

What's New For 1990?

The 928 Series



- 2 models - automatic and new higher-performance 5-speed.

New Standard Equipment

- Airbag supplemental restraint system, driver and passenger side, with new dashboard design.
- Porsche tire pressure monitoring system.
- Porsche variable limited slip differential, electronically controlled, hydraulically actuated to automatically transfer torque according to wheel speed, wheel slip and lateral acceleration.
- New Blaupunkt "Reno II" digital AM/FM/Cassette stereo sound system, with 160 watts, 6 channels, 10 speakers and equalizer.

• 5-speed equipment:

- 326 bhp engine, with higher redline (6,800 rpm), modified camshafts, pistons and engine management, fine-tuned intake system
- race gate shifter with reverse gear lockout, shortened shift lever by 20 mm
- revised rear axle ratio (new 2.73:1 vs 1989 2.64:1)
- reinforced ring and pinion
- wider Design 90 wheels (7.5Jx16 front, 9Jx16 rear)
- wider front and rear track (17 mm spacers on rear)
- sport suspension
- lightweight exhaust system with twin outlets
- modified AC compressor and bracket.

New Options

- Cast Design 90 alloy wider wheels optional on automatic.

The 928 Series



PROFILE/"B" PILLAR

1. Evolution

- **928 - 928S - 928S (4 valve) - 928 S4 - 928 GT**

The **Porsche 928** took the front engine/rear transaxle concept to its ultimate expression in a luxurious, ultra-high performance sports car. Upon its introduction in 1976, it swept the European Car of the Year awards—a first for a sports car. Its avant garde styling, aluminum alloy V-8 engine, ideal balance, refined ergonomics and driver conveniences set it apart from any other automobile available in the marketplace. But, in true Porsche tradition, Porsche engineers continued to refine the 928: in 1983, they gave it more power, enhanced handling and brakes, and called it the 928S. In 1985, a 4-valve-per-cylinder model was introduced in the U.S. The 1987

165-mph 928 S4 featured optimized aerodynamics and engine enhancements, becoming the fastest, most powerful Porsche ever brought to the U.S. The limited-production 928 GT of 1989 was even faster (171 mph) and more powerful (326 bhp). This car becomes the standard “928 5-speed” for 1990.

• Always “the best”

We’re looking at Porsche’s finest here. What do you suppose was going through the minds of Porsche’s engineers and designers who built the first 928? What were Porsche’s engineers trying to create? An exquisitely engineered automobile—Porsche’s best sports car. A car that Porsche owners can enjoy in many dimensions. It says a lot about Porsche that in striving to build their best sports car, they eventually refined the 928 into the world’s best car! A high performance sports car, fun to drive, yet reliable and practical—easy to live with and with good resale value. Everything one could want in one superb, entertaining automobile.

PROFILE/DRIVER'S DOOR

2. 928 Performance Data*

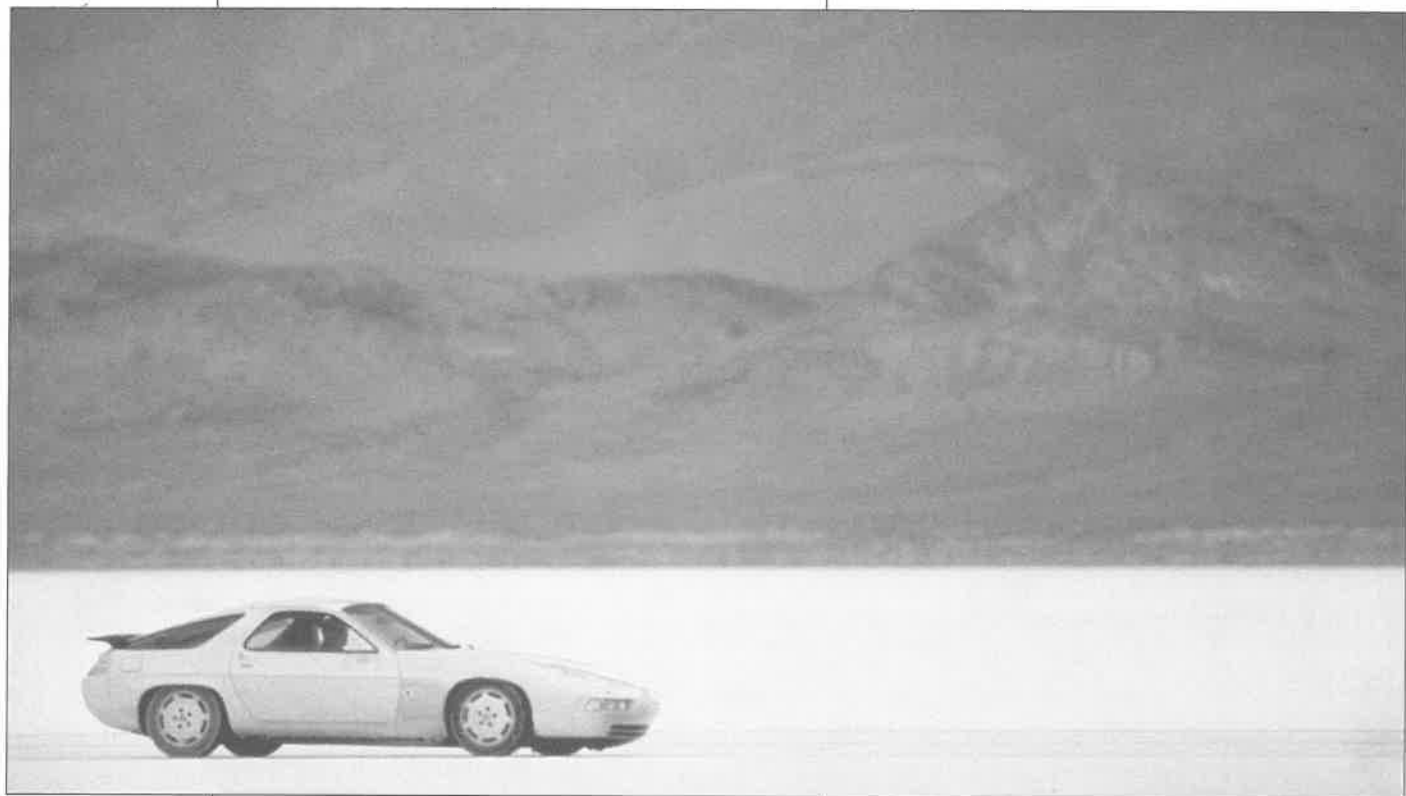
- **5.0 liter V-8, 316 bhp (326, 5-speed), 317 ft lbs torque (317, 5-speed)**

The response from the superb alloy V-8 adds an allure to driving that is missing from almost everything else in the 928's price range. One never lacks for enough low rpm power to pass safely—or take a joyous romp on a freeway onramp!

world. The 5-speed is the fastest sports car Porsche has ever offered in this country. Even more remarkable, the 928 owner knows their 928 could be driven at this speed on a test track all day, hour after hour. It's so quiet and comfortable, Porsche's 928 test drivers listen to the stereo in air conditioned comfort while they turn test laps flat out!

- **Coefficient of drag: 0.34**

Reflecting the state of the art air management engineering in this true Porsche GT.



- **0-60 mph: 6.0 seconds (5.6, 5-speed)**

The effortlessness with which one reaches 60 mph puts the 928 into a very small class of luxury performance automobiles. It is much faster than anything else that's as luxurious, and much more comfortable than anything else that's as fast!

- **Top Speed: 165 mph (171, 5-speed)**

One of the fastest production cars in the

- **Fuel economy: 15/19 (13/19) mpg†**

While few if any 928 buyers are attracted to this automobile for its fuel economy, its combination of good fuel economy and large fuel tank adds up to a long cruising range—a convenience benefit.

* Performance figures are stated for comparison only. Porsche recommends obeying all traffic laws.

† 1990 EPA estimates. Compare these estimates to the "estimated mpg" of other cars. Your actual mileage will vary with speed, weather and trip length. Highway mpg will probably be less.

FRONT/LF FORGED WHEEL

3. 5-Speed vs. Automatic

For 1990, Porsche offers the 928 in Automatic and Five Speed editions. The automatic is equipped much as last year (see What's New, elsewhere in this chapter). The Five Speed includes the equipment and performance specifications shown below...



- **5-speed differences - wheels, engine, exhaust, suspension**
 - 326 bhp engine, with higher redline (6,800 rpm), modified camshafts, pistons and engine management, fine-tuned intake system
 - race gate shifter with reverse gear lockout, shift lever shortened by 20 mm
 - revised rear axle ratio (new 2.73:1 vs. 1989 2.64:1)
 - reinforced ring and pinion
 - wider Design 90 wheels (7.5Jx16 front, 9Jx16 rear)
 - wider front and rear track (17 mm spacers on rear)
 - sport suspension
 - lightweight exhaust system with twin outlets
 - modified AC compressor and bracket.

- **automatic - ignition retard on upshift for smooth shifts**

Innovative electronics add smoothness to the 928's automatically executed shifts. During high speed shifts from first to second and second to third gear, the electronic ignition automatically retards the ignition by 16 degrees for about 1/3rd of a second, then restores timing to normal. The whole process takes but 1/2 second, occurs only if engine speed is more than 4,000 rpm, and makes shifts smoother as wear is reduced on transmission components.

INLET/WASHER/SHAFT/FENDER

4. 928 Special Features - Front

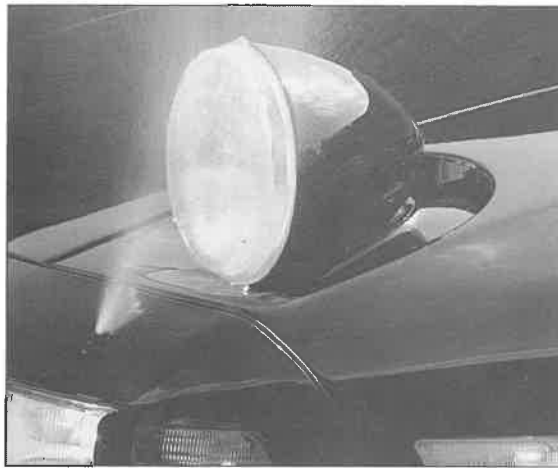
- **Shuttered air inlets**

Before we look into Porsche's phenomenal engine technology, I want to point out several examples of the kind of engineering that you'll find throughout the 928. First, Porsche found an innovative way to lower the car's drag coefficient—make it more slippery in the airstream. Knowing that an open grille creates some turbulence, they fitted the 928 with shuttered air inlets so that the grille is open only when the car really needs cool air. In other words, they optimized the tradeoff between cooling efficiency and aerodynamic efficiency, an example of something called systems engineering which we'll explore more later. You can feel the shutters right here...

[feel shutters under hood]

Should the system ever malfunction—which isn't likely, when you learn how Porsche tests everything so thoroughly—this knob is easily accessed for manual operation of the flaps.

[...point to knob]



- **High pressure headlight washer system**

Another thoughtful safety feature. Pushing the wiper lever (to the right of the steering wheel) away from you actuates a high pressure headlight washer system. It works only if the headlights are on and in the raised position, and is useful to clear the headlights of dirt, bugs or other vision-improving substances.

- **Rugged engineering - headlight rotating shaft**

While we're looking under the hood, look at the ruggedness of this shaft that rotates the headlights! Through their racing and testing programs, Porsche is superb at pinpointing each place that needs to be extra rugged—then building it that way.

[...lift on shaft]

- **Aluminum fenders, hood and doors for light weight**

No other manufacturer has achieved this kind of quality assurance in construction, painting and protection. Rust and corrosion is avoided through the use of non-ferrous materials such as aluminum, stainless steel and polymers. To lighten the car, Porsche's 928 engineers chose aluminum doors, hood and front fenders. Notice that the quality is so high that it's impossible to see or feel where steel ends and aluminum begins.

TOOL KIT/FORGED WHEEL/LTD. SLIP

5. 928 Special Features - Rear

- **Unexpected utility**

Each Porsche offers truly surprising utility for a sports car. Here is another opportunity to justify what might be perceived as merely a wildly emotional decision.



Each Porsche is so practical, it could hardly be called a "toy," unlike some mid-engine exotics where even a briefcase offers a luggage compartment challenge. More than half of all Porsche buyers are married, with children. The car seems designed precisely to meet their needs...

- exceptionally large luggage capacity (20.5 cu ft) with rear seat folded (more than Volvo 760 sedan!)
- 2+2 seating gives room for children and occasional adult use - so the Porsche can be enjoyed on more occasions
- individual fold-down rear seats offer convenient storage/seating options
- cargo cover for security
- rear tool storage area.

- **Tire pressure monitoring system**

This system alerts the driver to a drop in tire pressure at any of the tires. It was tested in other markets last year before being offered to the U.S. this year. Fitted to Porsche racing cars for some years now, the warning system has spared cars and drivers from potential accidents on several occasions.

- **New Electronically Variable Limited-Slip Differential**

Porsche engineers applied key technology developed for the 959 and the 911 Carrera 4 to produce this state of the art limited-slip differential that provides benefits at all speeds. The device utilizes the car's ABS sensors and an additional lateral acceleration sensor for...

- Predictable road behavior close to the handling limits – such as in an emergency evasive manner;
- Higher stability;
- Adjustment to wheel loading conditions under cornering;
- Reduced wear on tight corners and when maneuvering at low speeds;
- Considerable improvement in traction, since the locking action is automatically varied from 0 to 100%, according to need.

- **Unique Weissach rear suspension**

The unique, Weissach rear suspension design was developed through a competition among Porsche's best and brightest engineers...

This ingenious rear suspension system offers exceptional high speed cornering stability through...

- controlling "toe-in" of rear wheels
- tightly limiting "transition behavior" (power off/power on).
- Porsche variable limited slip standard for 1990.

ARM REST/RELEASE/SUN VISOR/ AC/POD

6. 928 Special Features - Interior

- **Unique swing-out armrest**

Porsche's attention to every detail inside the car can be seen in many features. One of the most interesting, the swing-out armrest, was invented by Porsche's Director of Research & Development. It provides an ideally positioned armrest plus a cover for the door storage compartments. Other thoughtful features...

- hidden door pockets with unique cover, coin holder on door and cassette holder in console, vanity mirrors, interior lights, hidden parcel shelf below dash—even an air conditioned glove box!

- **Dual rear hatch releases**

A convenient feature allowing one to open the rear hatch without stepping into a busy street to actuate the remote opener. While most cars have only one release, Porsche puts a release on both driver and passenger sides for added convenience. This is just one example of Porsche fitting full power operated controls where power is the most functional solution— windows, mirrors, door locks, seats and sunroof are others.

- **Rear sunvisors**

Another thoughtful touch unique to the Porsche 928: sunvisors fitted to shield the back seat occupants from the sun—or reduce the exposure of the interior to the sun's rays.

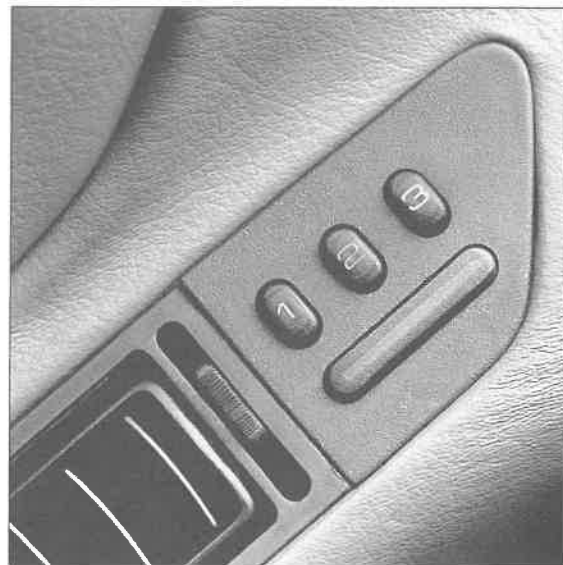


- **Dual air conditioning with separate controls**

- air conditioning, heating and ventilation system combines best of both manual and automatic operation (air distribution/fan speed manual, temperature control is automatic)
- standard rear air conditioning unit with separate controls offers more precise control of cooling environment.

- **Adjustable instrument pod**

Adjustable steering column and instrument pod move as a unit to allow any driver to enjoy "the Porsche driving experience" from their optimum driving position.



- **Positrol**

The Positrol memory system stores three seat and outside mirror settings. It may be used to program seat and mirror settings for three different drivers—or the relaxed and high performance settings for one driver—or one setting for higher heeled street shoes, another for lower tennis shoes: a worthwhile convenience feature!

DEMONSTRATION DRIVE



7. Press Quotes

Upon its introduction in 1986, the latest generation of the 928, the 928 S4, was unanimously adjudged "the world's best car" by no less than three of the most credible automotive magazines:

Motor Trend, Car and Driver and Automobile.

The 928's broad appeal is demonstrated by its inclusion in many categories of *Automobile Magazine's* reader's choice poll. The 928 was voted one of the best cars to drive in the following categories:

- "If money is no object;"
- "From New York City to Los Angeles;"
- "Nowhere in particular but fast;"
- "To be totally isolated from the road, your environment, the whole world;"
- "If you could have only one car for everything."

On the 928's systems engineering...

"Because the 928 is as much a system as an automobile, you can expect every piece in the mechanism to be as good as the drivetrain, which isn't always the case in fast cars."

Road & Track

"... when you're in this Porsche you aren't so much in a car as in a system... like an aerospace project, with every part carefully designed and fitted, not picked out of a parts bin."

Road & Track**On the 928's ride...**

"Ride is firm, but controlled..."

Road & Track**On the 928's fuel economy...**

"Our mileage on the 1500-mile trip ranged from a low of 19.6 mpg to a high of 26.8, with two adults, moderate luggage and the air conditioning on the entire way."

Road & Track**On the 928's steering...**

"The steering is a power-assisted rack and pinion that seems to provide just the right effort with sufficient feedback."

Road & Track**On the 928's handling...**

"Turn-in is quick and precise with the car never showing any tendency to understeer."

Road & Track

"... suspension elements creating handling and roadholding qualities which deserve ten out of ten points for feel, speed and controllability."

Automobile

"... phenomenal grip and unshakable stability."

Car and Driver

"... the 928 S4's road manners exhibit world class predictability and grip, at speeds far greater than the ease of the driver's task would indicate."

Motor Trend

"This kind of sure-footed urge is what active safety is all about."

Automobile**On the 928's power...**

"Power is everywhere, right up to the 6200 rpm redline, with impressive mid-range torque."

Road & Track

"... throttle response fast and eager..."

Automobile

"...immediate power, followed by a free-revving climb to peak output."

Auto Gallery**On the 928's brakes...**

"Stops shorter than any production car we've ever tested, save the Ferrari 412."

Road & Track**On the 928's 5-speed manual transmission...**

"The 5-speed is a pure unalloyed joy to operate in conjunction with the massive horsepower potential."

Motor Trend**On its ergonomics and comfort...**

"Its cockpit is ergonomic perfection. Its comfort, particularly at high speed, is exemplary"

Car and Driver

