



# The New Cayenne

## The momentum continues.

From the moment it first appeared on a drawing board at the Porsche Weissach Research and Development Center, the Cayenne changed the momentum of what was considered a Porsche.

Cayenne instantly redrew the boundaries of what defined a Porsche—just as the 911 and Boxster had redefined the sports car.

Cayenne proved that the only true measure of a Porsche is its performance. Not how many doors it had.

And thanks to its sophisticated traction technology, Cayenne proved the Porsche driving experience was not merely limited to paved roads. The off-road was suddenly wide open.

Now comes the next generation of this groundbreaking Porsche: The new 2008 Cayenne, Cayenne S and Cayenne Turbo models again reset the standards of sports-car performance.

All three are more visually dynamic, more agile and more powerful than ever.



### **Cayenne Turbo.**



Porsche Turbo is a name that's held a special power over auto enthusiasts for decades. Now for 2008, the twin-turbocharged Porsche Cayenne Turbo makes that special allure more powerful than ever. A supercar that happens to seat five, the redesigned Cayenne Turbo receives a significant increase

in output—500 horsepower at 6000 rpm and 516 lb.-ft. of torque at 2250–4500 rpm.

The Cayenne Turbo's twin turbo is one of the most advanced production V8 engines in the world, capable of propelling the Cayenne Turbo with stunning speed: from 0 to 60 miles per

hour in 4.9 seconds. On the test track, the Cayenne Turbo can reach 171 miles per hour.

It's the kind of power that can thrill, to be sure. But it has practical applications, as well, affording ample acceleration for merging onto the interstate, passing on a country road, climbing up a mountain switchback. On any paved surface, Cayenne Turbo is simply electrifying.

It's no less amazing when you turn off-pavement. The massive torque helps you power through the unpredictable surfaces that you may encounter beyond the pavement: gravel, snow, sand and mud.\* Cayenne Turbo brings poise with its power, no matter the road surface.

The optional Porsche Dynamic Chassis Control (PDCC) system helps reduce lateral body movement during cornering. And a self-leveling air suspension with adjustable ride height is standard on the Cayenne Turbo.

"Normal Level" is the standard setting, with a maximum ground clearance of 8.46 inches, without occupants or cargo.

\*With tires recommended for those types of road conditions.

"Loading Level" drops clearance to 6.34 inches for easier loading when the Cayenne Turbo is stationary.

"Low Level" adjusts the ride to .94 of an inch below Normal height and "Special Low Level" lowers an additional .39 of an inch to improve aerodynamics and handling at higher speeds.

"Off-road Level" increases ground clearance 1.03 inches above Normal for a maximum clearance of 9.49 inches. To maintain vehicle stability, this option is only available at speeds up to 50 miles

per hour. A "Special Off-road Level" is available for extreme offroad conditions at speeds of less than 19 mph. It provides a total ground clearance of 10.67 inches, an approach angle of 31.8 degrees, and a departure angle of 25.4 degrees. Like all ride-height settings, it is automatically maintained by an advanced self-leveling technology.

Whatever the ride height, one thing is certain: The new Cayenne Turbo takes SUV performance to an entirely new level.



### **Cayenne S.**

The new 2008 Cayenne S does more than reshape the original lines that Porsche designers gave the Cayenne. It reshapes the performance envelope. Beneath its contoured hood lies a 4.5-liter V8 engine, with increased output rated at 385 horsepower and 369 lb.-ft. of torque. Fed through the standard six-speed Tiptronic S automatic transmission, the power of the normally aspirated Porsche V8 helps the Cayenne S accelerate from a standing start to 60 mph in 6.4 seconds on its way to a top test-track speed of 155 mph.

Remarkably, these figures don't come at the expense of off-

pavement prowess. The Cayenne S doesn't yield its Porsche driving dynamics simply because the pavement has stopped.

A comprehensive set of technologies helps the Cayenne S address its exceptional performance agenda. It starts with the standard Porsche Traction Management (PTM) permanent four-wheel-drive system, and includes the optional Porsche Active Suspension Management (PASM), an electronically variable damping system that stabilizes body sway during sudden gaspedal or brake-pedal applications or when driving in rough terrain. PASM is available in conjunction

with the optional air suspension system that self-levels to six adjustable ride-height positions. These systems work together to ensure that the Cayenne S offers equally outstanding on-pavement and off-pavement performance.

Whatever the surface, Cayenne S uses the intelligence of Porsche Traction Management to enhance driving stability and traction.

PTM's intelligent activation of the lockable center differential improves directional stability and tracking control, and increases the degree of locking action before the wheels start to spin to further improve traction. PTM also helps





overcome the understeer tendencies typical of most allwheel-drive systems, by opening the lockable center differential.

For the most extreme offpavement driving maneuvers, Cayenne S employs the PTM's reduction gearbox with a 2.7:1 gear ratio. By activating the Lowrange mode via a toggle switch on the Cayenne's center console, the driver can prepare several control systems simultaneously for the constantly variable traction conditions encountered off-pavement. PTM switches to the appropriate gear ratio for off-pavement driving and activates a special off-pavement control map for the differential lock.
PTM also automatically switches on the traction-oriented off-pavement Anti-Lock Brake System (ABS) and Automatic Brake
Differential (ABD) systems, thus reducing the risk of control errors when driving off-pavement.

Porsche was the first car manufacturer to offer this combination of systems controlled by a central switch.

The result of this technical wizardry is a level of driving confidence that simply has to be experienced to be believed. And thanks to a long list of standard comfort, convenience and safety features, that sense of well-being is evident throughout the Cayenne S, to both driver and passengers alike.

### Cayenne.



The 2008 Cayenne is the first redesign for Porsche's groundbreaking vehicle. As you would expect from Porsche, changes to Cayenne's fundamental shape are not revolutionary but evolutionary, always reaffirming its sports-car heritage.

That sports-car performance comes from its proven V6 engine, now in a more potent form for 2008. The new Cayenne produces 290 horsepower at 6200 rpm and 273 lb.-ft. at 3000 rpm.

Porsche designers applied the most obvious design changes to the front profile: new headlights,

larger air intakes and a prominent steel protection plate underneath the front skirt are featured on the face of the 2008 Cayenne, while the rear end features LED taillights.

These design refinements conceal a chassis that continues to take the Porsche driving experience to a new level. The 2008 Cayenne achieves an ideal balance of performance and power, whether the driving surface is on-pavement or off-pavement.

Porsche engineers brought to
Cayenne their unique appreciation
for suspension design, honed
during the development of allwheel-drive sports cars such as
the legendary 959. Cayenne's
multi-arm rear axle accepts the
conflicting demands placed on it,
deftly managing the high traction
forces expected of a Porsche, and
the high carrying loads expected

of an SUV. For agility, the upper control arms are extra-light forged aluminum. For robust strength over the roughest surfaces, the lower track control arms and tie rods are steel. The axle kinematics reduce squat and dive when accelerating and braking. Rear toe-in control stabilizes the Cayenne when cornering and under load change. Extra-long spring travel absorbs off-pavement irregularities. The optional Porsche Dynamic Chassis Control (PDCC) system is an active chassis system that anticipates and significantly reduces lateral body movement during cornering.

All that ensures Cayenne benefits from its advanced all-wheel-drive system, biased to the rear wheels. While many SUVs have an inherent tendency toward nose-heavy handling characteristics, Porsche Traction Management (PTM), standard on the Cayenne, feeds 62 percent of the engine torque to the rear wheels under ordinary conditions.

As a result, Cayenne displays handling dynamics worthy of the name Porsche.





## **Performance**

More drive.

More power.

More efficiency.

More of the things that make the

Cayenne a Porsche.

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## The heart of a Cayenne now beats stronger than ever

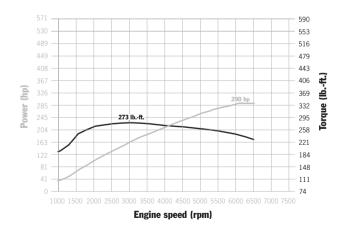
The heart of every Porsche is its engine. That distinctive exhaust note you expect of a Porsche—that signature expression of its power—originates here.

For 2008, that power is even greater. Compared with the previous generation, the new Cayenne engines offer significantly higher horsepower and torque.

The V6-powered Cayenne model is rated at 290 horsepower and 273 lb.-ft. of torque; the naturally aspirated V8 of the Cayenne S generates 385 horsepower and 369 lb.-ft. of torque; and the Cayenne Turbo achieves a remarkable output of 500 horsepower and 516 lb.-ft. of torque.

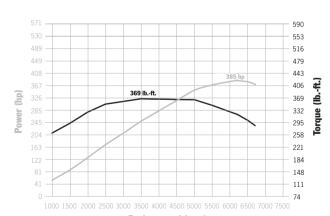
That all new Cayenne models offer more power is indicative of increased displacement, and an engineering advance called Direct Fuel Injection (DFI). (For more





Cayenne: 290 hp at 6200 rpm and 273 lb.-ft. at 3000 rpm

AS VS



Engine speed (rpm)

Cayenne S: 385 hp at 6200 rpm and 369 lb.-ft. at 3500 rpm

information on Direct Fuel Injection, see page 26.)

The Cayenne model's new 3.6-liter V6 has a cast-iron crankcase and one-piece cast-aluminum cylinder head. This combination provides a significant increase in engine output per unit of total capacity.

The new Cayenne S has a naturally aspirated 4.8-liter V8 with Direct Fuel Injection (DFI) and VarioCam Plus.

Porsche engineers designed all three engines for an active lifestyle, including towing heavy trailer loads. As a result, the cooling system is extremely robust.

All three engines are also designed for super unleaded fuel, and achieve impressive fuel economy.

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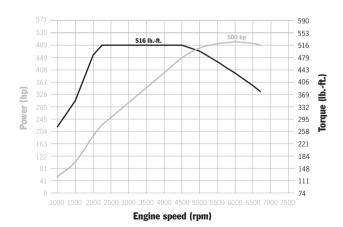


Porsche engineers were among the first to harness the ability of turbocharging to radically transform the power output of an engine. In 1974, Porsche altered the sports-car landscape with the introduction of the 911 Turbo.

Thirty years later, the introduction of the Cayenne Turbo had an equally profound effect on the marketplace, literally reshaping perceptions about the nature of high-performance vehicles.

And now that effect is intensified: The new Cayenne Turbo is more powerful than ever, producing 500 horsepower and 516 lb.-ft. of torque. It is the kind of engine dynamics that puts the Cayenne Turbo in a category previously occupied by only a handful of Porsche sports cars.

To help compensate for the significantly higher loads that are generated in the twin-turbo engine, the pistons in the Cayenne Turbo engine are forged.



Cayenne Turbo: 500 hp at 6000 rpm and 516 lb.-ft. between 2250-4500 rpm



The Cayenne Turbo engine is among the most advanced internal combustion engines ever produced by Porsche. This mechanical symphony integrates a list of technical features that is a culmination of everything our engineers have learned about water-cooled V8 engines and turbo technology over the past four decades.

- 1. Air intake system
- 2. High-pressure pump
- VarioCam Plus (rotary-vane adjuster)
- 4. Duplex timing chain
- 5. High-pressure fuel rail
- 6. Injector (obscured)
- 7. VarioCam Plus (switchable tappet with hydraulic valve clearance adjustment)
- 8. Inlet camshaft
- 9. Exhaust camshaft
- 10. Valve
- 11. Piston
- 12. Spark plug
- 13. Exhaust manifold
- 14. Turbocharger
- 15. Oil filter
- 16. Oil/coolant heat exchanger
- 17. Air-conditioning compressor
- 8. Oil-pump pickup pipe
- 19. Water pump (obscured)
- 20. Ancillary drive belt
- 21. Throttle-valve tract (electronic throttle)

## Power is the product of efficiency.

## Lightweight alloy engine construction.

The idea that "less is more" has always been a core principle of Porsche engineering. If something can be made lighter, it can move more quickly. In the Cayenne, this principle is put into practice many ways, but especially in regard to engine weight.

Despite its generous displacement of 4.8 liters, the Cayenne V8 is a compact and lightweight engine. The power it produces is therefore efficient power, applying minimal weight to maximum effect. And because the Porsche V8 engine is so compact, its mass can be positioned within the chassis precisely where it can best aid Cayenne's handling dynamics.

Both the normally aspirated V8 and its Turbo engine stablemate make extensive use of aluminum in key components. The pistons, crankcase and one-piece cylinder heads are all aluminum alloy, and combine to significantly reduce two fundamental impediments to high



performance: weight and rotational mass. In the Cayenne Turbo, the pistons are further reinforced to help withstand the added loads of turbocharged performance.

To ensure the aluminum components remain pillars of strength even as spirited driving places increased demands on the engine, the Porsche V8 employs what is called a "closed deck" construction. To help maintain a consistent operating temperature, the aluminum cylinder block forms a separate structure from the

cylinder heads. As a result, the block and its coolant channels are a fully enclosed, highly efficient system. And to provide optimal dimensional stability for the main bearing bore of the crankcase, the lower section of the V8 block is reinforced by a lightweight aluminum bedplate.

This design not only reduces the weight of the engine—it also improves the structural integrity. Since the engine is stronger, it is more durable and its acoustic properties are improved.

## Combating the archenemy of high performance.

## **Engine cooling system and lubrication.**

It's critical for a high-performance engine such as the Cayenne V8's to operate within a consistent temperature range. Too much heat—or too little—and overall engine performance can be significantly compromised.

The V8 engines of the new Cavenne S and Cavenne Turbo use a coolant management system to control temperatures throughout the engine. The entire cooling system is designed for prolonged heavy-duty operation, from high-torque on-track and off-road driving to the rigors of towing and hauling heavy loads. Even under such duress, the Cavenne V8 is expected to remain within its optimal temperature range. As well as reducing emissions, noise and fuel consumption, the Cayenne V8 engine's cooling system helps to maximize performance in every respect.

The strategy for achieving these objectives is nothing if not thorough, Approximately 20 percent of the engine's coolant flows longitudinally through the crankcase. The remaining 80 percent cross-flows through the cylinder heads, where rapidly reciprocating components tend to generate the most intense heat. Piston heads are especially vulnerable to temperature spikes that can result in premature detonation. To keep temperatures in check, oil-spray jets aim their lubrication directly at the piston heads. And to reduce sources of friction in the first place, clearances throughout the engine are extremely precise.

#### Lubrication.

Porsche engineering isn't just "inspired" by the company's legendary racing program—there's a direct connection. Case in point: The V8 engines in the Cayenne S

and Cayenne Turbo use integrated dry-sump lubrication. This racedeveloped technology ensures a consistent oil supply to every part of the engine, in all load conditions. Rather than using an external tank, the oil reservoir is located inside the engine. As well as saving space and reducing weight, the oil is always there where it's needed. As conditions in the engine change, a variableoutput pump modifies the flow of oil to help prevent oil "starvation." Oil is circulated around the V8 engine using a two-stage scavenging system. Ensuring optimal supply in even the most extreme off-road scenarios, it enables the car to traverse. climb and descend slopes of up to 45 degrees.

In the new Cayenne model, the V6 engine uses a wet-sump lubrication system. The sump and the oil/coolant heat exchanger are also designed for extreme conditions on- and off-road.

## An injection of adrenaline.

## **Direct Fuel Injection.**

All Cayenne engines feature Direct Fuel Injection (DFI), a technology that uses precisely timed. precisely placed fuel delivery to help create optimal combustion.

As the name suggests, DFI injects fuel directly into the individual combustion chambers, instead of the intake manifold. The injector valves have an electromagnetic mechanism that controls each injection with astonishing precision, while a high-pressure pump provides the necessary pressure up to 1,740 psi—to accompany the rapid fire of the fuel injection.

Precise geometry of the injector's position and its spray pattern is a key factor in helping to improve power, torque and emissions of the engines. The specific placement of the fuel as it enters each chamber it the power and efficiency of creates a swirl that improves the air/fuel mixture, and therefore the overall combustion process.

At engine speeds up to 3500 rpm, a double-injection process is used. In this mode, the required fuel volume requirements and, as you drive, is delivered in two successive injections per working stroke. The resulting benefits include faster catalyst warm-up and increased torque in the upper load range.

By forming the air/fuel mix directly in the combustion chamber, DFI contributes to engine cooling. As a result, it is possible to increase the compression ratio and with the engine.

The direct injection process is continuously adjusted. The engine management system reads changes to throttle inputs and performance the air/fuel mix is monitored and adapted as required. Oxygen sensor circuits within the exhaust system provide accurate emissions control (see page 74).

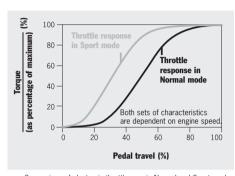


## Push a button. Push the envelope.

## "Sport" mode.



Sport button in center console



Comparison of electronic throttle map in Normal and Sport modes

Porsche engineers made certain the Cayenne exhibited an ideal balance of performance, handling and ride comfort. Of course. what's ideal can change depending on various factors, from the character of the road to the length of the commute. Cavenne lets you skew the balance as you see fit: A special "Sport" mode is standard, with a choice of comfortoriented (Normal) or highperformance (Sport) drivetrain and chassis setups. Make your selection using the button on the center console, below the Tiptronic S gear selector. When

active, the word "SPORT" appears in the instrument cluster display.

Enable Sport mode, and the Cayenne's electronic throttle is instantly issued a new, more positive map. The throttle response is quicker, and the engine becomes discernably more dynamic.

The Tiptronic S transmission also alters its shift points when Sport mode is activated. Upshifts are performed later, and downshifts earlier, to make the most of Cayenne's performance capabilities. Porsche Active Suspension Management (PASM)\* and Porsche Dynamic Chassis System (PDCC) are even set to Sport mode. The ride height on cars with air suspension is lowered to Low Level. The results are befitting the Porsche driving experience: The ride is firmer, turn-in is more positive and overall feedback from the road feels more direct and immediate.

On the Cayenne S, engaging the Sport button also activates the optional sport exhaust system.

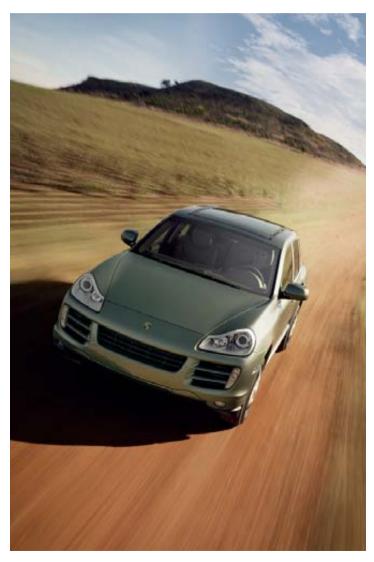
<sup>\*</sup> PASM is an option available in conjunction with the optional air suspension on the Cayenne and Cayenne S. It is standard on the Cayenne Turbo.

## The valve timing varies. Your enjoyment never does.

## Variable-valve timing in the V6 engine.

Getting more power out of the Cayenne's V6 engine meant getting more air into it. To accomplish this, Porsche engineers employed variablevalve timing on both intake and exhaust valves. The engine management system reads critical data on engine speed and other factors, continuously varying the camshaft phase angle. Within each cylinder, the two intake and two exhaust valves are actuated by roller cam followers featuring hydraulic valve clearance adjustment.

As a result of this careful orchestration of valve openings and closings, the new Cayenne V6 achieves better fuel economy, lower emissions and, above all, better power and torque—even at low engine speeds.

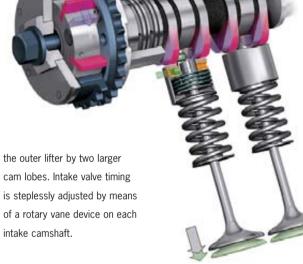


Increasing torque.
Reducing fuel consumption.

## VarioCam Plus in the V8 engines.

The Cayenne was engineered to serve many roles. But thanks to VarioCam Plus, it's instantly able to perform the most vital one: to be a Porsche, VarioCam Plus can tell—based on the driver's inputs when the V8 engine is being used for normal driving, or for more enthusiastic, performance-oriented driving. By seamlessly adapting the intake valve timing and lift as driver inputs change, VarioCam Plus essentially creates two engines out of one. The engine management system does all the thinking. All you have to do is enjoy the Porsche V8's responsive acceleration and exceptionally smooth running characteristics.

The two-stage valve lift on the intake side is achieved using electro-hydraulically switchable tappets. Each tappet consists of two concentric lifters which can be either locked together to form a single unit, or allowed to move independently. The inner lifter is actuated by a small-profile cam;



VarioCam Plus (V8 engines)

To improve responsiveness when starting from cold, VarioCam Plus selects the higher lift setting and retards valve timing.

At medium revs and minimal load, the valve lift is lowered and timing advanced to minimize fuel consumption and emissions. At low engine speeds in particular, VarioCam Plus significantly improves fuel economy. To

achieve maximum power and torque, the valve lift is raised and the timing advanced.

Overall, the system resolves an inherent conflict: creating greater power and torque while maintaining modest fuel consumption.

## There is one fuel that will always be free. So why not make the most of it?

Air intake system.



An engine is really nothing more than an air pump. The more air you can flow through an engine, the more power it typically makes—which is why the new Cayenne models are equipped with a resonance air intake system. This ingenious technology uses the pressure waves generated by the

intake valves to "force" more air into the Cayenne engine.

In the new Cayenne and Cayenne S, this forced-air resonance is enhanced by a two-stage intake manifold. To create higher torque at low rpm, the manifold effectively lengthens its intake tube. And to create more power and higher rpm, the manifold shortens its intake tube.

Although naturally aspirated, the new Cayenne and Cayenne S engines provide highly impressive torque output ratings at lower engine speeds.

## Double your pleasure.

## Twin turbochargers power the new Cayenne Turbo.

The technology of turbocharging has always been synonymous with Porsche. And now, it's synonymous with Cayenne.

On the new Cayenne Turbo, engine performance is dramatically enhanced by twin turbocharger units. The low-volume intake pipes combine with short exhaust manifolds to achieve acceleration response that is nothing short of astonishing.

Porsche engineers continue to refine the science of turbocharging. In the Cayenne Turbo, the incoming air is passed through a filter and compressed

by the turbine units. Its temperature is then reduced in the intercooler system, thereby improving cylinder charging and reducing thermal loads on the engine.

Boost pressure is controlled by the engine management system, reaching as much as 26.1 psi (absolute pressure) under full acceleration from just 2500 rpm.

Under "normal" driving demands
(part-throttle mode), the boost is
adjusted to help optimize fuel
economy. When the driver demands
more from the Cayenne Turbo

(full-throttle mode), the turbines increase the amount of pressure available. Press the throttle assertively, and the boost can be applied immediately. There's virtually no "turbo lag," just the seamless delivery of phenomenal engine power—up to 500 horsepower and 516 lb.-ft. of torque.

To help prevent the turbine units from reaching temperatures where oil degradation would otherwise occur, both turbochargers are cooled by dedicated circuits from the main engine cooling system.



## **Exerting total control. So you can experience total exhilaration.**

## **Engine management system.**

To exact maximum performance from an engine requires comprehensive engine control.

On the new Cayenne models, the engine management system provides coordinated regulation of all engine functions and associated systems in all operating conditions (see diagrams).

The basic principle of Porsche engine management is simple:
As you drive, sensors monitor a wide range of variables and engine components, gathering real-time data that's then compared with a corresponding set of reference values. Based on this comparison, a range of key engine functions, including ignition and fuel injection, is instantly adjusted. The result: optimal fuel economy and lower emissions, as well as greater power and torque at all times.

One of the most important systems controlled by engine management is the electronic throttle, a key prerequisite for Porsche Stability

Management (PSM). Other major functions include onboard diagnostics and cylinder-specific knock control, which automatically compensate for changes in fuel quality.

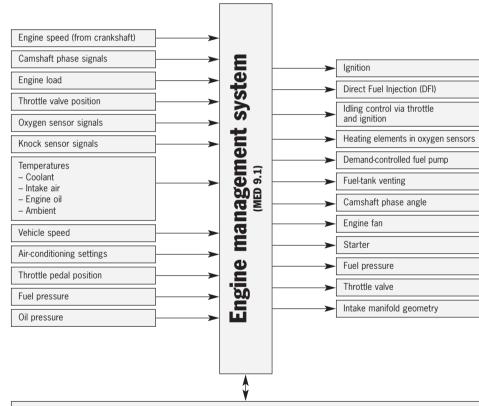
On the Cayenne and Cayenne S, the engine management system controls the variable-tract intake manifold. On the Cayenne Turbo, the engine management system regulates the turbo boost pressure.

#### Ignition system.

For a high-performance engine, the quality of ignition is critical—which is why the new Cayenne models use a static high-voltage ignition system with separate ignition coils on each individual plug. As well as providing a more consistent spark, this is a more reliable alternative to a conventional distributor and leads. The role of distributor is performed by the engine management system,

which communicates directly with each coil. The results are better performance and fuel economy as well as lower emissions. **Engine management in the new Cayenne.** 

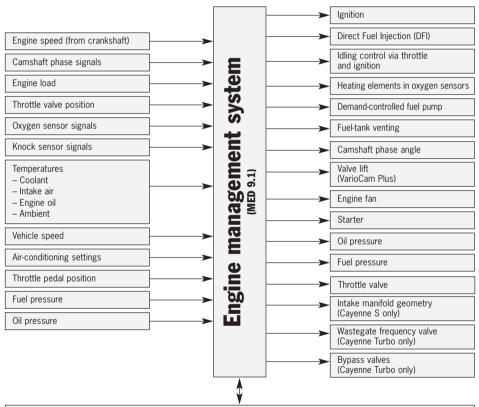
## Input data Used to regulate/control



CAN interface to PSM control unit, transmission control unit, engine immobilizer, instrument cluster, air-conditioning control unit, Sport button, onboard diagnostics, etc.

### **Engine management in the new Cayenne S and Cayenne Turbo.**

### Input data Used to regulate/control



CAN interface to PSM control unit, transmission control unit, engine immobilizer, instrument cluster, air-conditioning control unit, Sport button, onboard diagnostics, etc.

## Managing emissions to achieve the purest possible driving experience.

## **Exhaust system.**

The Cayenne's engine management system works its silent magic to help reduce emissions at the source. Along with short exhaust manifolds that enable rapid heating of the primary catalysts—a basic prerequisite for early emissions control—the system helps ensure Cayenne complies with all emissions legislation.

The purification process works like this: Inside each of the primary catalytic converters are two oxygen sensors. These supply a real-time analysis of exhaust gas composition. Based on this information, the engine management system can adjust the air/fuel mix as required.

This "stereo Lambda" control circuit keeps emissions low in all operating scenarios. The key benefits of the primary and main catalysts are high efficiency, faster warm-up and consistently lower emissions (for more details, see page 74).

The lightweight exhaust systems in the new Cayenne models are made from special, ultra-durable stainless steel. The new Cayenne S is also available with an optional sport exhaust system. It has a performance sound setting which is automatically enabled when Sport mode is selected via the Sport button on the center console. Also included is a pair of specially designed dual-twin tailpipes. (Please note that fitment of this system restricts ground clearance, and thus the ability of the Cayenne S to engage in off-road driving.)



Single-twin tailpipes on Cayenne and Cayenne S



Dual-twin tailpipes on Cayenne Turbo

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## Applying power with safety.

## **Porsche Traction Management.**



A Cayenne puts its power to the pavement via Porsche Traction Management (PTM). Combining a range of systems and functions, PTM be automatically varied to match actively distributes engine torque precisely where it is needed most.

At the heart of PTM is an intelligent permanent all-wheel-drive system with electronically variable center

differential. The standard torque split of 38 percent to the front and 62 percent to the rear can changing driving conditions. For the toughest off-road terrain, the differential can be locked using the PTM control on the center console.

Other major features in PTM include a two-speed transfer gearbox (with Low-range gearing for off-road use), an Automatic Brake Differential (ABD) for better traction, and Anti-Slip Regulation (ASR) for greater stability under acceleration.

Combined, these components give Cayenne exceptional performance

and vehicle control, on- or off-road. PTM uses the ABD and ASR functions to achieve a higher standard of handling and grip, without intervention from the driver.

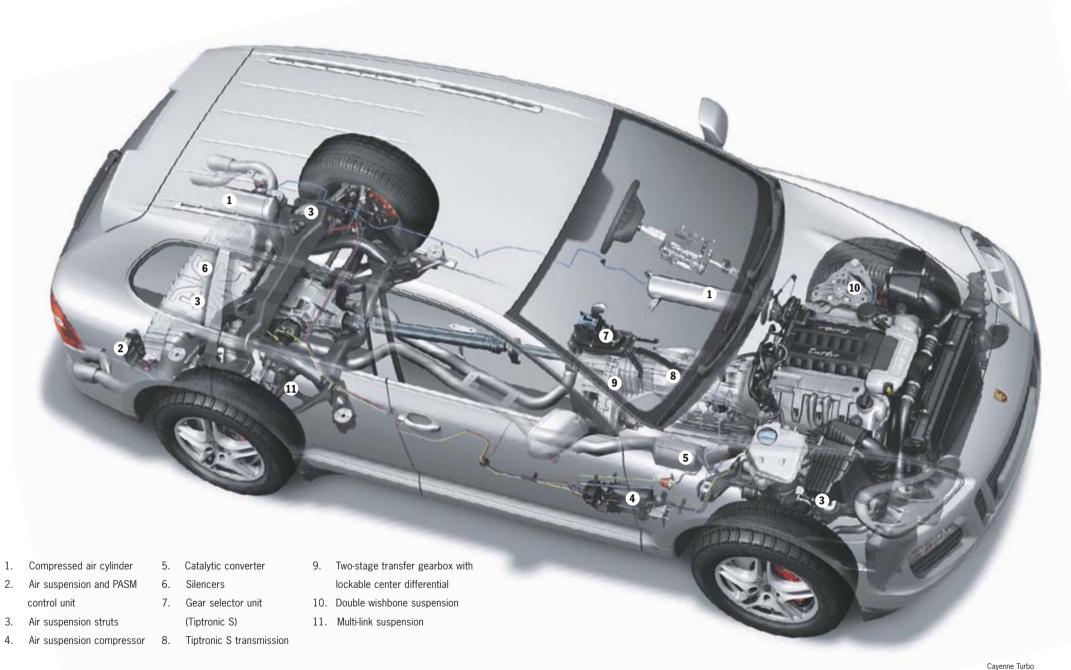
If one of the wheels is about to lose traction, PTM uses the ABD system to apply the corresponding brake. Torque that would normally be delivered to that side is transferred to the opposite wheel. If both wheels on one axle are in danger of slipping, ASR immediately intervenes and modifies engine output to maintain traction.

All PTM functions are fully automatic. As the driver, you simply choose High-range mode for road and track driving, or Low-range mode for additional off-road traction. This selection is made using a single control on the center console. In Low-range mode, the gearing is reduced to enable difficult off-road maneuvers or to maximize on-road traction with heavy trailer loads.



All-wheel-drive system

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## Uncompromising in design.



#### Front axle.

The power and responsiveness of a Porsche engine demand an equally responsive chassis. Only then is it possible to transmit the Cayenne's power onto the widest range of terrain.

To achieve that aim, the front axle design of the new Cayenne incorporates a subframe-mounted double wishbone suspension. The broad-based geometry between the upper and lower arms raises the top wishbones, reducing the forces acting on the front wheels and allowing greater precision of wheel location. The agility of the new Cayenne is significantly improved, too, with minimal interference on uneven terrain.

The subframe is secured on large rubber mountings that also help minimize road noise. What you hear instead is the satisfying sound of a Porsche engine.

The front suspension subframe is made from lightweight yet highstrength steel, specially constructed to increase the rigidity of the Cayenne models.

The resulting benefits include greater stability, greater comfort, and even greater active and passive safety.



#### Rear axle.

The Cayenne chassis requires an especially strong yet sophisticated rear axle. Designed to meet the high-performance criteria of a Porsche, the rear axle must also offer exceptional load-carrying capacity and towing capability.

To simultaneously resolve these conflicting demands, Porsche engineers developed a multi-link rear suspension. The lower

suspension links and track rods are constructed from steel, providing the additional strength needed to endure rugged off-road terrain.

The upper links are located high in the wheel arches and can therefore be constructed from lightweight forged aluminum to better serve the Cayenne's performance agenda.

The exact angle of the suspension struts results in two benefits: a longer suspension travel for greater

ride comfort, and a deeper, wider cargo area for enhanced utility.

Another advantage of the Cayenne's rear-axle design is its ability to minimize dive and squat under acceleration and braking. It also uses active toe-angle control to improve mid-corner stability and compensate for sudden load transfer, such as lift-off oversteer.

## Six speeds. A singular experience.

## Six-speed manual gearbox.

Standard equipment on the new Cayenne, the six-speed manual gearbox is designed to provide both precision control for road and track, and comfort and durability for all terrain.

As on every Porsche, the engineering priority was on performance. Each of the six ratios was carefully selected for spirited acceleration through the gears. The shift-lever throw is

short and precise, with minimal driver effort required.

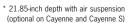
And while the gearbox casing is made of lightweight cast aluminum, its overall construction is robust, able to withstand the loads encountered under maximum torque.

As impressive as it is on-road, the six-speed manual transmission performs equally well off-road, in Low-range mode. Its main

components were specifically designed for the unique demands of off-road driving. So you can negotiate water crossings of 19.69-inch depth\* and gradients of up to 45 degrees with confidence. Special features include the Porsche Drive-Off Assistant, which enables hill starts without having to use the brakes when operating the clutch.

To ensure quiet, comfortable operation, the gear linkage is insulated from the drivetrain. Grab the shift lever and you will feel the engineering equivalent of a firm handshake. Vibration has been all but eliminated, thanks in part to executional subtleties such as a dual-mass flywheel fitted with torsionally elastic elements that reduce noise transfer from engine to gearbox.





## The convenience of an automatic. The pleasure of sequential transmission.

## **Six-speed Tiptronic S.**



Porsche engineers ushered in a new era of driving versatility when they debuted the Tiptronic transmission more than a decade ago. The latest evolution of the concept—now called Tiptronic S—is standard on the Cayenne S and Cayenne Turbo (optional on the Cayenne). Upgraded to match the revised horsepower and torque characteristics of the Cayenne engines, the new Tiptronic S provides smooth power delivery in both on- and off-road use.

In automatic mode, Tiptronic S can choose from multiple gearshift patterns, from a basic "Economy" program for normal

on-road driving to a "Sport" setting that maximizes the engine's performance potential. Each gearshift point is automatically selected based on current driving style and road conditions. Typically, Tiptronic S automatically changes gear precisely when you would have yourself. Within a short space of time, you'll be able to influence gearshifts using the throttle alone.

The benefits of Tiptronic S are particularly apparent in Sport mode. The immediacy of response, with practically no interruption in acceleration, is comparable with that of a manual gearbox.

If rapid throttle inputs are detected, Tiptronic S automatically selects the Sport gearshift pattern, so there is no need to use a kickdown function. When the throttle is released quickly, as when upon entering a corner, overrun downshifts are prevented.

Mid-corner gearshifts are also

suppressed, enhancing stability and safety.

Under heavy braking, Tiptronic S shifts down to maximize engine braking. An incline sensor seamlessly adjusts the gearshift pattern so that the vehicle remains in a lower gear when climbing or descending a gradient. This not only improves uphill acceleration, but also makes better use of engine braking on descent.

Tiptronic S is also engineered to optimize Cayenne's off-road performance. In Low-range mode, it automatically adapts the gearshift pattern. The Low-range gearing can be selected even while traveling at speeds of up to nine mph. You can also return to High-range mode at up to 18 mph when in neutral.

To help ensure the gearbox can endure the added stresses of off-road performance, Tiptronic S is equipped with a dedicated cooling

system. Specifically configured to match the capability of each Cayenne model, it is also designed for heavy-duty transport and towing applications, as well as off-road use.

Want to take a hands-on approach to piloting your Cayenne? Slide the Tiptronic S gear lever into the manual slot, and you'll be able to control shifts manually, either of two ways: Use the gear selector lever on the center console and you'll push the lever forward to change up; pull it backward to change down. Or use the "rocker"-type gearshift controls on the steering wheel to shift gears up or down. Whichever method you use, Tiptronic S responds with virtually no delay.

Even in automatic mode, you can change gears manually using the plus/minus control switches on the steering wheel. If there's no further manual input for a period of eight

seconds, Tiptronic S simply reverts to automatic mode.

An important new feature of Tiptronic S is called standby control. Designed to help reduce fuel consumption, standby control is activated whenever three things occur: The Cayenne is idling on level ground, it's in an active gear position, and the driver has the foot brake applied. In that situation, the input clutch automatically disconnects the engine from the driveline, thereby reducing engine load and cutting fuel consumption.

Tiptronic S also incorporates

Porsche Hill Holder, a technology
that enables easy hill starts. With
Porsche Hill Holder, you can stop
on an incline and start again
without having to use the brakes,
keeping the gear selector in the
Drive position.

Another advanced feature of Tiptronic S: a warm-up program that temporarily suppresses upshifts in order to maintain higher engine speeds. This accelerates the process of heating the catalytic converters and, as a result, emissions are significantly reduced.



Tiptronic S gear selector

## Power directed by precision.

### Steering.

To enhance the Cayenne's innate agility, both on- and off-road, Porsche engineers combined a variable steering ratio with precise valve settings on the power-steering system. Lock-to-lock travel is a modest 2.65 turns, while the turning circle is just 38.39 feet.

The steering wheel can be adjusted by 1.97 inches for reach and 1.57 inches for height. Both adjustment options are manual on the Cayenne and Cayenne S, and power assisted on the Cayenne Turbo. Power adjustment is also available as an option on the Cayenne and Cayenne S in conjunction with the optional Comfort or Sports Seat Packages.

The power adjustable steering column has a driver-selectable "Easy Entry" function. It raises the steering wheel clear of the seat whenever you enter or leave the car. The Driver Memory Package (now standard on the Cayenne S,

optional on the Cayenne) has a memory function that stores the driver's seat and exterior mirror settings. The Cayenne Turbo has a standard Enhanced Memory Package that also stores the driver's preferred steering-wheel position along with the seat, exterior mirror and seat-belt height settings. The Enhanced Memory Package is available as an option on the Cayenne and Cayenne S in conjunction with the Comfort or Sport Seat Packages.

The steering column itself consists of multiple collapsing sections linked by three universal joints. In the event of frontal impact, a special deformation element offers 2.76 inches of travel.

#### Servotronic.

Available as an option on the Cayenne and Cayenne S, standard on the Cayenne Turbo, Servotronic is a speed-sensitive power-steering system.

At higher speeds, Servotronic creates a firmer steering feel, with more direct response to steering inputs.

At lower speeds, such as when you are parallel parking, Servotronic gives the Cayenne a light, easy steering feel for enhanced maneuverability.



## On the all-wheel-drive Cayenne, it really is all about the wheels.

#### Wheels.

Porsche models have always been known for their distinctive wheel designs. The new Cayenne is no exception. The Cayenne model comes standard with the 17-inch Cayenne wheel. The new Cayenne S and Cayenne Turbo are each offered with a new wheel design: the 18-inch Cayenne S II and the 18-inch Cayenne Turbo II.

For even greater impact, you can choose from a range of new wheel options, including the 21-inch Cayenne Sport and 21-inch Cayenne SportPlus wheels, both in conjunction with wheelarch extensions painted in exterior color.

#### Tire Pressure Monitoring System.

Early warning of any drop in pressure is critical information. Cavenne provides it with the latest generation of the Tire Pressure Monitoring System (TPMS), a system that alerts the driver via an onboard computer display. In addition, the driver can check the individual pressures in all four tires via the multipurpose display in the instrument cluster. The new version of TPMS provides a much quicker pressure update after changing or reinflating a tire. It also provides a much faster calibration process after fitting a new set of tires, and prompt display of the new tire-pressure data. TPMS is standard on all new Cayenne models.



17-inch Cayenne wheel



18-inch Cayenne S II wheel



18-inch Cayenne Turbo II wheel

## Even on off-road terrain, you're literally floating on air.

## Air suspension.

The new Cayenne Turbo is equipped with an air suspension system. Featuring self-leveling ride-height control and PASM as standard, the system is also available as an option on the new Cayenne and Cayenne S.

The self-leveling control maintains a constant ground clearance, regardless of vehicle load. With the ride-height control, you can vary the ground clearance using a single control on the center console. The ride-height setting is indicated in the instrument cluster and on a special LED display on the center console. The following ride-height settings are available:

#### 1. Special Off-road Level.

Set 2.21 inches above Normal Level, it offers a maximum ground clearance of 10.67 inches.

Selectable at speeds of up to 19 mph for extreme off-road use.

Capable of approaching gradients of 31.8 degrees while clearing the front overhang of the Cayenne.

#### 2. Off-road Level.

Set 1.03 inches above Normal Level, it offers a maximum ground clearance of 9.49 inches. Selectable at speeds of up to 50 mph for off-road use.

#### 3. Normal Level.

The standard ride height on Cayenne models with steel-sprung suspension, it offers a maximum ground clearance of 8.46 inches.

#### 4. Low Level.

Set .94 of an inch below Normal Level, it offers a maximum ground clearance of 7.52 inches. Automatically selected when the Cayenne accelerates beyond 78 mph, it offers a firmer suspension, reduces aerodynamic drag and enhances Cayenne's agility.

#### 5. Special Low Level.

Set 1.33 inches below Normal Level, it offers a maximum ground clearance of 7.13 inches. Automatically selected when the car accelerates beyond 130 mph. Not manually selectable.

#### 6. Loading Level.

Set 2.12 inches below Normal Level, it offers a maximum ground clearance of 6.34 inches. This is the lowest available setting, enabling easier loading of the vehicle. Only selectable when vehicle is stationary. Once you drive off, the Cayenne's suspension automatically reverts to Normal Level.



Special Off-road Level: 10.67 inches



Normal Level: 8.46 inches



Loading Level: 6.34 inches

 Active suspension.

Because there's nothing passive about driving a Porsche.

**Porsche Active Suspension Management.** 



If the road surface becomes rough while traveling in Sport mode, PASM immediately changes to a softer rating to restore ride comfort and handling control. If the road surface improves, PASM automatically reverts to the original, firmer setting.

For even greater comfort, PASM (as part of the air suspension system) can also be combined with the new optional Porsche Dynamic Chassis Control (PDCC).

Standard on the new Cayenne
Turbo, PASM is an electronic
control system that adjusts the
suspension system to changing
driving styles and road conditions.
PASM is also available as an option
on the new Cayenne and Cayenne S
(in conjunction with optional
air suspension).

PASM uses a series of sensors to monitor the movement of the body under various forces and continuously adjusts the individual shock dynamics to help maintain an ideal balance of ride and handling.

PASM has three setup modes: "Comfort," "Normal" and "Sport."

If Comfort or Normal mode is selected, and the PASM-equipped Cayenne is driven assertively, the system automatically switches to a firmer suspension. As the suspension stiffens, the Cayenne becomes more stable and easier to control.



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## A new benchmark in handling precision.

## **Porsche Dynamic Chassis Control.**



Cornering at speed without PDCC

Two major objectives of Porsche chassis design are optimal road-holding and precision handling. Both of these can be further enhanced with Porsche Dynamic Chassis Control (PDCC). This optional aid is available for all new Cayenne models in conjunction with the optional air suspension

featuring PASM.

PDCC uses active anti-roll bars on the front and rear axles to significantly reduce lateral body movement during cornering maneuvers. PDCC reads the current steering angle and lateral acceleration forces, and responds by producing a stabilizing counterforce that precisely negates any swaying

force acting on the body. The result is optimal traction and occupant comfort in both onand off-road use.

PDCC automatically switches to Off-road mode when the Low-range gearing is selected. Essentially, this allows the two halves of each anti-roll bar to rotate further in opposition to each other, lengthening wheel articulation and improving traction on uneven surfaces. Since each individual wheel has greater contact with the ground, a greater proportion of drive torque is transmitted. Cayennes equipped with PDCC can be identified by the silver-colored chassis controls on the center console.

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Cornering at speed with PDCC

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**Off-Pavement** 

With the legendary all-wheel-drive 959, Porsche proved it could take the sports car beyond the pavement.

With the new Cayenne, it is proving just how far that journey can go.

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## At first, there were skeptics. Now, no one doubts that the Cayenne is every inch a Porsche.

## Off-road capability.

A Porsche is designed to extremely high standards—in dynamics, agility, safety, comfort and everyday practicality. With the new Cayenne models, those standards are no longer limited to paved roads. On virtually any terrain, it delivers the total Porsche experience.

All three Cayenne models were developed for the road—and much of the landscape beyond. Simply shift the transfer gearbox into Low-range mode and your Cayenne is ready for off-road use.

Porsche Traction Management (PTM) combines with enhanced Porsche Stability Management (PSM) to adapt a range of systems for optimal off-road performance. The seamless transition from road to trail includes the automatic selection of Low-range gearing, off-road ABS and ABD for optimal traction, and a maximum ground clearance of 9.49 inches (Off-road Level) on vehicles with air



20.4° ramp breakover angle<sup>1</sup>
24.7° ramp breakover angle<sup>2</sup>



19.69 inches max. wading depth<sup>1</sup> 21.85 inches max. wading depth<sup>2</sup>



28.6° front 31.8° front

max. approach/departure angle max. approach/departure angle

rear 22.8° rear 25.4°

<sup>1</sup>Vehicles with steel-spring suspension.
<sup>2</sup>Vehicles with air suspension at Special Off-road Level.



suspension (standard on the Cayenne Turbo, optional on Cayenne and Cayenne S).

If that's not enough, the air suspension system (standard on Cayenne Turbo, optional on Cayenne S and Cayenne) can be raised to a Special Off-road Level of 10.67 inches. At this setting, the new Cayenne models have an approach angle on gradients of 31.8 degrees and a departure angle of 25.4 degrees. The ramp breakover angle is 24.7 degrees. The center differential, part of the all-wheel-drive system, can be fully locked for use in the toughest offroad conditions.

All three models can negotiate gradients of up to 45 degrees. With the Hill Holder function in Tiptronic S, it is possible to stop on a hill and drive off again without ever using the brakes.

Porsche Hill Control (PHC) uses engine braking to enable slow and steady descent on otherwise challenging gradients at speeds of up to 12.5 mph. If one or more wheels begins to lose traction, PHC compensates by applying increased engine braking on wheels that retain contact with the ground. As it is no longer necessary to modulate the brake inputs, the driver of a Cayenne can concentrate on steering the vehicle.

The Cayenne and Cayenne S have a maximum wading depth of

19.69 inches. With the optional air suspension (standard on the Cayenne Turbo), the vehicle is secure to a depth of 21.85 inches. The Cayenne all-wheel-drive system reveals its full potential on loose off-road surfaces, such as mud, gravel and loose earth.

On extremely uneven terrain, your path can be smoothed with the optional Porsche Dynamic Chassis Control (PDCC). Featuring active anti-roll bars, PDCC is

automatically enabled whenever Low-range mode is selected.

By softening the anti-roll bars,
PDCC enables greater articulation
of each individual wheel while
substantially reducing body roll.
The effect is more than an
increase in the Cayenne's off-road
capability—The comfort of the
driver and passengers is greatly
enhanced, too.



PDCC in Off-road mode: increased wheel articulation





PDCC in On-road mode: reduced wheel articulation

Power and strength, shaped by necessity.

**Off-Road Technology Package.** 



Available as a factory-fitted option on all new Cayenne models, the Off-Road Technology Package incorporates an electronically variable and lockable rear differential as part of the standard all-wheel-drive system.

As on the standard center differential, the rear axle unit features viscous multi-plate technology. This is used to achieve optimal distribution of engine drive torque to each of the rear wheels.

In difficult off-road terrain, it is extremely important that the torque supplied to each of the wheels does not exceed the traction available—otherwise, the wheel will simply spin. The rear differential provides a highly efficient and automatic means of supplying that torque in the precise proportions required.

If one of the rear wheels begins to slip, the rear differential varies the

amount of torque transmitted through each drive shaft, thereby restoring traction.

In Low-range mode, the rear differential can be manually locked using the main off-road control on the center console. Then both rear wheels receive the same amount of torque, regardless of surface conditions.

The Off-Road Technology Package includes high-strength rock rails with integrated skid plates, a reinforced engine-bay guard, enhanced protection for the fuel tank and rear axle, and a second towing lug. For additional off-road protection, all models can be equipped with optional wheel-arch extensions with stylish black finish, and running boards with integrated skid plates.



**Safety** 

Pursue the thrill of driving.
But always keep safety foremost.

That's always been the Porsche philosophy. And the key to Cayenne's active and passive safety systems.

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## A shining example of active safety.

## Headlight system.

It's always a pleasure taking corners in a Porsche—thanks to Cayenne's powerful headlight system.

The Cayenne and Cayenne S are both equipped as standard with a new H7 projection-beam headlight system featuring manual leveling and reflective high-beam headlights.

Sidelights and indicators are neatly combined as horizontal units in the outer air intakes.

Headlight (Cayenne Turbo)

The new Cayenne Turbo comes standard with Bi-Xenon headlights featuring dynamic leveling and an integrated cleaning system, as well as static and dynamic cornering lights.

As you turn into a bend, the dynamic cornering lights automatically adjust to provide better illumination of the road. The system uses a series of sensors to monitor the speed, yaw velocity (speed of rotation around the vertical axis) and

steering lock to calculate the characteristics of each corner. Based on this data, the system then calculates the optimal angle of illumination, up to a maximum swivel angle of 15 degrees on the Bi-Xenon headlight units. As a result, the corner is easier to see, and potential obstacles are easier to identify. The system is also available as optional equipment on the Cayenne and Cayenne S.

The static cornering lights are extremely useful when turning



Cornering light function on Bi-Xenon headlights



Headlight (Cayenne and Cayenne S)

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at an intersection, even at lower speeds. Depending on the amount of steering lock applied, they can, for example, provide helpful illumination of an unlit side street.

In addition, all new Cayenne models are fitted with round H11 fog lights on the front apron.

#### Other exterior lights.

The new rear-light modules are a one-piece design incorporating the indicators, fog lights (right and left), color-contrasted reversing lights, brake lights, sidelights and reflectors.

The reversing and brake lights are now fitted with light-emitting diodes. LEDs can also be found in the highlevel third brake light.

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Cayenne's doors and tailgate are fitted with red safety lights that illuminate when the doors are opened. An additional pair of indicators is located in the front wheel arches, ensuring optimal visibility from front, side and rear.

## The power of a Cayenne to accelerate is matched by its capacity to decelerate.

## **Braking system.**

Porsche braking systems are widely acknowledged as the benchmark in performance and durability. The new Cayenne models continue to uphold this standard, offering excellent deceleration—even when fully loaded with five adult occupants, a full complement of luggage and a braked trailer load of up to 7,716 lbs.

All new Cayenne models are equipped with internally vented discs all around. This proven technology ensures consistent brake temperatures—a critical

factor in maintaining optimal brake performance during heavy use.

The front disc dimensions (diameter/thickness) are 12.99 in./1.26 in. on the new Cayenne, 13.78 in./1.34 in. on the new Cayenne S and 14.49 in./1.42 in. (front) on the new Cayenne Turbo.

All three models have six-piston monobloc aluminum brake calipers at the front and four-piston equivalents at the rear.

To compensate for its increased engine performance, the

Cayenne Turbo has much larger front calipers.

As a visual differentiation, the calipers are finished black on the Cayenne, silver on the Cayenne S and red on the Cayenne Turbo.

Braking is assisted by a tandem booster and a large-diameter brake master cylinder. The footoperated parking brake uses a Duo-Servo system mounted on each of the rear discs. The new evolution of Porsche Stability Management (PSM) features two additional brake functions:



Cayenne: standard front brake with 12,99-in, disc



Cayenne S: standard front brake with 13.78-in, disc



Cayenne Turbo: standard front brake with 14.49-in. disc



electronic brake pre-fill prior to an emergency stop, and all-wheel brake assist. (See page 68 for more information on PSM.)

The pistons on the front calipers on all new Cayenne models are fitted with temperature-resistant synthetic insulation elements. By reducing heat transfer from the pads to the brake fluid, consistency and performance are enhanced.

The pads themselves are equipped with individual wear sensors. When new pads are required, a warning light is illuminated in the instrument cluster. The brake lines serving each of the rear calipers feature special protection against rocks and other off-road debris.

## **Expecting the best means preparing for the worst.**

## **Porsche Stability Management.**

All Cayenne models are equipped with a new evolution of the Porsche Stability Management (PSM). This electronic control system uses a range of functions—including Anti-Lock Brakes (ABS)—to help stabilize the vehicle in hazardous road scenarios.

PSM uses a range of sensors to monitor the direction, speed, yaw velocity (speed of rotation around the vertical axis) and lateral acceleration of the vehicle. Using this information, it is possible to calculate the actual direction of travel at any given moment. If the Cayenne begins to oversteer or understeer. PSM applies selective braking on individual wheels to restore stability. If necessary, PSM can also intervene in the engine management system to temporarily modify the amount of drive to the wheels.

The new evolution of PSM has two new functions which help to

further reduce braking distances. If the throttle pedal is released suddenly, PSM automatically readies the braking system.

The pressure in the brake lines is marginally increased, bringing each of the pads into light contact with the corresponding disc. If the driver then pushes the brake pedal, the calipers respond more quickly—potentially reducing braking distance.

In an emergency stop—gauged when the pressure on the brake pedal exceeds a certain threshold —the Brake Assist function uses the PSM hydraulics to apply maximum braking force at all four wheels.

PSM makes a significant contribution to safety— within the laws of physics. It compensates for load transfer caused by throttle and brake inputs up to the maximum degree of lateral acceleration. It also enhances Cayenne's driving

dynamics and directional stability when accelerating on inconsistent road surfaces. PSM can also intervene through the locking center and axle differentials as part of Porsche Traction Management (PTM).

Other advanced braking features include a special control strategy in the ABS for braking on loose surfaces such as gravel or snow. By briefly locking the wheels, a wedge is formed ahead of each tire, providing additional traction to help slow the vehicle.



## 50 years in motorsports has taught Porsche to place safety on a pedestal.

## Airbags.

All Cayenne models are equipped with dual front Advanced Airbags that offer upper-body protection with an added degree of intelligence: A weight sensor in the passenger seat automatically switches the passenger airbag off when unoccupied or fitted with a child seat. These are augmented by a side-impact protection system featuring a thorax airbag in each front seat. Curtain-type airbags on each side of the roof provide optimal head protection for both rows of seats. When these are deployed, they form a protective cushion along the side of the vehicle.

To provide better detection of a head-on collision, two additional impact sensors are located at the front of the new Cayenne. As a result, the front airbags can be more accurately deployed in response to the specific characteristics of what can often be a complex impact scenario.



The driver and front-passenger airbags use a gas generant based on an organic propellant. The airbags are thus lighter, more compact and easier to recycle.

A rollover detection system provides additional protection in the event that the vehicle overturns. Using sensor-acquired data, the rollover detection system enables early deployment of the curtain airbags and triggers the seat-belt pretensioners.

#### Interior safety features.

The new Cayenne models feature three-point seat belts at all seating locations, as well as seatbelt pretensioners (front and outer rear seats) and force limiters (front seats only). The outer rear seats are equipped with the Lower Anchors and Tethers for CHildren (LATCH) anchor system as standard. This system is specifically designed to attach the child seat directly to the seat. Porsche Child Seats are available through Porsche Tequipment.

Note: To avoid risk of injury from a deploying airbag, it is not recommended to place a child age 12 or under in a front seating position. Please see your authorized Porsche dealer for information on child seat availability and specific applications.

## Safety isn't something Porsche adds on. It's built in.

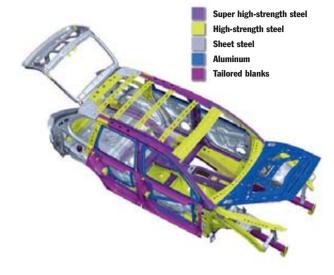
## **Bodyshell construction.**

The lightweight yet highly rigid steel body of the Cayenne is a decisive factor in the vehicle's enhanced passive-safety engineering system.

The triple-skin structure with robust three-box sections provides exceptional strength and occupant protection, particularly in the all-important roof and pillar areas.

In the event of an accident, a system of side- and crossmembers at the front of the vehicle helps to channel impact energy in a safe and predetermined manner.

Energy is absorbed by a three-tier deformation zone that shields the passenger cell. In areas with only limited capacity for deformation, the interior is protected by high-tensile steel reinforcements, including side-intrusion beams in each of the doors.



With its combination of high strength and consistent deformation properties, the multi-phase steel used throughout the Cayenne body fulfills two key safety requirements.

Tailored blanks are used throughout the vehicle to create effective crash-protection structures. Among the areas that benefit from this technology are the lateral members and roof rails.

As a result of all these measures, the new Cayenne models comply with all legal requirements for all types of crash protection, including frontal, side, diagonal and rear impact, as well as roll-over damage and frontal- or sidepost impact.



## **Environment**

Pushing to the limit.
Yet recognizing responsibility.
Going to every extreme, doing so in every respect.

Meeting the highest standards of all-terrain performance through equally high standards of efficiency.

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## The secret of Porsche performance? Waste nothing.

## **Exhaust emissions.**

The new Cayenne models are equipped with the very latest in emissions technology. As a result, they comply with stringent exhaust emissions standards. Many pollutants have been eliminated at the source, thanks to an advanced engine concept featuring Direct Fuel Injection (DFI), OBD II onboard diagnostics, VarioCam Plus (on Cayenne Turbo and Cayenne S) and variable-valve timing(on Cayenne).

Any impurities that do leave the engine are immediately contained by a system of primary and secondary catalytic converters on each of the two exhaust lines. Each catalyst has a rapid warm-up cycle so emissions are reduced sooner when starting from cold.

Another important feature on all Cayenne models is the use of twin oxygen-sensor circuits. Each bank of cylinders has a separate control system used by the engine management system to establish the optimal air/fuel mix and monitor the efficiency of the catalytic converters.



#### Fuel efficiency.

On the new Cavenne models. Porsche engineers have proven that it's not necessary to decrease fuel efficiency in order to increase performance. Led by their use of Direct Fuel Injection (DFI) technology, Cayenne engines provide a major increase in power output, while achieving greater fuel efficiency. The benefits of DFI are combined with those of VarioCam Plus in the V8 engines and variable-valve timing in the Cayenne V6. Both of these systems offer a significant increase in fuel efficiency and a reduction of exhaust emissions. Added to these measures is the Cayenne's revised aerodynamic shape. The coefficient of drag was considerably reduced, helping Cayenne cut drag and further boost fuel efficiency.

#### Fuel system.

New technologies have also been used to eliminate fuel evaporation. The non-return fuel-supply system provides a considerable reduction in vapor emissions. The fuel lines are partly constructed from steel, while those carrying vapor are made from multilayer plastics. A large active-carbon filter and multilayer plastic fuel tank help to further reduce evaporation. A leak-detection pump is also included to monitor the integrity of the fuel tank system.

#### Acoustics.

Think of a Porsche and what do you hear? Perhaps the most distinctive sounds on the road. A sound created not just by the engine, but also by the absence of unwanted noise.

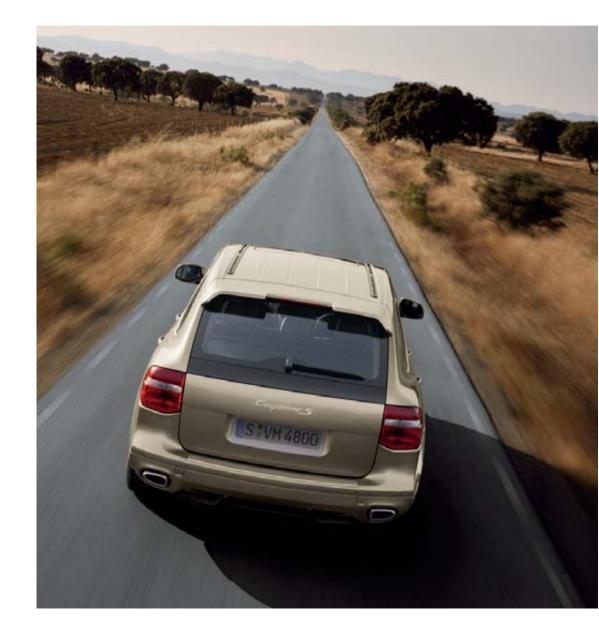
Mechanical noise is eliminated within the engine by increasing the

rigidity of individual components and using lighter and more temperature-resistant materials. Tolerances are reduced, and with them noise, which means there's no need for engine encapsulation.

Other features that enhance the acoustics include the air intake system and heavy-duty silencers in each exhaust tract. Both of these features remain fully effective throughout the life of the vehicle.

Tire noise was minimized during the development process, in collaboration with our official tire partners. And with the Cayenne's refined aerodynamic shape smoothing a path through the air, there's less susceptibility to wind noise.

As a result of all these measures, the Cayenne models easily comply with all noise regulations worldwide. Yet inside the cockpit, there's still that exquisite sound you've come to expect from a Porsche.



## A Porsche is built to endure.

## **Materials and recycling.**

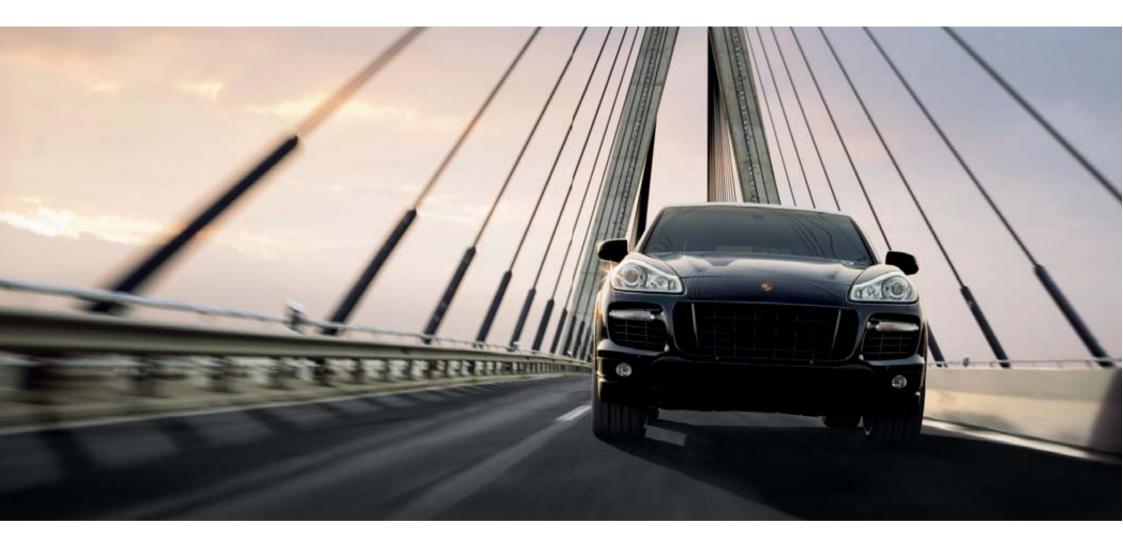
Porsche made its name in the demanding arena of endurance racing, where components must be made to last. That philosophy guides the company's approach to passenger vehicles as well. The lightweight exhaust on the new Cayenne models, for example, is constructed from highly durable stainless steel.

As you would expect, the engineering of lightweight components is a fundamental part of Porsche design. By using a greater proportion of highstrength materials, such as special steels, aluminum alloys and synthetic composites, Porsche engineers have reduced the weight of each vehicle, and therefore its fuel consumption.

The entire Porsche production process is designed with the environment in mind. Every Porsche model is entirely free of asbestos, CFCs and components manufactured using CFCs. All

legal requirements with respect to recycling are fulfilled. Materials are labeled enabling better recycling of end-of-life vehicles and individual parts and assemblies. While more than 85 percent of the car can be recycled using current technologies, chances are your new Cayenne may never need recycling at all. After all, approximately two thirds of all the cars we've ever made are still on the road today. This exceptional longevity is fundamental to the Porsche philosophy and our positive use of resources.





## **Comfort and Personalization**

Experience freedom.

Go where you want.

In a car where everything
is precisely where it ought to be.

Where exceptional ergonomics and the finest materials create a special driving environment.

Where attention to detail and generous space provide excellent comfort.

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Anyone familiar with the layout of a Porsche interior will feel instantly at ease sliding behind the wheel of the new Cayenne. It's only when you glance over your shoulder, at the spaciousness and utility afforded the four-door configuration, that Cayenne reveals itself to be unlike any Porsche you've ever experienced.

Directly before you is the signature Porsche instrument cluster, with its five round gauges presenting themselves with bold simplicity.

Grip the steering wheel, and you form an immediate connection with your Cayenne.

In the new Cayenne and Cayenne S, the steering wheel comes with manual height and reach adjustment. In the new Cayenne Turbo, the steering wheel is electrically adjustable and automatically heated.

Standard on all Cayenne models is a three-spoke multifunction steering wheel. With the integrated function

keys, you can control a range of systems with both hands on the wheel and your eyes attentive to the road ahead.

All three models come with leather upholstery on the seats, steering

wheel, gear lever/selector, door handles, center-console grab handles and door-panel armrests. On the new Cayenne Turbo, the leather extends to the dashboard, center console, including armrest, door panels and steering-wheel airbag module.

Cayenne Turbo with Natural Leather interior in Black/Natural Chestnut Brown



# Fully informed. At a single glance.

#### Instruments.

The elegant cluster of five round instruments is familiar to every Porsche driver.

To the left and right of the large central dial are the analog tachometer and speedometer. Your speed is also displayed in digital form, in the multipurpose display in the central dial. This displays other key information such as current gear selection (Tiptronic S), Sport status when Sport mode is selected, Tire Pressure Monitoring System (TPMS), system display in PTM Off-road mode, and onboard diagnostics messages. It can also be used to configure and view information from the onboard computer.

The Cayenne Turbo has a five-inch color display as standard. Its generous size and high resolution enable easy legibility at all times.

The Cayenne and Cayenne S are both equipped with a three-

inch dot-matrix multipurpose display. This is augmented by additional digital fields for the clock and odometer in the tachometer and speedometer dials, respectively.

The far-left dial on all Cayenne models contains the oil temperature gauge. The far-right dial displays the turbo boost pressure (Cayenne Turbo) or battery voltage (Cayenne and Cayenne S).



Instruments (Cayenne)



Instruments (Cayenne S)



Instruments (Cayenne Turbo)

## Long-distance comfort on the road. Lateral support for performance.

Seats.



Cayenne Turbo with Natural Leather interior in Black/Natural Chestnut Brown

Cayenne brings a level of comfort to driving a Porsche.

Both the new Cayenne and Cayenne S come with 12-way electrically adjustable front seats as standard. As well as fore/aft, height, backrest and seat adjustment, both front seats are

equipped with lumbar supports featuring electrically adjustable height and depth.

The Cayenne Turbo has a special Comfort Seat Package (optional on the Cayenne and Cayenne S) featuring 12-way electrical adjustment and an enhanced memory function for up to three sets of occupant preferences.

The driver-side memory stores seat, exterior mirrors, steering-wheel and belt-height positions. On the passenger side, up to three seat positions can be saved and retrieved as required.

Available as an option on the Cayenne and now standard on the Cayenne S is the Driver Memory Package. This provides a memory function for the driver's seat and exterior mirrors.

All seats are ergonomically designed for the optimal balance of comfort and feedback from the road. In addition, the side bolsters provide excellent cornering support.

The comprehensive range of adjustment options makes it easy to find the ideal driving position, regardless of physical build. For added comfort, both front seats have adjustable head restraints.

The seat-belt buckle is mounted on the seat, which means the belt is always correctly positioned—no matter how the seat is adjusted. Other important passive safety features include seat-belt pretensioners, force limiters and height adjusters (electrically adjustable on the Cayenne Turbo).

All Cayenne models are also available with an optional Sports Seat Package (no-cost option on the Cayenne Turbo). Featuring higher side bolsters and a contoured backrest, each seat provides greater lateral support. All adjustment options are identical to those on the Comfort Seat Package (standard seats on the Cayenne Turbo).

All front seats are available with an embossed Porsche Crest on the head restraints as an option.







Sports Seat

Generous space for up to three adult passengers. With the option of additional loadspace.

Rear seats.



Comfort and safety are essential in a Porsche—at every seat position. In the new Cayenne models, those qualities are combined with exceptional practicality. To enable variable use of the luggage compartment,

the rear-seat backrest has a 60/40 split-folding capability.

All seats have three-point belts and detachable head restraints.

On the outer rear seats, the head restraints are height-adjustable.

For added protection, energyabsorbent elements are used on the seats, doors, roof pillars, roof, and upper seat-belt deflection points.

Additional features include a nocost optional load-through area with ski bag as an integral part of the rear-seat backrest.

The Porsche range of child seats provides safety and comfort for all passengers up to 12 years of age. Available from Porsche

Tequipment, they install quickly and easily on the outer rear seats, which are fitted with the LATCH (Lower Anchors and Tethers for CHildren) anchor system as standard.

Note: To avoid risk of injury from a deploying airbag, it is not recommended to place a child age 12 or under in a front seating position. Please see your authorized Porsche dealer for information on child seat availability and specific applications.

### Genuine comfort is reflected in every detail.

### Storage compartments.

Achieving genuine comfort requires careful attention to detail, which is why all new Cayenne models offer a wide range of easily accessible and versatile storage options for all occupants. In addition to the glove compartment, door storage compartments and pockets on the front-seat backrests, all models come with a handy drawer beneath the front-passenger seat (not on vehicles with PCM), a sunglasses holder in the roof console and a two-layer compartment beneath the center-console armrest.

There are also two adjustable cupholders at both front and rear, featuring a variable diameter that can hold a wide range of drink containers.

#### Interior lighting.

For added convenience, all new Cayenne models are equipped with door entry lights and generous illumination of the tailgate area. Dedicated lighting is also provided for the luggage compartment, ashtray and glove compartment.

Other interior lighting features include a roof-light delay, door-handle illumination, front and rear footwell illumination, reading lights for all five seats and illuminated vanity mirrors in the sun visors. Combined, they make Cayenne an illuminating experience, day or night.

#### Power outlets.

All new Cayenne models have a total of six 12-volt power outlets (five in conjunction with no-cost optional Non-Smoker Package). Three outlets are located in the front-seat area (two with Non-Smoker Package), one in the rear-seat area, and two at the side of the luggage compartment. Each outlet can be used at any time to power electrical appliances such as a laptop computer.



Front cupholders



Glove compartment

#### You don't have to drive to have fun in a Porsche.

## **Porsche Rear Seat Entertainment System.**

Available as a factory-fitted option from Porsche Exclusive or retrofit accessory from Porsche Tequipment, the new and substantially improved Porsche Rear Seat Entertainment System is comprised of two video displays, one media player, two wireless infrared headphones and one remote control. The media player is now incorporated into the front- passenger-seat video display. This leaves the middle seat free for passengers.

The system is compatible with all standard media formats (e.g., CD, DVD and MP3). A digital anti-shock memory ensures continuous, uninterrupted play. It is also possible to connect two separate and individually selectable AV sources, such as a game console or digital camera.



Porsche Rear Seat Entertainment System

The system complies with the usual Porsche standards of safety and ergonomics, and blends harmoniously within the passenger compartment.

The seven-inch swivel-mounted TFT (thin film transistor) displays are trimmed in matching interior leather and mounted on the front-seat backrests.

## Perfect conditions. Whatever the weather.

## Air-conditioning systems.



Four-zone air conditioning for rear-seat area



Air-conditioning control panel (cover open) below PCM



Maximum visibility.

Maximum protection.

The new Cayenne models are equipped as standard with heat-insulating tinted glass featuring a grey top tint on the windshield. As an optional alternative, there's a special thermally insulating laminated glass, offering additional protection against infrared radiation.

### Water-repellent side windows.

The front side windows on the new Cayenne models have a water-repellent finish\* that automatically disperses moisture and dirt. The result: optimal visibility in poor weather conditions.

Privacy glass

The new Cayenne models all feature standard privacy glass on the rear and rear side windows.

Privacy glass.

The Cayenne S and Cayenne Turbo feature a fully automatic climate-control system (optional on the Cayenne).

The system features a simple push-button automatic mode. It comes with glove-compartment cooling as well as independent temperature control on both front seats. Special features include an active-carbon filter—to exclude dust, pollen and external odors—as well as an air-recirculation system that is automatically

enabled when the external air quality falls below a given level.

When Cayenne is stopped, the passenger compartment can be heated for up to 20 minutes using the residual warmth of the engine.

The new Cayenne has a manually operated air-conditioning system as standard.

All new Cayenne models can also be equipped with optional four-zone air conditioning. This system provides independent air conditioning for the rear cabin area, with separate temperature controls for left and right. The control panel is located on the rear of the center console. The rear air conditioning can also be adjusted from the front seats.

As the "four-zone" name suggests, the driver and front passenger also have separate air conditioning. All controls are ergonomically designed for easy access and operation.

\*Surface finish may require occasional renewal.

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## **Enhancing convenience and safety.**

#### Wiper system and rain sensor.

The front wiper system has two fixed speeds and an automatic rain-sensor function. If your road speed slows to less than 2.5 mph while the wiper system is active, it automatically switches to rainsensing mode. The system reverts to the original wiper setting when the road speed increases to more than five mph.

Washer fluid is delivered via two heated fan-type jets, ensuring uniform coverage of the entire windshield area.

The rear wiper system is also designed for maximum visibility in all conditions. The rear washer jet is located on the roof spoiler, close to the high-level brake light.

#### ParkAssist.

This audio/visual parking aid is standard equipment on the Cayenne Turbo and optional on the Cayenne and Cayenne S. The system uses an acoustic signal and front/rear displays to warn of any obstacles at the front or rear of the vehicle. A total of 12 sensors are neatly concealed in the front and rear aprons.

The front and rear LED displays are located on the dashboard and rear rooflining, respectively. A series of green, yellow and red lights indicates the relative proximity of any obstacle.

An intermittent warning tone increases in rapidity as the obstacle is approached.



Rain sensor

#### Rearview Camera.

The optional Rearview Camera supplies high-resolution, high-contrast color pictures to the PCM display. The system is useful during reversing maneuvers or when preparing to fit a trailer. In off-road terrain, it can also be used to avoid otherwise unseen hazards. When not in use, the camera is automatically retracted to protect the lens.



Rearview Camera retracted



Rearview Camera extended



Rearview Camera display in PCM

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### **Comfort, ergonomics and security.**

#### Anti-theft protection.

The new Cayenne models are all equipped with a transponderbased immobilizer system and anti-theft alarm featuring ultrasonic interior monitoring.

The alarm circuit includes all four doors, engine lid, tailgate, rear window, interior, ignition and a trailer when attached.

Interior monitoring can be deactivated via a switch next to the driver's seat, under the seat-belt adjustment.

The electronic immobilizer is automatically enabled when the key is not in the ignition. When the key is inserted, the system immediately confirms the ID code and the engine can be started as normal.

The steering column is automatically locked when the key is removed from the ignition.

#### Porsche Entry & Drive System.

With this optional system, you can use your Cayenne without the use of a standard key.

To enter your Porsche, all you need is to have the special electronic key in your pocket. As soon as you touch the door handle, the sensors register your presence and the key transmits its encrypted access code for verification. If the code is accepted, the doors are automatically unlocked and you can step inside. When you're ready to begin driving, simply turn the ignition key. After checking the code on your key once more, the system disables the immobilizer and starts the engine.

At the end of your trip, you can lock the vehicle by pressing a button on the outside of the door handle. If the key is identified correctly, your Cayenne is locked, the immobilizer is enabled and the steering column is secured.

#### Cruise control.

All the Cayenne models are equipped with standard cruise control.

Offering comfort and convenience on long-distance journeys, it is available for use at any speed beginning at 19 mph. The system is operated using a button on one of the control stalks.



Side and tilt glass moonroof

#### Slide and tilt glass moonroof.

Available as an option on all new Cayenne models, this power-operated slide and tilt glass moonroof is made from tinted single-pane safety glass and has a manually adjustable shade.

The roof position is easily adjusted using a single illuminated rotary control. An anti-jam facility is also included, as on all the electric windows.

### Light Comfort Package.

This optional package includes a "Welcome Home" lighting function. When you arrive at a destination after dark, the headlights remain illuminated for a user-defined period, lighting your path from the car. Other features include courtesy lights on both exterior mirrors, automatic headlight activation, and automatically dimming interior and exterior mirrors.

#### HomeLink®.

This convenient standard feature integrates a garage-door opener into the roof console and stores remote settings for up to three devices. The system can also control compatible home-lighting systems and alarms.

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**Explore the world. In every direction.** 

Panoramic roof system.



The power-operated panoramic roof system is available as an option on all new Cayenne models. Made from laminated safety glass, it has a total surface area of almost four times the slide and tilt moonroof. Even when closed, it provides a unique "open top" driving experience (see Figure a). The panoramic view can be enjoyed from all seat positions in every type of weather.

A key advantage of the panoramic roof system is its variability. The roof consists of three movable segments (1-3) and one fixed segment (4). When the roof is opened, the forward segment (1) is tilted upward to act as a wind deflector (see Figure b). With the aid of special flaps, it reduces turbulence and noise, even when the vehicle is traveling at higher speeds. The two middle segments (2 and 3) can be opened separately to provide a stream of fresh air to the front or rear. To do this, one segment slides above or

below the other. For the full opentop driving experience, both central segments can be fully retracted to the rear (see Figure c). It is also possible to tilt segment (3) above the rear seats to provide additional ventilation. In all, there are 15 variations to choose from.

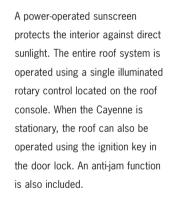




Figure a



Figure b



Figure c

## Only one thing compares to the sound of your Porsche. The sound of your Porsche.

## Porsche audio systems.

Sound is an integral part of the Porsche driving experience— which is why the interior acoustics of each Cayenne model were a key consideration during the development process.

Each model is equipped with a high-quality audio system as standard: Cayenne and Cayenne S, with the CDR-23 CD radio; Cayenne Turbo, with Porsche Communication Management (PCM) and the Bose® Surround Sound System. XM® Satellite Radio is also available as an option in conjunction with PCM.

Working in concert with the engine acoustics, they provide a powerful aural experience.

#### CDR-23 CD radio.

The CDR-23 audio system is standard equipment on the new Cayenne and Cayenne S. Included with the package are a CD drive,

12 loudspeakers and four 25-watt output stages. In radio mode, the RDS two-tuner frequency diversity function provides seamless switching to the strongest available signal for your chosen FM station. The result: optimal reception at all times. Dynamic Autostore searches the airwaves throughout your trip to provide the nine strongest signals at any time. Other features include speed-dependent volume control and a high-resolution dot-matrix display offering excellent night legibility.

#### Instrument cluster display.

The instrument cluster can display a range of audio and communications data. The audio system, for example, can supply the name of the current radio station or the tracks on the current CD. The display can also be used for visual route-guidance instructions from PCM as well as

details of incoming calls (only in conjunction with optional PCM telephone module).

#### MOST bus technology.

Audio and communications data is exchanged throughout the Cayenne using a digital bus technology called MOST.® Highspeed fiber optics are used to transfer information between the various system components with no loss of quality en route. The MOST bus system is particularly beneficial when processing audio signals. The result: a powerful, precision sound experience.

#### CDC-4 CD-changer.

This optional CD-changer holds up to six CDs and has a six-second anti-shock memory. The unit is operated using the standard CD controls.

Navigation, communication, entertainment.

## **Porsche Communication Management.**



Porsche Communication Management (PCM)

This powerful entertainment and communications system is standard in the Cayenne Turbo and optional in the Cayenne and Cayenne S. Key features include a high-resolution color display with 16:9 aspect ratio, a high-performance MP3-compatible CD radio with two-tuner frequency diversity, DVD-based satellite navigation and additional onboard computer functionality.

#### Audio system.

A dual-channel RDS tuner allows you to search for stations by format and store up to 40 presets. Radio station names and CD tracks are displayed on the PCM screen and inside the instrument panel's center dial. The integrated CD drive is MP3-compatible.

## A higher form of entertainment.

#### XM® Satellite Radio.

### Onboard computer.

The PCM computer supplies a wide range of information, including date, time, average fuel consumption, average speed, and time and distance traveled. It can also monitor the remaining range from the fuel on board, as well as the distance to destination and the estimated time of arrival.

#### Navigation system.

At the heart of PCM is a GPS navigation system. Selecting a destination is extremely simple, with a range of input options to choose from. The system lets you enter a street address or intersection, select your destination from a list of menus, and display by a category. You may also simply point and click using the onscreen map.

#### Extended navigation module.

This optional addition to the PCM navigation system enables automatic navigation along a previously recorded route (reverse route navigation). It also facilitates compass and GPS-based navigation in regions not covered by your navigation DVD. When off-road, the current vehicle location is permanently displayed on the PCM terminal screen.

#### Telephone module.

Available as an option, this GSM telephone module has an 8-watt transmitter and convenient handsfree facility. An optional handset with keypad and display is also available. To assist in optimal reception, the telephone antenna is incorporated within the roof spoiler.

#### Electronic logbook.

This optional addition to PCM enables you to automatically record the mileage, route distance, date and time, as well as starting location and destination for every journey. Data can be downloaded from PCM and processed on a PC using software included with the package.

Note: For safety reasons, drivers should not use mobile phones while the vehicle is in motion.

Note: Telephone module requires SIM card.



XM Satellite Radio

Whether you're cruising along a wide-open stretch of interstate highway or navigating the twists and turns of an off-highway trail, PCM's optional XM Satellite Radio\* makes it easy for you to bring your favorite music and entertainment along for the ride.

With over 170 crystal-clear digital channels, XM gives you the most entertainment choices, wherever you are. XM provides the most

music, with 69 commercial-free music channels. A variety of music genres is available: country, classical, hip-hop, rock, jazz, blues, Latin and dance.

Beyond music, XM offers channels for sports, talk and entertainment, comedy, news and kids programming—all yours. XM is incredibly easy to use, becoming your new lifestyle

accessory for every mood, schedule and destination.

Porsche selected XM to be its exclusive long-term provider of satellite-delivered audio and data services. XM Satellite Radio is available as a factory-installed option on all Cayenne models and includes a 90-day free trial subscription.

<sup>\*</sup>To learn more about XM and what they offer, visit xmradio.com.

## Panoramic sound at all seat positions.

## **Bose® Surround Sound System.**

Porsche drivers appreciate sound. The distinctive acoustics of the engine and exhaust are a major part of the Porsche driving experience. Now you can add an extra dimension with an optional Sound Package for the new Cayenne and Cayenne S.

The Bose Surround Sound System provides the ultimate in digital incar audio. Standard equipment on the Cayenne Turbo, it is compatible with both Porsche Communication Management (PCM) and the CDR-23 CD radio. The system is designed to blend CD and radio output with the unique acoustics of the Cayenne models. This is achieved by tailoring all system components to the generous interior and adjusting sound output using Bose Signal Processing (BSP).

Simply push a button and you're immediately immersed in the lifelike audio of Bose Automotive Surround Sound. This proprietary

technology uses additional audio channels at front and rear to create a rich and panoramic sound.

The digital amplifier supplies 250 watts of output through eight separate channels. A total of 13 loudspeakers in the dashboard, doors, luggage compartment and D-pillar, together with a



Loudspeaker (Bose Surround Sound System)

100-watt subwoofer in the spare wheel well, provide balanced audio output throughout the Cayenne interior. The Bose Nd® bass speakers are neatly integrated within the doors, thanks to their ultra-slim profile and lightweight design.

Special features include AudioPilot® noise compensation technology, which uses a microphone in the cockpit to monitor ambient sound and provide real-time adjustment of all output. The results are greater clarity and more consistent sound, with no need for continuous manual adjustment.

A dynamic loudness function automatically enhances the lower frequencies in low-volume sound. In doing so, it compensates for the reduced sensitivity of the human ear to the lower end of the frequency spectrum. The results are lifelike music quality at any volume, with rich layers of bass and natural voice reproduction.



The system can even reach concert-hall volumes with no perceptible distortion.

Active compression circuitry enables precision adjustment of the dynamic range for a more enjoyable quality of sound.

Combined, these technologies create the perfect accompaniment to the distinctive acoustics of your Porsche.



**Transport** 

Strength.
Endurance.
Versatility.

Three of the qualities that define every Porsche.

The new Cayenne models bring a new facet to the concept of high performance.

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## **Spacious and easy to use.**

## Luggage compartment.

The new Cayenne models use power and performance for more than just driving pleasure. In addition to the spacious passenger area, all three models have a generously proportioned and variable rear luggage compartment. The tailgate comes with a power-closing function as standard. A Power Tailgate is available as an option, offering a programmable height setting and push-button opening and closing.

The luggage compartment has more than enough space for up to four large suitcases: a total volume of approximately 19.1 cu. ft.

Total load capacity is 1,731 lbs. in the new Cayenne (based on manual transmission), 1,841 lbs. in the new Cayenne S and up to 1,598 lbs. in the new Cayenne Turbo. The cargo space floor is completely flat and the tailgate sill is low.

Even when the Cayenne is heavily loaded down, the self-leveling

air suspension on the new
Cayenne Turbo (optional on
Cayenne and Cayenne S)
maintains a constant ground
clearance at front and rear.

The Air-Suspension Package also includes ride-height adjustment, enabling the car to be lowered by approximately 2.12 inches below the normal ride level for easier loading of heavy items. When moving off, the suspension automatically reverts to the standard ride-height setting (Normal Level).

The rear-seat backrest features asymmetric split folding (40%/60%) and can be combined with a load-through feature with an optional (no-cost) ski bag. The load-through feature will also fit a snowboard. When the backrest is fully folded, the loadspace expands to as much as 62.5 cu. ft.

Even when loaded to the maximum weight, each Cayenne model

remains agile, responsive and easy to control.

Items can be stored out of view and protected from the sun using a retractable cover with detachable storage cassette.

Two additional storage spaces (one on vehicles with four-zone air conditioning) are discreetly concealed behind the side trim panels in the luggage compartment (volume may vary depending on optional equipment).



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Luggage compartment with larger section of rear-seat backrest folded (40%/60%).

Loading option:

4 x Carfit trolley case (L) 2 x Carfit travel bag (M)





Luggage compartment with rear-seat backrest fully folded.

Loading option:

- 3 x Carfit trolley case (L)
- 3 x Carfit trolley case (M)
- 2 x Carfit travel bag (M)
- 2 x Porsche golf bag





Loading option with rearseat backrest raised and loadspace cover extended:

3 x PTS trolley case—Ultralight (XL)

Loading option with rear-seat backrest raised and loadspace cover retracted:

1 x Porsche diesel pedal tractor 1 x Porsche stroller

## **Convenient access and loading.**

## **Power Tailgate.**

The rear door on the new Cayenne models opens high for easy access and loading.

For the 2008 Cayenne, a new standard Power Tailgate includes easy operation via controls on the driver door, tailgate and key remote. The new Power Tailgate is designed for comfort and day-to-day usability. As an added feature, the opening height is user-programmable.

To load smaller items, the rear window can be opened independently using either the key remote or a button next to the rear wiper.



Rear window

## Making even more of the luggage compartment.

## **Cargo Management System.**



Cargo Management System

This optional package enables you to partition the luggage compartment and secure individual objects during transit. The partitions are created using a special rail system with sliding telescopic bar. Objects can be secured using a fixing belt and four variable lashing eyelets. A reversible mat protects against dirt while securing luggage under braking, etc. A luggage net is also included.



Button for Power Tailgate





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The Cayenne is built to carry many things. Even another Porsche.



#### **Roof Transport Systems.**

Even when the luggage compartment is completely full, the Cayenne has space for more. Using the standard roof rails, the car can be equipped with an optional Roof Transport System. It is compatible with all the usual load-carrying attachments available

from Porsche Tequipment, e.g., ski/snowboard carriers and roof boxes. Naturally, the system is elegantly designed to complement the exterior of the car. All loadbearing parts are made from robust aluminum, enabling a maximum roof load of 220 lbs.

Form and function are also combined in the optional roof/drip rails in aluminum (matte Aluminum-Look or black finish in conjunction with the optional Monochrome Black Exterior Package). These can be combined with a set of roof bars from Porsche Tequipment to offer a maximum roof load of 165 lbs.

#### Trailer hitch.

The Cayenne is quite simply the most versatile vehicle we have ever built. Like every Porsche, it encourages you to explore the highest levels of performance—more than that, it allows you to explore other places and other pleasures with equal competence.

To satisfy a wide variety of towing needs in the most elegant manner possible, all three Porsche Cayenne models have trailer-hitch preparation as a standard feature.

An optional Towing Package includes a manually detachable trailer hitch that accommodates a maximum braked trailer weight of 7,716 lbs. and a maximum tongue weight of 616 lbs.

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**Options and Specifications** 

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## **Exterior styling enhancements.**

## Monochrome Black Exterior Package.

This optional package provides a stylish black finish on the side window surrounds, door handles and door trim. On the new Cayenne Turbo, a matching black finish can also be found on the standard roof rail system. On vehicles with darker exterior colors, it provides a subtle styling enhancement. In conjunction with lighter paint colors, the darker trim creates a dramatic color contrast.

On vehicles with optional roof/drip rails, these elements have a matching black finish.

#### SportDesign Package.

Also available as an option, the SportDesign Package\* brings additional strength to the powerful character of the new Cayenne models. The package includes a larger bi-plane roof spoiler as well as lower moldings at the front, sides and rear, painted in the exterior color. Each element has been tested and refined in the Porsche wind tunnel.

\*Fitment restricts off-road capability.

## Stainless-steel skid plates (front and rear).

These optional protective elements in genuine stainless steel lend additional presence to your Porsche. Designed as a package, both skid plates (front and rear) are also available separately.



Monochrome Black Exterior Package



Cayenne with SportDesign Package and 19-inch Cayenne Design wheels



Cayenne with SportDesign Package, 19-inch Cayenne Design wheels, sports tailpipes and stainless-steel skid plate (rear)

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Running boards

Exterior.  Options and features	Cayenne Cayenne S		Option Code
Metallic paint	0 0	•	Code
<ul> <li>SportDesign Package*/**: exterior paint finish on lower front/ rear/side molding and extended roof spoiler featuring fixed bi-plane roof spoiler and integral third brake light; side skirts (lower side molding) not included if ordered with Off-Road Technology Package or running boards**</li> </ul>	o c	0	2D1-2
• Side skirts (lower side molding) in exterior color*/**	0 0	0	2D3
Running boards with integrated skid plates	0 0	0	VR1
Wheel arch extensions in black	0 0	0	6GG





Stainless-steel skid plate (front)

Stainless-steel skid plate (rear)

Exterior.	ne I	ne S	Cayenne Turbo	
Options and features	Cayenne	Cayenne S	Сауеп	Option Code
Stainless-steel skid plate (front)	0	0	0	2JC
Stainless-steel skid plate (rear)	0	0	0	2JL
Stainless-steel skid plates (front and rear)	0	0	0	2JX
Bi-Xenon headlights with static/dynamic cornering lights and headlight cleaning system	0	0	•	PC3
Porsche Entry & Drive System	0	0	0	4F6
ParkAssist (front and rear)	0	0	•	7X2
Privacy glass on rear and rear side windows	•	•	•	
Thermally insulating laminated glass on all windows	0	0	0	PJ1
Power-operated slide and tilt glass moonroof with manual shade	0	0	0	3FE
Panoramic roof system	0	0	0	3FU

<sup>\*</sup> Reduces off-road capability.

\*\* Introduction planned for 7/2007.

- not available • extra-cost option • standard equipment W no-cost option



Roof/drip rails

Exterior.  Options and features	Cayenne	Cayenne S	Cayenne Turbo	Option Code
Options and reactives	3	0	3	Option Code
Sunscreen on rear side windows (manual)	0	0	0	3Y4
Roof Transport System (adjustable transverse roof bars)	0	0	0	3S8
Roof/drip rails with matte Aluminum-Look finish (black finish in conjunction with Monochrome Black Exterior Package)	0	0	0	3\$1, 5
<ul> <li>Monochrome Black Exterior Package: black finish on side window surrounds including B- and C-pillar trim, door handles (excl. inlays) and door trim; additional black finish on Cayenne Turbo: standard roof rail system</li> </ul>	0	0	0	QJ4
Deletion of model designation	W	W	W	ONA
Dual-twin sports tailpipes*	0	0	0	OP3
Power Tailgate	•	•	•	

<sup>\*</sup> Introduction planned for 7/2007.



Dual-twin sports tailpipes

Engine, transmission and chassis.	Cayenne	Cayenne S	Cayenne Turbo	
Options and features	Ca	Cay	Cay	Option Code
Six-speed Tiptronic S	0	•	•	GOR
<ul> <li>Air suspension with self-leveling ride-height control and Porsche Active Suspension Management (PASM)</li> </ul>	0	0	•	1BK
Porsche Dynamic Chassis Control (PDCC)	0	0	0	OAW
Servotronic (speed-dependent power-steering system)	0	0	•	1N3
Off-Road Technology Package: electronically variable rear differential lock, rock rails with integrated skid plates, reinforced engine-bay guard, additional protection for fuel tank and rear axle, second towing lug	0	0	0	PT2, 3
Sports exhaust system (Cayenne S)	-	0	_	0P8
Trailer hitch without hitch ball**	0	0	0	1D6

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<sup>-</sup> not available o extra-cost option • standard equipment W no-cost option

<sup>\*\*</sup>Maximum towing capacity: 7,716 lbs.







18-inch Cayenne S II wheel

18-inch Cayenne Turbo II wheel

19-inch Cayenne Design wheel





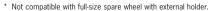


20-inch Cayenne SportDesign wheel

20-inch Cayenne SportTechno wheel

21-inch Cayenne Sport wheel

Wheels.	пе	ne S	ne Turb	
Options and features	Cayenne	Cayenne	Cayenne	Option Code
• 18-inch Cayenne S II wheel	0	•	-	C2R
• 18-inch Cayenne Turbo II wheel	0	0	•	CD3
• 19-inch Cayenne Design wheel	0	0	0	CJ3
20-inch Cayenne SportDesign wheel	0	0	0	CS5
• 20-inch Cayenne SportTechno wheel*	0	0	0	CY3
• 20-inch Cayenne SportTechno wheel painted in exterior color*	0	0	0	CY4
• 21-inch Cayenne Sport wheel with wheel-arch extensions*	0	0	0	CY2
• 21-inch Cayenne SportPlus wheel with wheel-arch extensions*/**	0	0	0	C9N



<sup>\*\*</sup>Introduction planned for 7/2007.



Cayenne Turbo with 21-inch Cayenne SportPlus wheels and wheel-arch extensions

Wheels.	Cayenne	Cayenne S	Cayenne Turbo	
Options and features	Caye	Caye	Caye	Option Code
• 21-inch Cayenne SportPlus wheel painted in exterior color with wheel-arch extensions */**	0	0	0	C9S
All-season tire for 17-inch alloy wheel	•	-	-	
All-season tire for 18-inch alloy wheel	•	•	W	Н9М
All-season tire for 19-inch alloy wheel	W	W	W	HP2
• Full-size spare wheel with external holder, 17-(Cayenne only)/18-/19-/20-inch diameter <sup>1</sup>	0	0	0	1G3
• 18-inch collapsible spare wheel	•	•	•	
Tire Pressure Monitoring System (TPMS)	•	•	•	
Wheel center caps with colored Porsche Crest	0	0	0	1NP

<sup>1</sup>Not compatible with 20-inch Cayenne SportTechno wheel, 21-inch Cayenne Sport wheel or 21-inch Cayenne SportPlus wheel.

not available o extra-cost option
 standard equipment
 W no-cost option





neLink

Cruise control

Interior.	nne	nne S	Cayenne Turbo	
Options and features	Cayenne	Cayenne	Caye	Option Code
Light Comfort Package: dimmable interior comfort lighting, courtesy lights on mirrors, automatic headlight activation, automatically dimming interior and exterior mirrors, programmable-delay courtesy lighting with dipped headlights ("Welcome Home" function)	0	0	0	P03, 4
HomeLink (garage-door opener)	•	•	•	
Three-spoke multifunction steering wheel in leather	•	•	•	
Comfort seats (front) with 12-way adjustment and extended memory	0	0	•	PE1
• Sports Seats (front) with 12-way adjustment and extended memory	0	0	W	PE2, 3
Cruise control	•	•	•	





Floor mats

Three-spoke multifunction steering wheel

Interior.	ıne	nne S	ıne Turbo	
Options and features	Cayenne	Cayenne	Cayenne	Option Code
Driver Memory Package (driver's seat and exterior mirrors incl. courtesy lighting preferences)	0	•	-	PG1
Seat heating (front) including steering-wheel heating	0	0	-	PK1, 3
Seat heating (front and rear) including steering-wheel heating	0	0	•	PK2, 4
• Ski bag	W	W	W	3X1
Cargo Management System	0	0	0	3GN
Floor mats	0	0	0	OTD
• Automatic air conditioning with separate temperature adjustment for driver and front passenger	0	•	•	9AD

- not available o extra-cost option o standard equipment W no-cost option





Door-entry guards in Stainless Steel

Soft-Look leather seats

Interior.	nne	nne S	nne Turbo	
Options and features	Cayenne	Cayenne	Cayenne	Option Code
Four-zone air-conditioning system	0	0	0	9AH
<ul> <li>Independent interior preheating and pre-ventilating system with a 24-hour programmable timer</li> </ul>	0	0	0	7VE
Non-Smoker Package	W	W	W	9JA
• Fire extinguisher*	0	0	0	6A5, 7
Door-entry guards in Stainless Steel	0	•	•	7M1



Leather interior in Black (standard color)

Leather interior.	nne	nne S	nne Turbo	
Options and features	Cayenne	Cayenne	Cayenne	Option Code
• Leather Interior Package in Smooth-Finish leather, standard color	0	0	•	Code
Leather Interior Package in natural leather	0	0	0	VR
Soft-Look leather seats (not available on Sports Seats)	0	0	0	N5Y, N7D, N7F
Porsche Crest embossed on head restraints	0	0	0	3J7

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 $<sup>^{\</sup>star}\,$  On vehicles with PCM, fire extinguisher is mounted beneath driver seat.

<sup>-</sup> not available o extra-cost option • standard equipment W no-cost option



Dark Walnut Package

Wood interior.	Cayenne	Cayenne S	Cayenne Turbo	
Options and features	Ca	Ca	Ca	Option Code
Dark Walnut Package with high-gloss finish*	0	0	0	5MG, PH4
• Light Olive Package with high-gloss finish*/**	0	0	0	5TF, PH5
Three-spoke multifunction steering wheel     with Dark Walnut trim, high-gloss finish	0	0	0	PH1
• Three-spoke multifunction steering wheel with Light Olive trim, high-gloss finish**	0	0	0	PH2



Light Olive Package

Aluminum interior.  Options and features	Cayenne	Cayenne S	Cayenne Turbo	Option Code
Sports Aluminum Package	0	0	•	5TE

<sup>\*</sup> On vehicles with Tiptronic S, includes wood trim on gear selector.

<sup>\*\*</sup> Ash with Olive-Look grain.

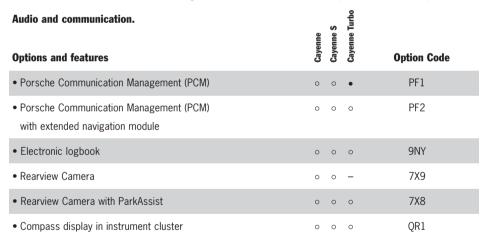
<sup>-</sup> not available o extra-cost option • standard equipment W no-cost option







Telephone module for PCM with passive handset







Six-disc CD-changer

Porsche Rear Seat Entertainment System

Audio and communication.	nne	nne S	Cayenne Turbo	
Options and features	Cayenne	Cayenne	Caye	Option Code
Telephone module for PCM (GSM-based, requires SIM card)	0	0	0	9W1
Telephone module for PCM with handset	0	0	0	9ZP
Bose Surround Sound System (digital)     with 14 speakers incl. subwoofer	0	0	•	9VL
• Six disc CD-changer	0	0	0	7A2
XM Satellite Radio	0	0	0	QV4
Porsche Rear Seat Entertainment System with two video displays, media player, two wireless infrared headphones, remote control	0	0	0	AEU

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## **Preferred Packages for the Cayenne models.**



#### Cayenne

### Preferred Package Option Code: PPA

- Power-operated slide and tilt glass moonroof with manual shade
- Trailer hitch
- Seat heating (front) including steering wheel heating
- Driver Memory Package
- Wheel center caps with colored Porsche Crest
- Automatic air conditioning

### Preferred Package Plus Option Code: PPB

- Power-operated slide and tilt glass moonroof with manual shade
- Trailer hitch
- Seat heating (front) including steering wheel heating
- Driver Memory Package
- Wheel center caps with colored Porsche Crest
- Automatic air conditioning
- Bose Surround Sound System
- Six-disc CD-changer
- Bi-Xenon headlights with static/dynamic cornering lights



Cayenne S

#### Preferred Package Option Code: PPA

- Power-operated slide and tilt glass moonroof with manual shade
- Trailer hitch
- Seat heating (front) including steering wheel heating
- Wheel center caps with colored Porsche Crest
- Six-disc CD-changer
- Bi-Xenon headlights with static/dynamic cornering lights

## Preferred Package Plus Option Code: PPB

- Power-operated slide and tilt glass moonroof with manual shade
- Trailer hitch
- Seat heating (front) including steering wheel heating
- Wheel center caps with colored Porsche Crest
- Bose Surround Sound System
- Six-disc CD-changer
- Bi-Xenon headlights with static/dynamic cornering lights
- Porsche Communication Management (PCM)



#### **Cayenne Turbo**

### Preferred Package Plus Option Code: PPB

- Power-operated slide and tilt glass moonroof with manual shade
- Trailer hitch
- Wheel center caps with colored Porsche Crest
- Six-disc CD-changer
- Porsche Communication Management (PCM) with extended navigation module

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## **Experience the origin of momentum.**

## **Tourist Delivery.**

The first Cayenne model to be delivered in person was completed in December 2002. Since then, more than 100,000 examples have left our purposebuilt factory in eastern Germany.

The vast Porsche facilities in Leipzig include the Cayenne manufacturing facility, a Customer Center with numerous Porsche attractions, an FIA-approved test track and a comprehensive offroad proving ground.

The Customer Center is a striking architectural statement and a major landmark for the Leipzig region. Here you can take delivery of your new Cayenne after having a chance to look into the past of Porsche, at the exhibition area on the top floor of the Customer Center.

Your visit begins at the Customer Center with a general introduction to Porsche ownership and the many facets of the Porsche marque. A short film presentation is followed by a tour of the factory and a three-course meal in our customer restaurant. The next stop on your itinerary is the Track Control Center where you can familiarize yourself with the test track.

By now you'll be ready for the most exciting part of your visit: a hands-on introduction to the Porsche Cayenne—both on and off the racetrack.

An experienced Porsche instructor will accompany you throughout in a factory demonstration vehicle. Once you're familiar with the capability of the car, it's time for the ultimate highlight of your visit: the moment you take delivery of your new Cayenne.

The Tourist Delivery Package offers a full five hours of pure Porsche enjoyment. It also provides the perfect setting for those first few moments with your Porsche.



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## Travel around the world. In just 2.5 miles.

#### The test track.

Our on-site test circuit consists of accurate reproductions of some of the most famous racing corners in the world, e.g., the Corkscrew from Laguna Seca, the Parabolica from Monza, and the Bus Stop from Spa Francorchamps. While new Cayenne models undergo final quality testing on a separate section of the track, you can experience their on-road capability

in a factory demonstration vehicle. The track is FIA-certified for competition use, making it the ideal environment in which to enjoy the performance of the Porsche Cayenne.

# 18 of the toughest off-road trials. For one of the toughest off-road cars.

#### Off-road circuit.

The off-road driving session is held on a 3.7-mile circuit under the expert supervision of a Porsche instructor. As well as familiarizing yourself with the vehicle's controls, you'll learn some of the secrets of all-terrain driving on a challenging off-road course.

The session begins outside the Customer Center with three

challenging off-road tests: seesaw, twist humps and stepped ascent. Once that is completed, it's time for the main off-road circuit.

Designed with the local environment in mind, it occupies a 247-acre area. With up to 15 different off-road challenges culminating in a 164-foot wading trough, there's plenty of opportunity to explore

the car's off-road potential. You'll also discover a lot about yourself—and the unique enjoyment of Porsche ownership.

For details, please contact your local Porsche dealer.



## **Specifications**

	Cayenne				Cayenne S				
Engine									
Туре	Front-mounted, water alloy cylinder heads a		with cast-iron block,		Front-mounted, water-cooled V8 with alloy block, cylinder heads and pistons				
Valvetrain	Dual overhead camsha variable-valve timing s		alves per cylinder with		Dual overhead camshafts, four valves per cylinde VarioCam Plus variable-valve timing system				
Induction	Resonance-tube induc	tion		F	Resonance-tube induction				
Displacement	3.6 liters (3,598 cc)			4	4.8 liters (4,806 cc)				
Horsepower	290 hp @ 6200 rpm			3	385 hp @ 6200 rpm	m			
Torque (max.)	273 lbft. @ 3000 rp	273 lbft. @ 3000 rpm			369 lbft. @ 3500 rpm				
Bore/Stroke	3.50 in./3.80 in.			3	3.78 in./3.27 in.				
Compression Ratio	12.3:1			1	12.5:1				
Engine Management	Motronic MED 9.1 system with electronic throttle (E- gas), high-voltage ignition with individual coils, Direct Fuel Injection (DFI), cylinder-specific knock control, quad catalysts, stereo Lambda exhaust regulation and onboard diagnostics (OBD II)			t v c d s	EMS SDI 4.1 system, high-voltage ignition with individual coils, Direct Fuel Injection (DFI), cylinder-specific knock control, quad catalysts, stereo Lambda exhaust regulation and onboard diagnostics (OBD II)				
Chassis									
Front Suspension	Fully independent dou	ble wishbo	ne	F	Fully independent do	uble wishbone			
Rear Suspension	Fully independent multi-link		F	Fully independent multi-link					
Steering	Rack-and-pinion (power-assist)		F	Rack-and-pinion (power-assist)					
Turning Circle Diameter	38.39 ft.		3	38.39 ft.					
Brakes	Ventilated discs front and rear. Front: Six-piston aluminum monobloc fixed calipers Rear: Four-piston aluminum monobloc fixed calipers		F	Ventilated discs front and rear. Front: Six-piston aluminum monobloc fixed calipers Rear: Four-piston aluminum monobloc fixed calipers					
Disc Diameter	12.99 in. front, 12.99	in. rear		1	13.78 in. front, 12.9	9 in. rear			
Wheels	7.5J x 17			8	BJ x 18				
Tires (Summer)	235/65 R 17			2	255/55 R 18				
Transmission									
Drivetrain	6-speed manual/6-speed Tiptronic S		6	6-speed Tiptronic S					
Layout	All-wheel drive			А	All-wheel drive				
Gear Ratio	1st gear 2nd gear 3rd gear 4th gear 5th gear 6th gear	nnual 1.68 2.53 1.69 1.22 1.00 0.84 1.27	Tiptronic S 4.15 2.37 1.56 1.16 0.86 0.69 3.39	2 3 4 5	Ist gear Ind gear Ind gear Ind gear Ith gear Ith gear Ith gear Reverse	iptronic S 4.15 2.37 1.56 1.16 0.86 0.69 3.39			
	Final Drive	3.70	4.30	F	Final Drive	3.55			

	Cayenne Turbo
Engine	
Туре	Front-mounted, water-cooled, twin turbocharged V8 with alloy block, cylinder heads and pistons
Valvetrain	Dual overhead camshafts, four valves per cylinder with VarioCam Plus variable-valve timing system
Induction	Turbocharged
Displacement	4.8 liters (4,806 cc)
Horsepower	500 hp @ 6000 rpm
Torque (max.)	516 lbft. @ 2250–4500 rpm
Bore/Stroke	3.78 in./3.27 in.
Compression Ratio	10.5:1
Engine Management	EMS SDI 4.1 system, high-voltage ignition with individual coils, Direct Fuel Injection (DFI), cylinder-specific knock control, boost pressure control, quad catalysts, stereo Lambda exhaust regulation and onboard diagnostics (OBD II)
Chassis	
Front Suspension	Fully independent double wishbone
Rear Suspension	Fully independent multi-link
Steering	Servotronic rack-and-pinion (power assist)
Turning Circle Diameter	38.39 ft.
Brakes	Ventilated discs front and rear. Front: Six-piston aluminum monobloc fixed calipers Rear: Four-piston aluminum monobloc fixed calipers
Disc Diameter	14.49 in. front, 14.09 in. rear
Wheels	8J x 18
Tires (Summer)	255/55 R 18
Transmission	
Drivetrain	6-speed Tiptronic S
Layout	All-wheel drive
Gear Ratio	Tiptronic S

	Cayenne	Cayenne S
Off-road Capability		
Ground Clearance	8.58 in. (at curb weight w/standard suspension)	8.58 in. (at curb weight w/standard suspension)
Wading Depth	19.69 in. with standard suspension	19.69 in. with standard suspension
Approach Angle	28.6° with standard suspension	28.6° with standard suspension
Departure Angle	22.8° with standard suspension	22.8° with standard suspension
Ramp Breakover Angle	20.4° with standard suspension	20.4° with standard suspension
Differential Locks	Electronic center differential	Electronic center differential
Safety		
Active	Continental Teves MK25 E1, optional Porsche Active Suspension Management (PASM), Porsche Traction Management (PTM) permanent all-wheel drive and optional Bi-Xenon lights	Continental Teves MK25 E1, optional Porsche Active Suspension Management (PASM), Porsche Traction Management (PTM) permanent all-wheel drive and optional Bi-Xenon lights
Passive	Dual front and side Advanced Airbags, dual side curtain airbags, front and rear deformation zones, side-guard door beams, three-point seat belts, seat-belt pretensioners and front seat-belt force limiters, Lower Anchors and Tethers for Children on outer rear seats, exterior/interior alarms and central locking	Dual front and side Advanced Airbags, dual side curtain airbags, front and rear deformation zones, side-guard door beams, three-point seat belts, seat-belt pretensioners and front seat-belt force limiters, Lower Anchors and Tetthers for CHildren on outer rear seats, exterior/interior alarms and central locking
Weights and Dimensions	3	
Gross Vehicle Weight Rating	Manual: 6,493 lbs.	6,790 lbs.
Curb Weight	Manual: 4,762 lbs./Tiptronic S: 4,784 lbs.	4,949 lbs.
Length	188.9 in.	188.9 in.
Width	75.9 in.	75.9 in.
Height	66.89 in.	66.89 in.
Wheelbase	112.4 in.	112.4 in.
Track (with standard wheels)	65.16 in. front, 65.75 in. rear	64.84 in. front, 65.43 in. rear
Maximum Load	Manual: 1,731 lbs./Tiptronic S: 1,709 lbs.	1,841 lbs.
Towing Load	7,716 lbs.	7,716 lbs.
Fuel Tank Capacity	26.4 gal.	26.4 gal.
Performance		
0–60 mph	Manual: 7.5 sec./Tiptronic S: 7.9 sec.	6.4 sec.
Top Track Speed	141 mph	155 mph
Fuel Economy (city/highway) EPA Estimate*	Manual: 14/20 mpg Tiptronic S: 14/20 mpg	13/19 mpg
Warranty		
<b></b>		

To underline our confidence in the quality of our cars, all new Porsche vehicles are covered by a 4-year/50,000-mile (whichever comes first) limited warranty and Roadside Assistance program. This warranty covers any defect in materials and workmanship. Porsche's limited corrosion warranty extends a full 10 years, regardless of mileage. Satellite radio service is warranted by the service provider.

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\* Values based on new EPA fuel economy determination procedures for 2008 model year vehicles.

Cayenne Turbo
Min. 6.34 in. /Max. 10.67 in. with the standard air suspension
21.85 in. on air suspension (Special Off-road Level)
28.5° at Normal Level/31.8° at Special Off-road Level
22.3° at Normal Level/25.4° at Special Off-road Level
$20^{\circ}$ at Normal Level/24.7° at Special Off-road Level
Electronic center differential
Continental Teves MK25 E1, Porsche Active Suspension Management (PASM), Porsche Traction Management (PTM) permanent all-wheel drive and Bi-Xenon lights
Dual front and side Advanced Airbags, dual side curtain airbags, front and rear deformation zones, side-guard door beams, three-point seat belts, seat-belt pretensioners and front seat-belt force limiters, Lower Anchors and Tethers for Chilidren on outer rear seats, exterior/interior alarms and central locking
6,790 lbs.
5,192 lbs.
188.78 in.
75.9 in.
66.69 in.
112.4 in.
64.84 in. front, 65.43 in. rear
1,598 lbs.
7,716 lbs.
26.4 gal.
4.9 sec.
171 moh
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To underline our confidence in the quality of our cars, all new Porsche vehicles are covered by a 4-year/50,000-mile (whichever comes first) limited warranty and Roadside Assistance program. This warranty covers any defect in materials and workmanship. Porsche's limited corrosion warranty extends a full 10 years, regardless of mileage. Satellite radio service is warranted by the service provider.

<sup>\*</sup> Values based on new EPA fuel economy determination procedures for 2008 model year vehicles.

Colors	Solid Exterior Colors	Metallic Ex	terior Colors	Interior Leather	Rooflining	Carpet
A selection of two exterior solid colors and eight exterior metallic colors are available for the	Black	Basalt Black Metallic	Crystal Silver Metallic	Black	Steel Grey	Black
Cayenne, Cayenne S and Cayenne Turbo. The exterior metallic colors are standard for the Cayenne Turbo and are optional for	Sand White	Carmona Red Metallic	Meteor Grey Metallic	Havanna/Sand Beige	Sand Beige	Sand Beige
the Cayenne S and Cayenne models.  The interior has five leather selections to						
choose from, including two combinations that are two-tone. Matching rooflining and carpet complete the interiors.		Dark Olive Metallic	Jarama Beige Metallic	Stone Grey/Steel Grey	Steel Grey	Steel Grey
		Olive Green Metallic	Marine Blue Metallic	Sand Beige	Sand Beige	Sand Beige
				Black/Natural Chestnut Brown	Black	Chestnut Brown



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