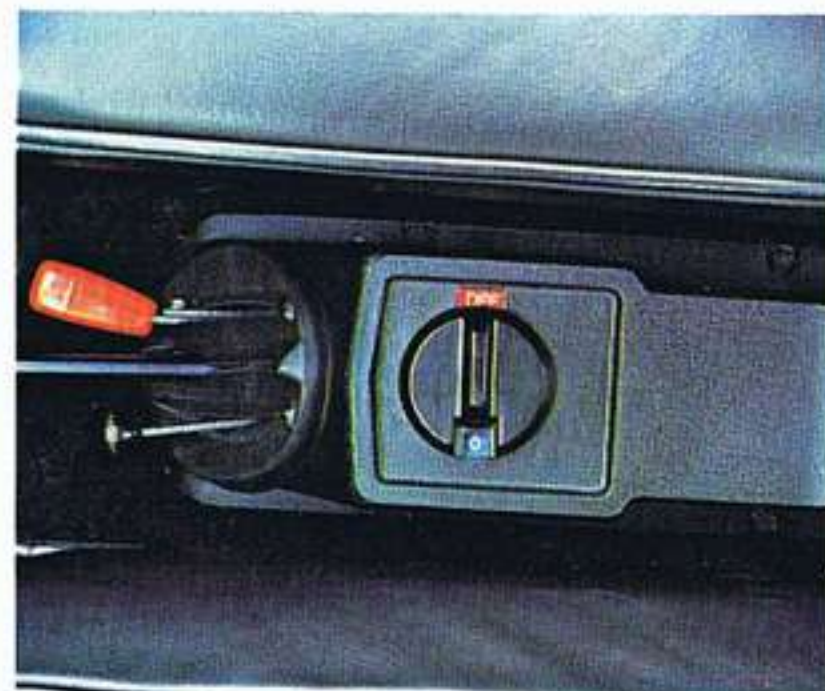
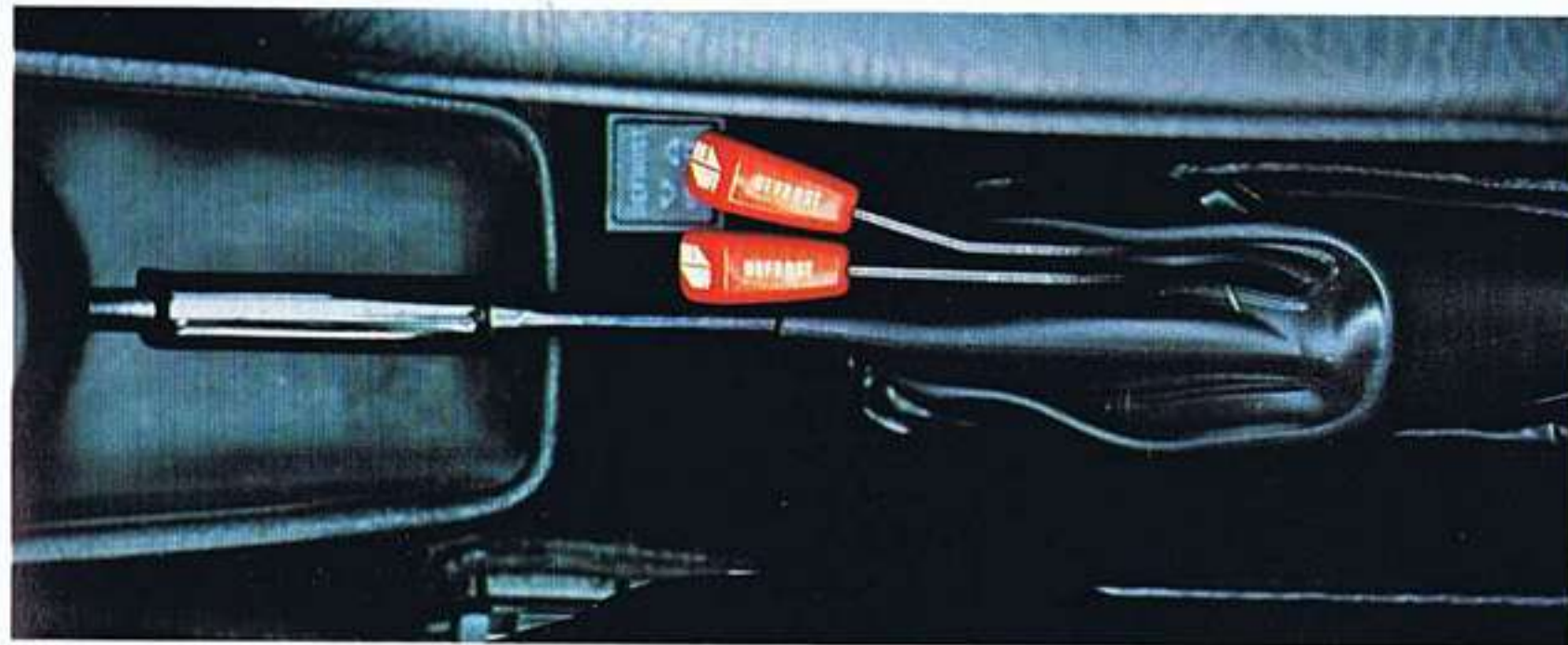
used on the Turbo. They trim the 911SC to suit the most sporting driver.

Options to enhance motoring comfort are available in full measure. Air conditioning, fully integrated with the built-in dash vents, may be fitted. So may an automatic temperature control. By means of a sensor above the windshield, it constantly adjusts the input of heat to the car interior to maintain a preselected temperature level. Power controls for the door windows may be ordered, making it easier for the driver to open or close the passenger-side window. Electric operation is also provided for the optional sliding sunroof, which has an

automatic airstream deflector to give sun without drafty discomfort. With the optional AM/FM stereo cassette radio, four speakers are installed for optimum sound reproduction.

Other choices for the equipment of the 911SC relate directly to driving efficiency. A powerful water-jet cleaner for the headlamps can be supplied. It keeps the lights bright when they're needed most, in bad weather and over dirty roads. For the same reason a wiper for the rear window may be ordered. An increasingly popular option for 911-series Porsches is an automatic cruise control. It can be used to trim the 911SC to

any desired cruising speed, which it will hold with impressive precision. The control is overruled easily by any braking or acceleration, and quickly reset at a finger's touch. It is typical of the technology Porsche has developed for the 911SC: advanced to the state of the engineering art, and tamed to the service of the enthusiastic driver.



Turbo: Superlatives on Wheels

Porsche's Turbo was the product of exceptional vision. It took vision on the part of Porsche's executives and engineers to see the potential for road cars with exhaust turbo-charging, an advanced power-boosting technique that had hitherto been used mainly for racing cars. It took vision also to see how turbo-charging might be used in concert with the 911 concept to create an ultimate Porsche, a sports car that at one and the same time attained new heights of both performance and luxury. That vision of a new kind of Porsche car has since been vindicated in the automotive world, which hailed the Turbo as a motor-ing classic from the very day of its intro-

duction. Now, that classic has been further improved.

Those owners of Turbo who have experience of other sports cars of extremely high performance have found that this ultimate Porsche is by far the most practical car in its class for day-to-day operation in the real world. Built into it as standard are all the anti-corrosion provisions of the 911SC: hot-galvanized steel, baked-on factory under-coating, and the use of rustproof and light weight aluminum for such vital parts as the engine and transmission housings, front suspension crossmember, rear suspension arms and road wheels. Headlight and windshield washers, a rear-window



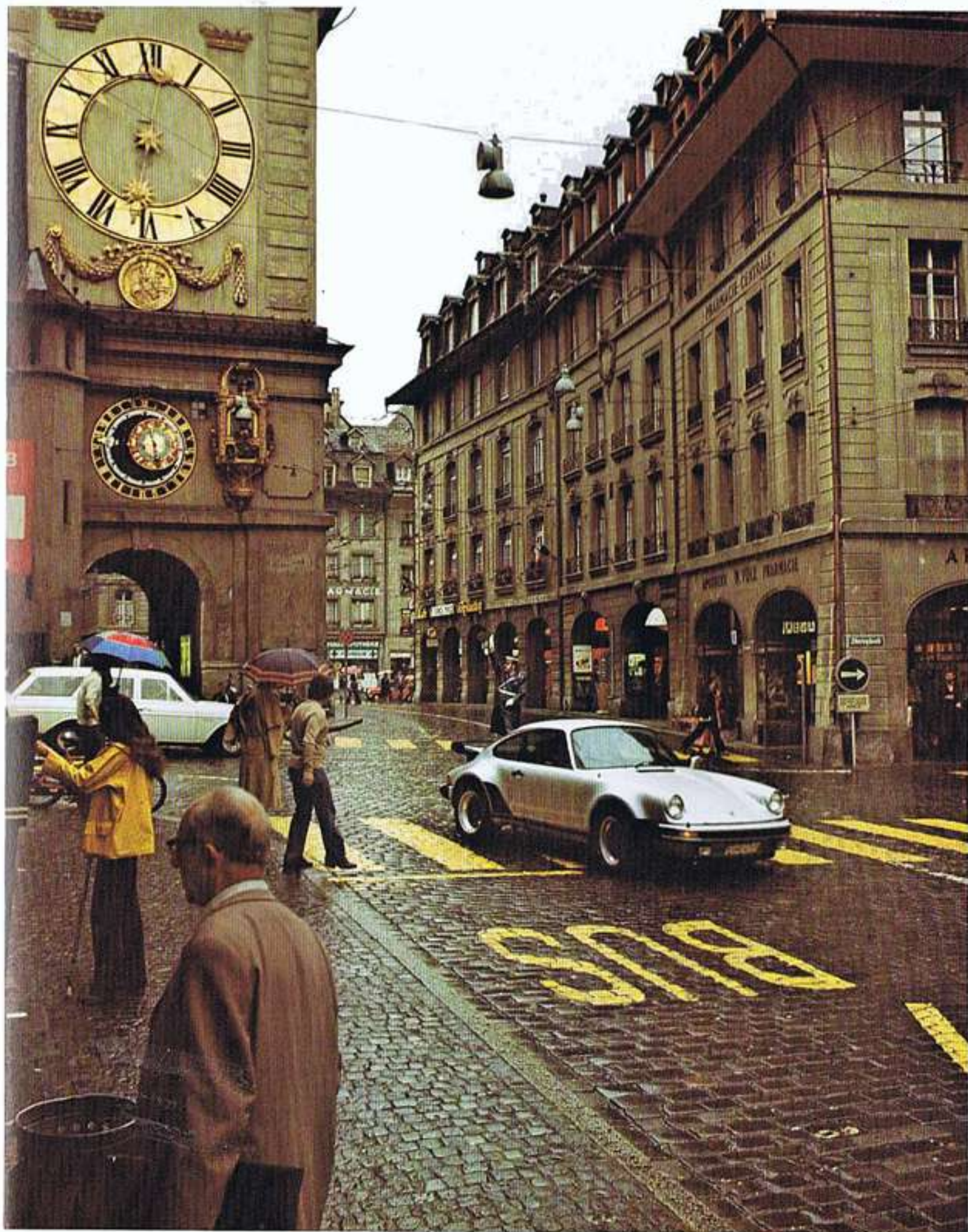
wiper, fog lights, tinted glass, air conditioning, and the automatic heater control — all standard — equip the Turbo to cope with all weather conditions.

The Turbo owner also enjoys the same long 15,000 mile intervals between major servicing (see owners' manual for full details), as do other Porsche drivers. It has the same simple and precise mechanical CIS fuel injection system. The Turbo also uses a maintenance-free breakerless transistor ignition system. This assures proper ignition timing over extended mileages. It also delivers a powerful spark that keeps the plugs from oiling up during slow

driving. Even after hours of idling in creeping traffic the engine is ready to deliver its full power at a touch of the accelerator. Others may pretend to the Turbo's performance but not with this great Porsche's suave versatility.

Few cars of any kind are as imposing in appearance as this fleet Porsche. Its brilliance and fortitude are aptly expressed by its unique form: black anodized exterior trim, wide wheel flares, and bold front and rear spoilers. More than merely spectacular the body design contributes to the Turbo's superb road performance. The deep spoiler below the nose helps reduce air drag, and

also minimizes lift, to maintain road feel at all speeds. The rear deck spoiler, a trademark of the Turbo, has been enlarged and reshaped for the new model. This makes it even more effective in stabilizing straight-line running and in improving performance during braking, cornering and cross-wind driving. In this way Porsche balanced the increased output of the Turbo's new 3.3-liter engine.

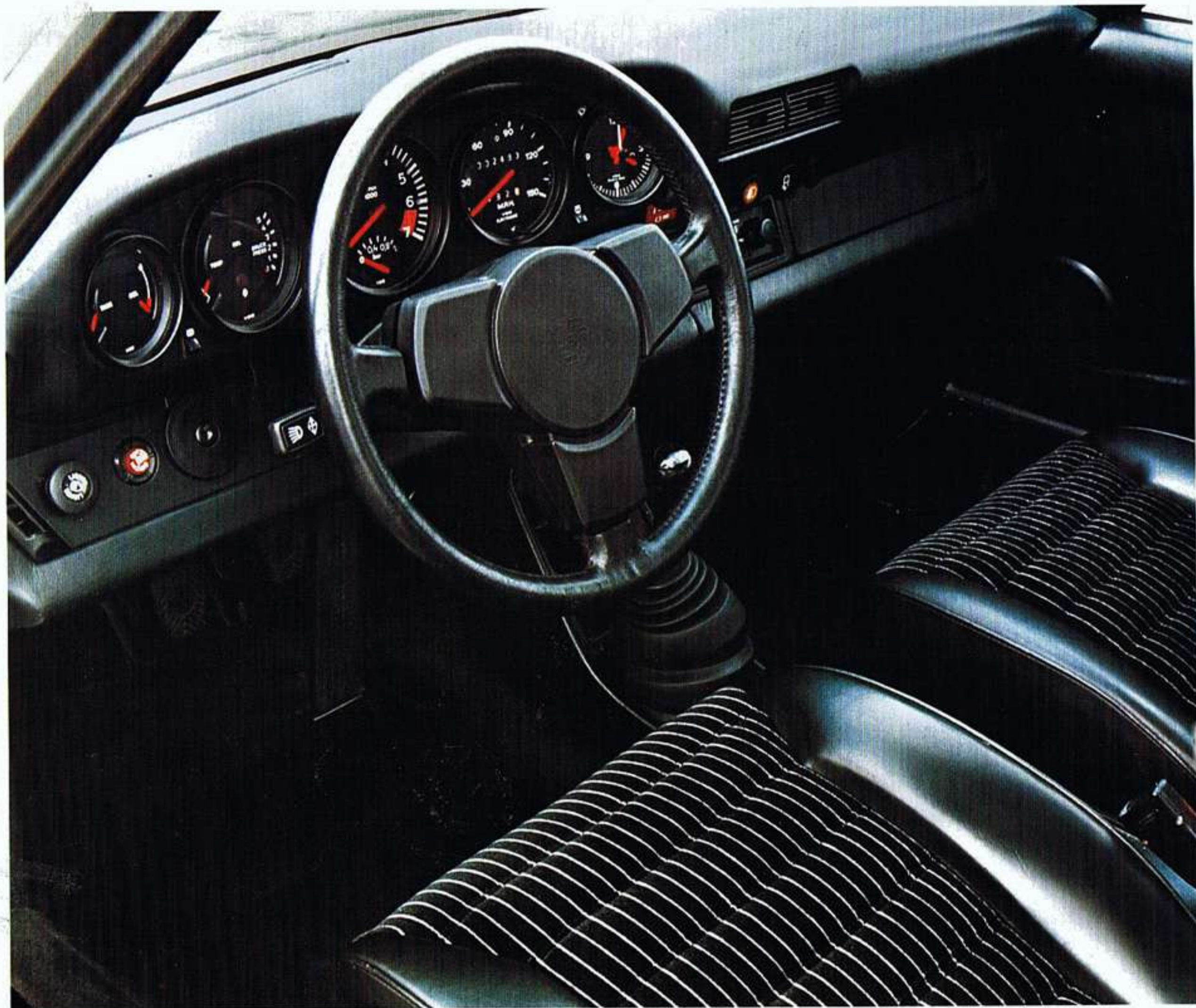


Sybarite with Speed: The Appointments of the Turbo

Porsche built on the unique qualities of its turbo-charged power train to make the most of the potential of the Turbo. While it dramatically raises power, the turbo-charger also uncannily quiets and smooths out the engine. Thus it was sensible for Porsche to equip the car as standard with a four-speaker stereo cassette hi-fi system that is capable of receiving short and long wave signals as well as AM and FM. Push-button tuning aids station selection, and a rack for extra cassettes is built into the center console. This has an additional storage compartment that supplements the glove box and the door and side

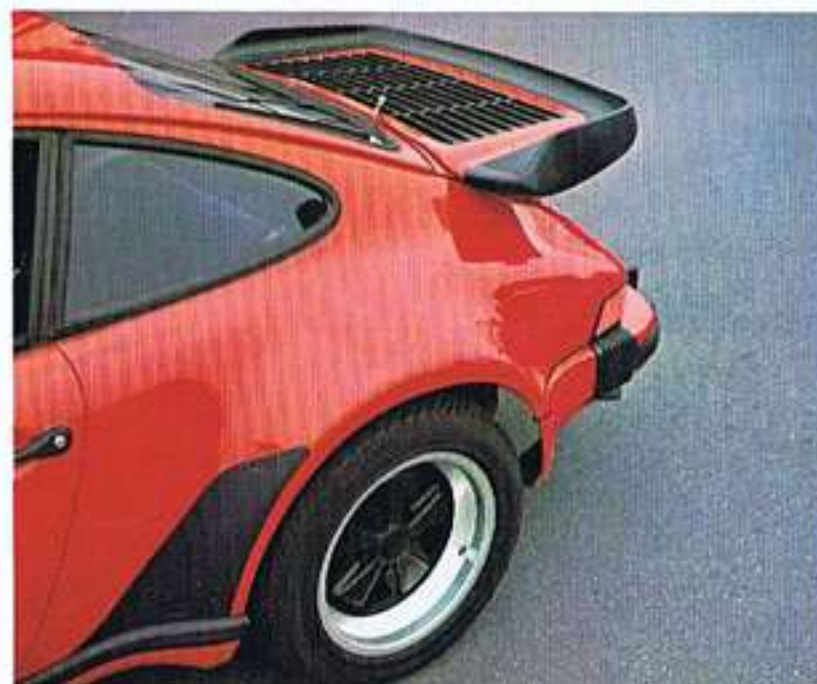
pockets. Illumination at night is standard for the glove box, ashtray, trunk and engine bay.

Its hushed way of going also justified the highest possible standard of interior trim for the Turbo. In spite of this Porsche's incomparable performance, normally achieved only by out-and-out racing cars, its deep cut-pile carpeting throughout the interior does not seem incongruous. Neither does the supple leather upholstery. Leather covers the steering wheel rim, the bucket seats, and the color-matched padding of the dash panel. The instrumen-



tation is typically complete and legible, a reflection of the car's meticulous engineering, and contains one gauge unique to the Turbo; an indicator of the turbo-charging boost pressure built into the central tachometer. On the steering column and along the dash, the driving controls are at the driver's fingertips. They operate the Turbo's many standard appointments: power-operated door windows, heated adjustable outside mirror, two-stage defrosting for the rear window, and windshield wipers that may be run at three different speeds or intermittently.

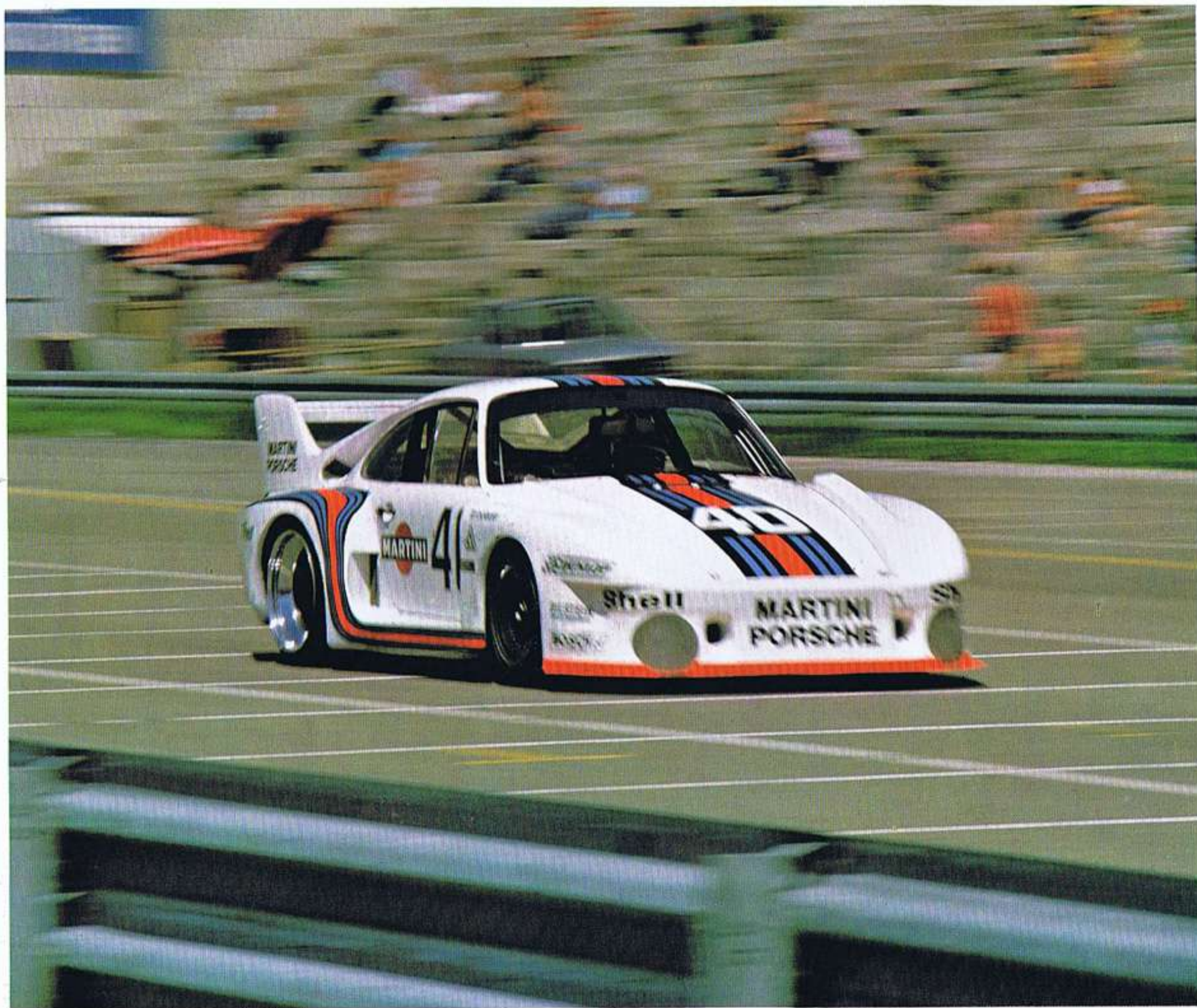
Commands given the brake pedal are obeyed more promptly by the Turbo, which has a braking system based on the latest designs proven in racing. Thick brake pads are pressed against ventilated discs by larger four-piston calipers. Wide-profile rear tires are fitted, to handle the torque of the 3.3-liter engine. Sixteen-inch forged aluminum wheels, for the advanced tires, are 8 inches wide at the rear and 7 inches in front. After final assembly checks and roller dynamometer runs, the tires of each Turbo are scrubbed in during a strenuous 60 miles of road testing.



High-Pressure Heart of the Turbo

Exhaust turbo-charging, a technique associated chiefly with racing cars of extremely high power, has been successfully tamed for road car use by the Porsche engineers. It uses a separate pump to deliver more air to the engine than it would normally be given by atmospheric pressure, and that extra air, or turbo-charge, lets the engine produce additional power. In the Turbo the centrifugal air-delivery pump is driven by the exhaust gases, which pass over a turbine wheel on their way out of the engine. Hence the Porsche system is known as a turbo-charger.

The costly precision-built turbo unit uses exotic aircraft metals and spins at up to 90,000 rpm to effect an 80 percent increase in the engine's intake manifold pressure. The 6.5:1 compression ratio allows the use of unleaded low octane fuel. Porsche first perfected turbo-charging for its fabled Can-Am Championship cars, and has now proven it equal to any racing task with two turbo-charged Le Mans victories in succession. These racing Porsches used a technique that has been refined for road use in the new Turbo. The manifold has a



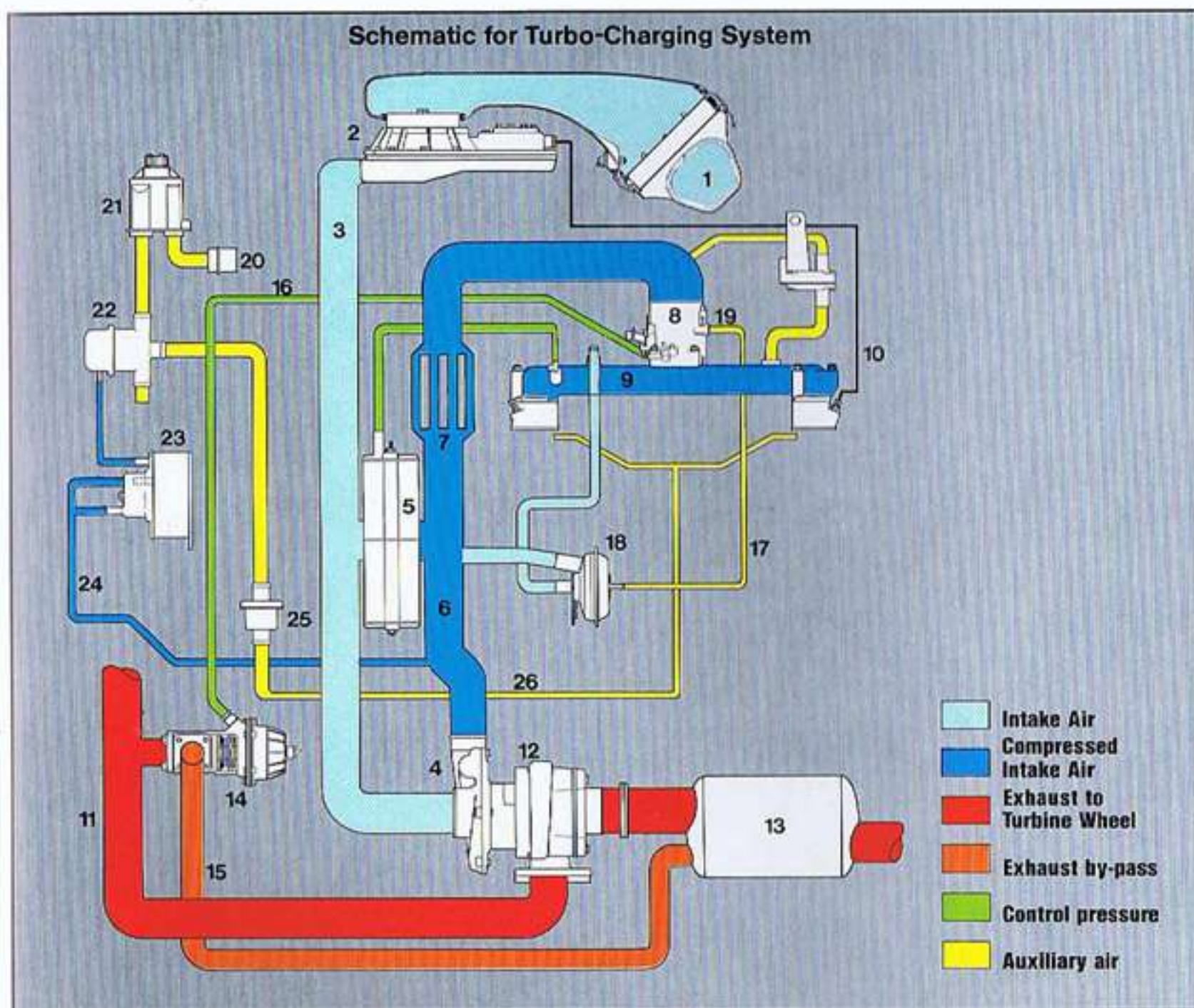
special cooler for the air being pumped from the turbo-charger to the engine. Known as an intercooler, it improves the engine's power and efficiency by reducing the intake air's temperature, which increases its density.

The Turbo still holds its title as the most powerful roadgoing Porsche, with a net SAE output in excess of 250 horsepower. Prodigious though it is, this power is always under total control. In fact it is one of the attributes of the turbo-charger that it is

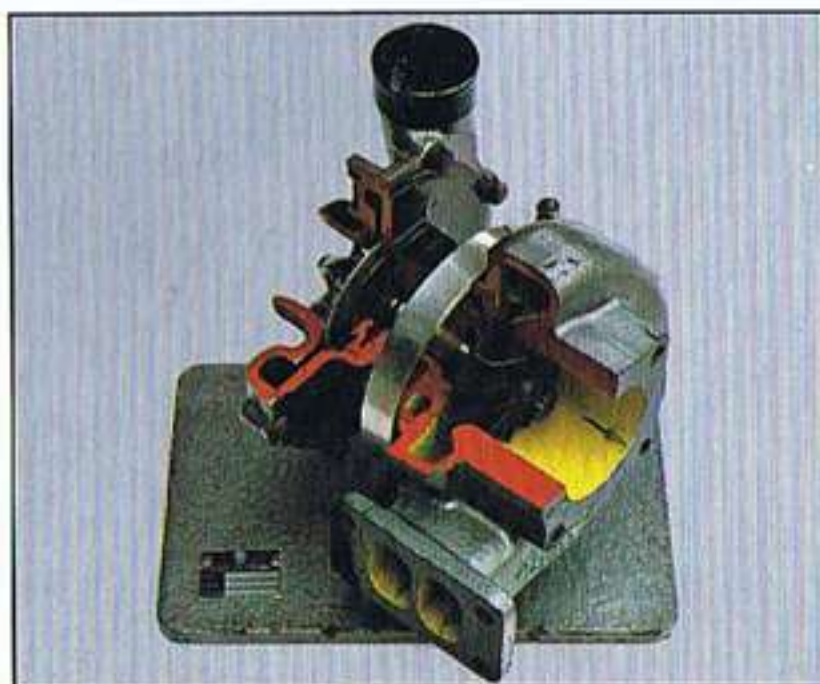
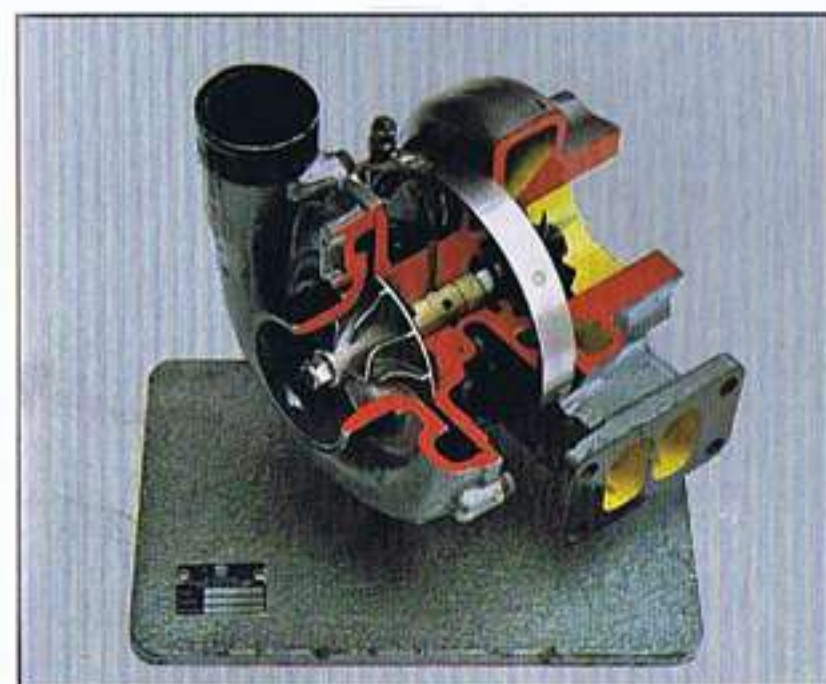
only called into play when the driver summons maximum effort from the engine room. At other times the turbo-charger idles and customary Porsche docility and fuel economy* prevail. Matched to the Turbo engine are a higher final drive ratio, for quieter and more economical* cruising, and a stronger transaxle. It makes use of a more robust differential. The turbo-charged engine's vast reserves of torque are such that four forward speeds are completely sufficient to bridge the Turbo's entire speed range.

Such subtleties show how far Porsche has been willing to go to add to the attributes of the automobile that many have already called the finest sports car in the world.

* Based on 1978 EPA estimates 22 highway, 11 city mileage with manual transmission. Your actual mileage may vary, depending on where and how you drive, your car's condition and optional equipment. 1979 data not available at printing time. Ask your dealer for a free copy of the EPA/FEA Gas Mileage Guide for New Car Buyers.



- 1 Air cleaner
- 2 Fuel distributor
- 3 Air intake line
- 4 Impeller housing (Compressor)
- 5 Pop-off valve
- 6 Manifold pressure line
- 7 Intake air cooler
- 8 Throttle valve housing
- 9 Intake manifold
- 10 Fuel injection
- 11 Exhaust manifold
- 12 Turbine housing
- 13 Exhaust muffler or silencer
- 14 Waste gate
- 15 Exhaust by-pass
- 16 Waste gate control
- 17 Control pressure for deceleration valve
- 18 Deceleration valve
- 19 Manifold pressure safety switch
- 20 Air-cleaner
- 21 Air-pump
- 22 Divertor valve
- 23 Control for diverter valve
- 24 Pressure control line
- 25 One-way valve
- 26 Air-injection line





PORSCHE
911SC
turbo

**Porsche 911 SC and
Turbo:
Culmination of a
Concept**

These are times of change for Porsche cars, as they are for all the motor industry at a time of concern over air quality and energy and material resources. Such new Porsche models as the 924 and 928 indicate one way the Weissach engineers have set sails for these winds of change. The other way has been expressed in the preceding pages: Porsche has marshalled

a dramatic round of improvements for the sports cars of its 911 family, the cars that have been acknowledged for a generation as the standard for excellence in the world of fine sports machines. They complete a range of Porsche automobiles that offers the widest choice of price, style, performance and equipment in the company's history.

Each of these new cars represents the finest modern interpretation of a great classic.

Their three-liter engines invigorate the 911SC's. The fastback Coupe expresses the sleek style that all the world associates with Porsche, and the Targa

speaks to the sunlover, more compellingly than ever. In the Turbo, now with 3.3-liter power, Porsche offers its most compelling combination of racing performance and luxury sedan equipment and comfort. Each car represents all of Porsche's great heritage, distilled to provide a scintillating motoring experience -- for those who appreciate fine cars.

Some of the vehicles and equipment shown or mentioned in this catalog may not be available in some areas. We reserve the right to make specification and equipment changes without notice.

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