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Press Information

Porsche Cayenne

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An efficient athlete for all seasons

The Porsche Cayenne continues as a cornerstone of the Porsche line-up. The second generation's seven models combine typical Porsche dynamics and efficiency in a variety of configurations: eight- and six-cylinder engines are available in gasoline, gasoline-electric hybrid or diesel versions.

The seven models are:

- Cayenne, 300 hp V6 engine, six-speed manual transmission, active all-wheel drive;
- Cayenne Diesel, 245 hp diesel V6 engine, eight-speed Tiptronic S, permanent all-wheel drive;
- Cayenne S, 400 hp V8 engine, eight-speed Tiptronic S, active all-wheel drive;
- Cayenne S Hybrid, with 380 hp, eight-speed Tiptronic S, permanent all-wheel drive;
- Cayenne GTS, 420 hp V8 engine, eight-speed Tiptronic S, active all-wheel drive;
- Cayenne Turbo, 500 hp V8 biturbo engine, eight-speed Tiptronic S, active all-wheel drive;
- Cayenne Turbo S, 550 hp V8 biturbo engine, eight-speed Tiptronic S, active all-wheel drive

The Cayenne has pleased critics and customers alike. In reader surveys and in U.S. market research firm J.D. Power and Associates' APEAL test, the Cayenne has been rated first several times. The Cayenne was the world's most popular Porsche model in 2012.

As well as introducing parallel hybrid technology in the second-generation Cayenne, Porsche pursued increased efficiency across the entire model range. Multiple technologies work together to significantly reduce fuel consumption: an eight-speed Tiptronic S transmission with auto start/stop functionality and a wide ratio spread, optimized thermal management

for engine and transmission cooling circuits and electrical system recuperation. Reduced curb weights in conjunction with intelligent lightweight design also make a significant contribution to efficiency; the Cayenne S is 400 lbs. lighter than the previous generation Cayenne S, for example. Without compromising substance or safety, lightweight materials are used throughout the vehicle and in all-wheel drive systems. In addition to efficiency and emissions improvements, performance, agility and handling also benefit from reduced weight.

A Cayenne first: the eight-speed Tiptronic S

Porsche has brought the eight-speed Tiptronic S to the Cayenne family. This transmission combines high efficiency, rapid gear changes, and superior smoothness and refinement. The top two gears are both overdrives, made possible by the wide ratio spread and reducing fuel consumption significantly during steady-state cruising. For optimal acceleration, the eight-speed Tiptronic S always launches from rest in first gear. Most models reach top speed in sixth gear except the Cayenne S Diesel, which attains top speed in eighth. Drivers can select between “Normal” and “Sport” modes. The eight-speed Tiptronic S is standard equipment in all models except the standard Cayenne.

For optimum traction and driving dynamics:

Porsche Traction Management (PTM) all-wheel drive

Porsche uses two different all-wheel drive systems for the Cayenne range. The PTM in the Cayenne Diesel and Cayenne S Hybrid features a permanent four-wheel drive with a self-locking center differential. The PTM in other models is an active all-wheel drive with an electronically-regulated, map-controlled multi-plate clutch. The system’s variable torque distribution improves driving dynamics, agility and rapid traction management.

Depending on the model, the driver can adjust off-road characteristics using a rocker switch on the center console. In off-road mode 1, all relevant systems are tuned for optimum traction. Models with active all-wheel drive system add off-road modes 2 and 3. Off-road mode 2 closes the center coupling to 100 percent for improved traction on difficult terrain and off-road mode 3, activated by another press of the rocker switch, locks the rear differential for even greater traction. In all cases, the hill control assistant is activated by means of a separate switch.

Chassis and options

Porsche provides a wide range of suspension tune for the Cayenne. All models except the Cayenne Turbo and Cayenne GTS come with steel springs as standard equipment. Porsche Active Suspension Management (PASM) is optional on other steel-sprung models. All Cayenne Turbo and GTS models are equipped with air suspension and PASM, an optional combination on other models. To further enhance driving dynamics, active all-wheel drive models can be equipped with Porsche Torque Vectoring Plus (PTV Plus); Porsche Dynamic Chassis Control (PDCC) is an additional option on gasoline V6 and V8 models. PTV Plus features variable torque distribution to the rear wheels and an electronically controlled rear differential lock. PDCC integrates with PTV Plus to resist body roll during cornering and improve ride quality on rough roads when driving straight ahead.

Powerful and economical six-cylinder engines: Cayenne and Cayenne Diesel

The Cayenne features a 300 hp, 3.6 liter V6 engine with a maximum torque of 295 lb-ft. It accelerates from zero to 60 mph in 7.1 seconds. The eight-speed Tiptronic S is available as an option, and helps the Cayenne accelerate to 60 mph in 7.4 seconds. The Cayenne tops out at 143 mph with either transmission model.

The Cayenne Diesel is a powerful and efficient long-distance runner. The 3.0 liter V6 delivers 245 hp and, more importantly, 406 lb-ft. of torque, ensuring strong acceleration and excellent pulling power. Though capable of accelerating to 60 mph in 7.2 seconds, it is rated at 29 mpg highway by the U.S. EPA. Thus, the Cayenne Diesel is the most efficient Cayenne; it also stands out with a potential range of 765 miles on a single tank. Top track speed is 135 mph.

Powerful eight-cylinder engines: Cayenne S and Cayenne GTS

Flexibility, efficiency, superior torque and urgent power delivery are characteristics shared by all naturally aspirated eight-cylinder Porsche engines. Cayenne S and Cayenne GTS demonstrate how vehicles with very different personalities can be designed around one engine. The 400 hp Cayenne S, powered by a 4.8 liter V8, is a well-rounded performer, delivering a 0-60 mph time of 5.6 seconds and a top speed of 160 mph.

Based on the Cayenne S, the Cayenne GTS is tuned for more aggressive driving. Its entire drive system is geared towards performance: The engine is modified to produce 420 hp, the eight-speed Tiptronic S is programmed for faster shifting, and the gear ratios of the front and rear axles are lowered. This makes the Cayenne GTS an enthusiastic sprinter in all conditions. The higher performance is complemented by a suspension lowered .78 inches.

Efficiency champion with coasting capability: Cayenne S Hybrid

The Cayenne S Hybrid is the first Porsche production car with a hybrid drive. The primary engine of the Cayenne S Hybrid is a 3.0 liter supercharged V6 engine with direct fuel injection that generates 333 hp. The engine is coupled with a 47 hp electric motor, which can drive the Cayenne either alone or in tandem with the supercharged V6. It also acts as both generator and starter motor. The hybrid module consists of this electric motor and a decoupling clutch between the engine and the new eight-speed automatic. The hybrid system is completed by a 288-volt nickel-metal hydride battery (NiMH) under the trunk floor, which stores the electrical energy recovered during braking and driving. With 380 hp total, the six-cylinder Cayenne S Hybrid has the power of an eight-cylinder engine but with significantly lower fuel consumption. The Porsche hybrid drive also furthers efficiency at higher speeds and in certain conditions such as highway driving by shutting the combustion engine off and “coasting”, eliminating fuel consumption altogether for portions of the drive.

Superior performance: Cayenne Turbo and Cayenne Turbo S

Two high performance models, Cayenne Turbo and Cayenne Turbo S, take the top spots of the Porsche SUV range. Their exceptional power and driving performance, as well as their extensive features list, make these two models stand out. The eight-cylinder, bi-turbo Cayenne Turbo engine generates 500 hp and 553 lb-ft. of torque, enabling a 0-60 mph sprint of 4.4 seconds; top track speed is 172 mph. Just like every other flagship Porsche model, the Cayenne Turbo comes with an extensive equipment list as standard, including air suspension and PASM, leather upholstery, and adaptive sports seats.

The 550 hp Cayenne Turbo S is an even more athletic performer, having been designed for maximum driving dynamics throughout. Starting with the air suspension/PASM active damping control combination of the Cayenne Turbo, the Cayenne Turbo S adds Porsche Dynamic Chassis Control (PDCC), which virtually eliminates body roll, as well as Porsche Torque Vectoring Plus (PTV Plus) in combination with an electronically controlled rear differential lock. The Cayenne Turbo S accelerates in 4.3 seconds from zero to 60 mph, reaches a top track speed of 176.