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The Cayenne concept

Lateral thinking. Taking different routes. Repeatedly driving oneself. Thus achieving a common sporting denominator.

That's character. Porsche character. Characteristics that per force are transferred to our cars.

The Cayenne embodies them all. It's a Porsche. Without any if's and but's. Uncompromisingly sporty. Agile, dynamic and practical down to the final detail for everyday use.

Even though it's different, it's characteristically a Porsche.











What are the factors for a successful concept?

It can be improved upon.

The most important factor for the Cayenne models: they are based on a clear idea.

The harmonious overall concept is the formula for success: a charismatic exterior and a highly sophisticated technology. Typically Porsche. Even so, just one idea is not enough. From the outset, we also consider the next idea. It has to be highly emotional and have a considerable potential for development.



We have transferred this ideology to the Cayenne models. From the outset. From the first to the last bolt.

The latest example is the high adaptability: the option to increase the power of the Cayenne Turbo.

In the Cayenne Turbo, the optional increase is from 450 to 500 bhp.

We will continue to improve on this. We promise.

The Cayenne models

Power, direct response behaviour, fast reaction. The Cayenne remains true to the nature of a Porsche. Driver and vehicle unite to form one unit.

It's designed for the road. Which is no surprise. And it's an all-terrain vehicle. Which is no surprise.

3 personalities have developed. With different profiles: The Cayenne Turbo. The Cayenne S. And the Cayenne.

No matter which one you choose. They have character.





The Cayenne models comply with the Porsche philosophy:

not to fit in any category.

A vehicle which defies ice and snow in Sweden, braves the sand in Dubai's desert and masters every mountain pass in the Alps could be described as an offroad vehicle. The same vehicle which then performs on the Nürburgring as if it were born for the racetrack could justifiably be described as a sports car. But the fact that such a vehicle was developed in Weissach sheds the necessary light on this enigma: a Porsche.



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Something that's a challenge demands your full attention.

The road is one of the most challenging driving environments there is, and possibly the most challenging for the Cayenne model range. Succeed in mastering it, and the driving experience can be all the more rewarding.

Whether on the motorway or a winding country road, the Cayenne models remain cool, calm and

collected. The powerful performance is matched with surprising agility and totally irresistible control.

It's not only the sporty performance on the road which gives the driver the feeling of being at one with any of the Cayenne models. It's also its off-road performance. It's the safety. The comfort. The transport concept. The unlimited suitability for everyday use.

Or, to put it another way: the reassuring knowledge that you're sitting in a Porsche.

There are 3 models: the Cayenne Turbo is the quintessence of Porsche unique take on top performance – an uncompromisingly sporty character coupled with cutting-edge technology in the segment of all-wheeldrive multi-purpose vehicles.

in power and dynamic performance. This is the 'decathlete' that can be relied on for top-rate performance in the most diverse on- and offroad disciplines.

The Cayenne is a well-balanced all-rounder: sporty, all-terrain, comfortable, practical and safe. And typically Porsche through and through.

Cayenne S



Reinventing the legend.

The Cayenne Turbo.

For more than 25 years, Porsche engineers have set the benchmark in turbo technology.

Along the way, each new generation of turbocharged Porsche vehicles has redefined the meaning of pure acceleration. A sensation of power that fills the senses, yet defies all explanation.

Precisely this feeling of speed, performance and sound, this sense of excitement can also be experienced in the Cayenne Turbo.

You can expect a good deal from its technology, without any compromise. For the ultimate, unique driving experience.

On- and off-road, the Cayenne Turbo demonstrates that we have reached our objective. Details that satisfy the highest technical demands. So that the complete vehicle can satisfy the highest emotional demands. Inside the cockpit, the handling and control are both compelling and reassuringly familiar. The latest expression of a driving philosophy that is uniquely and unmistakably Porsche.

The result is a car that advances the tradition of pure Porsche engineering. Combining performance and practicality with the last word in comfort and the ultimate in occupant safety. In short, everything you'd expect from a genuine Porsche.





Turbo power. Take a deep breath.*

Turn the ignition, and immediately you sense the power of the 4.5 litre V8 biturbo engine. It produces 331 kW (450 bhp). Set the damping of the Porsche Active Suspension Management (PASM) to the 'Sport' setting. As you press the throttle, the instruments surge while the tyres grip deep into the road. With a full 620 Nm of torque pressing you into your leather seat, the car's awesome potential is revealed.

After just 5.6 seconds, the speedometer sweeps past 100 km/h (62 mph). At 125 km/h (78 mph), the car is automatically lowered by around 27 mm. A few seconds later, at around 210 km/h (130 mph), the ride-height drops by a further 11 mm to provide optimum aerodynamics and stability. This sleek combination of power and control continues on to a top speed of 266 km/h (165 mph). As you ease off the throttle and relax in your seat, you are now intimately acquainted with the power of Porsche turbo technology.

Less apparent, perhaps, is the wide range of systems that enable that power to be transferred to the road.

Porsche Traction Management (PTM), for example, uses permanent four-wheel drive to balance delivery to the front and rear wheels. Continuously adapting to changing road conditions, PTM ensures optimum traction and driving dynamics.

Porsche Stability Management (PSM) constantly monitors and ensures stability by controlling the brakes, centre differential lock or engine management system to keep the car under control.

Porsche Active Suspension Management (PASM) continuously modifies the damping force of the air suspension to take account of the driving situation and the handling dynamics. While you may not have noticed these systems at work, you will undoubtedly have enjoyed the results. The most important of which is the unique sensation you will only experience in a Porsche.

Equally impressive is the car's exceptional off-road capability. Standard features include selflevelling air suspension with rideheight control, a centre differential lock and a reduction gearbox which can be engaged at speeds of up to 15 km/h (9 mph) and disengaged at up to 30 km/h (18 mph), to name but a few. To summarise, the Cayenne Turbo is a car with virtually unlimited potential – on virtually every surface there is.

An experience that can be improved upon on request: by means of the optionally available increase in power to 500 bhp in the Cayenne Turbo (page 58).

* Porsche advises all its customers to drive responsibly on- and off-road at all times. The full road potential of the Cayenne models should only be used under appropriate racetrack conditions.

Exceptional performance on any terrain.

The Cayenne S.

For some, it's the ultimate all-terrain vehicle. For others, it's a Sports Utility Vehicle (SUV). Or it's a family car. For us, the Cayenne S is one thing only: the next generation of Porsche. Like every Porsche before it, the Cayenne S is a natural on-road performer.

Not surprising, when you consider just how much of its advanced engineering was directly sourced from the track. The powerful V8, for example, is more than a match for many high-performance cars. The handling is responsive, the dynamics assured, for a more agile and exhilarating drive.

Smooth and composed on every type of road, the Cayenne S explores the unique possibilities of Porsche sports performance. Even so, it's also ideally equipped for some of the most challenging topography in the world. Torque and traction come in plentiful supply, with enough to pull up to 3.5 tonnes of braked trailer load. Inside the car, there's enough seating space for up to five adult passengers. The elegant interior is ergonomically designed for exceptional long-distance comfort. Behind the rear seats is a generous and versatile luggage compartment for even greater practicality.

The result is a car that is uniquely prepared for any terrain – no matter how rugged or refined.



A genuine Porsche. With a genuine Porsche specification.







With its 4.5 litre V8, every journey in the Cayenne S is a compelling driving experience.

Power is delivered with effortless precision through a high-performance six-speed manual gearbox (six-speed Tiptronic S available as an option). As you ease off the throttle at 100 km/h (62 mph), you can relax and savour the car's cultured performance.

For added composure, the Cayenne S has a comprehensive range of safety features.

Most important of these is the powerful braking system, featuring Porsche technology developed for the track. As on every Porsche before it, we've matched peerless performance with literally breathtaking deceleration. Through the permanent four-wheel drive, the standard electronically controlled centre differential lock as well as the standard reduction gear, the Cayenne S has an effective system for outstanding traction and excellent handling on virtually every surface.

For example when the Automatic Brake Differential (ABD) intervenes. If a wheel is in danger of slipping on ice, for example, the ABD function applies selective braking on that wheel. At the same time, drive torque is increased to the wheel on the opposite side of the axle. All of this is dealt with by the Porsche Traction Management (PTM), which also includes the Traction Control System (TCS).

All of these functions are seamless and automatic, leaving you to enjoy what really matters most: a genuine Porsche driving experience.



Inspiration that makes sense.

The Cayenne.

Few cars are capable of inspiring both an emotional and rational response simultaneously. The Cayenne is one of them. Successfully combining apparent contradictions such as attractive design, advanced technology and exceptional on- and off-road performance, it appeals to both hearts and minds. However, it's anything but a 'middle of the road' vehicle. With its intelligent four-wheel drive, it can tackle any terrain, while its engine and chassis offer all the power you'd expect of a racing car. The Cayenne also provides the highest levels of safety and comfort, making it the ideal family car.



Balanced performance.

The Cayenne is designed to offer outstanding levels of performance and comfort.

Its V6 engine delivers 184 kW (250 bhp) and a maximum torque of 310 Nm, with a top speed of more than 214 km/h (133 mph). The exceptional sports performance of the Cayenne is suitably demonstrated on both short and long journeys. It's also impressively agile in off-road situations and in 'low-range' mode.

The Cayenne is also equipped with complex chassis and drivetrain control systems such as PSM, which uses permanent four-wheel drive to balance delivery to the front and rear wheels for greater stability in all driving conditions

and PTM, which uses the centre differential lock to enhance traction on difficult terrain.

But whatever the driving conditions, you can enjoy all the practicality and comfort you've come to expect from Porsche. With room for up to five adult passengers and a spacious luggage compartment, the Cayenne is ideal for longer journeys. It also comes with a range of practical towing accessories and a roof transport system.

As on every new Porsche, the Cayenne boasts a comprehensive safety concept to maximise occupant protection. Key features include a sophisticated airbag system with curtain-type airbags on each side of the roof, providing

optimum head protection for both rows of seats, as well as integrated side airbags in each of the front seats. Other key safety features include bodyshell components made of multi-phase steels and materials that channel impact energy as well as side impact protection and the powerful Porsche braking system.

As you can see, we've taken care of all aspects of safety. So all you have to do is sit back and enjoy driving your Cayenne.



Drive and chassis

A Porsche without high performance potential? Unthinkable.

Mile after mile.

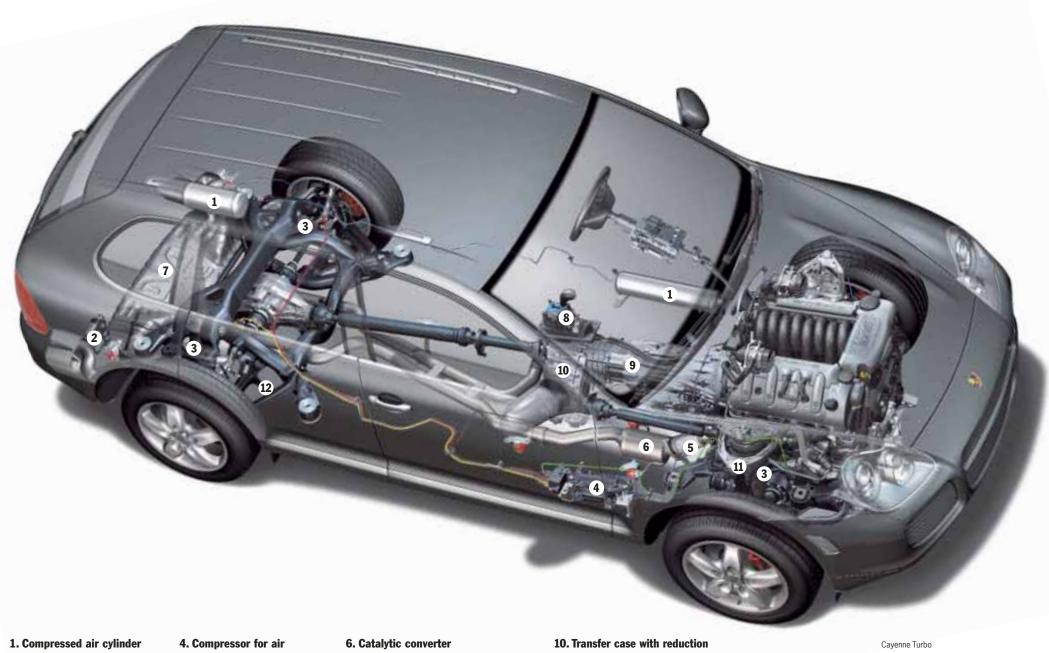


Even so, despite the propulsion, every Cayenne model also incorporates an additional major Porsche characteristic: sensitivity.

For agility and extremely precise control.

- And maximum road contact.
- As well as on virtually every other type of surface.
- Millimetre by millimetre.



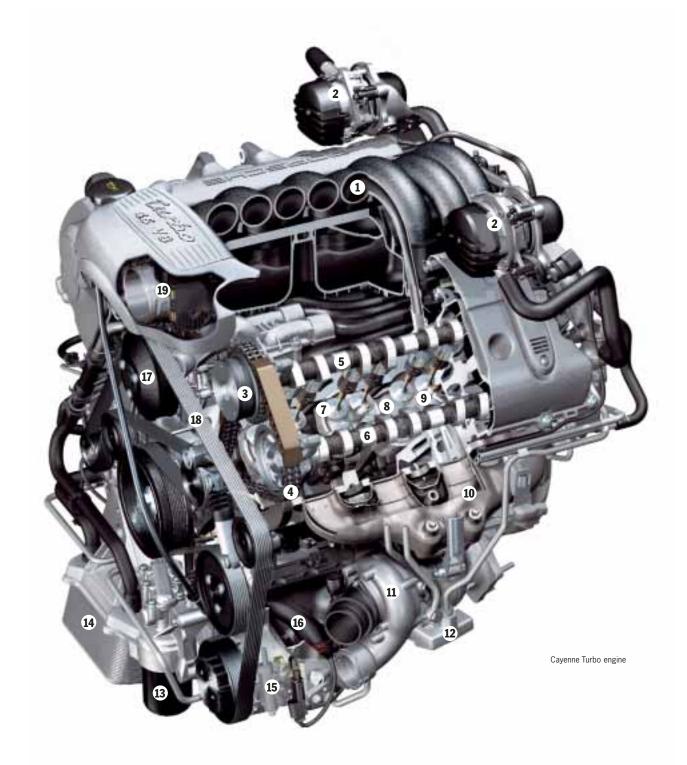


- 2. Air suspension and PASM control unit
- 3. Air suspension

 Compressor for air suspension
 Anti-vibration element in exhaust 6. Catalytic converter
 7. Silencers
 8. Gear selector lug Tiptronic S

9. Tiptronic S

- 10. Transfer case with reduction stage and centre differential lock11. Double control arm
- 12. Multi-link suspension



1. Intake system 2. Secondary air pumps 3. VarioCam 4. Duplex timing chain 5. Inlet camshaft 6. Outlet camshaft 7. Valve 8. Piston 9. Spark plug 10. Exhaust manifold 11. Turbocharger 12. Oil drain pan for turbocharger 13. Oil filter 14. Oil/water heat exchanger 15. Air-conditioning compressor 16. Intake snorkel for oil pump 17. Water pump (obscured) 18. Ancillary drive belt **19. Throttle position/ETC** (electronic throttle control)





The actual driving force: passion.

The engine is the heart of each and every Porsche. The origin of its power, its presence and sound. Its inimitable character and performance on the road.

That's why we have equipped them with very special engines: a V8 turbo engine on the Cayenne Turbo, a V8 petrol engine on the Cayenne S and a standard V6 configuration on the Cayenne – engines that offer exceptional power density, a free-revving response, a low weight as well as being environmentally friendly.

The V6 and V8 configurations are rightly renowned for their plentiful power and high torque, their cultured performance and sound. Precisely the right characteristics for the Cayenne models.

We've applied each of those attributes with skill and ingenuity to create a new and more powerful interpretation of this proven engine concept.



Cayenne Turbo engine

The resulting V8 is a totally new Porsche design developed exclusively for the Cayenne Turbo and Cayenne S.

The V6 offers a dynamic driving experience and a suitably distinctive sound. In terms of cylinder layout, both the Cayenne V8 and V6 are a radical departure from the flat-six cylinder engines featured on the 911 and Boxster. In terms of power and torque, however, they are extremely familiar indeed. With a total displacement of 4.5 litres and four-valve cylinder head technology on the V8 (or 3.2 litres and three-valve cylinder heads on the V6), the Cayenne engine delivers prodigious performance as well as exceptional fuel economy and emission control. The result: one of the finest engines in the world today. Its athletic capability is all the more remarkable when you consider its modest dimensions and weight. Add in a cooling system perfected in the deserts of Dubai and you have the ideal power plant for even the most demanding applications. All in all, a powerful demonstration of heavyweight performance in a surprisingly compact package.



Cayenne S engine



Power and torque.

The Cavenne Turbo is powered by a 4.5 litre twin-turbo V8 developing 331 kW (450 bhp) at 6.000 rpm, whilst maximum torque of 620 Nm is available from 2,250 to 4,750 rpm. Top speed is a phenomenal 266 km/h (165 mph). From a standing start. the Cavenne Turbo reaches 100 km/h (62 mph) in a breathtaking 5.6 seconds. With the optionally available boost in performance, the Cavenne Turbo (page 58) achieves this in a phenomenal 5.3 seconds. With this boost in performance the top speed is 270 km/h (168 mph).

The Cayenne S features a 4.5 litre V8 cylinder naturally aspirated engine generating a power output of 250 kW (340 bhp) at 6,000 rpm and a torque of 420 Nm between 2.500 and 5.500 rpm. It has a maximum speed of 242 km/h both emotions which the performance with manual transmission as well as with Tiptronic S. Acceleration from 0 to 100 km/h takes only 6.8 s with manual transmission.

The Cavenne is powered by a 3.2 litre V6 cylinder naturally aspirated engine, 184 kW (250 bhp) at 6.000 rpm and a maximum torque of 310 Nm between 2,500 and 5,500 rpm provide for a maximum speed of 214 km/h (133 mph).

And for plenty of kick: from 0 to 100 km/h in 9.1 s with manual transmission.

This all sounds highly technical. What better way of describing the capabilities of the Cayenne models arouse?

The cooling system.

A high performance engine best develops its optimum and longlasting performance when all the engine components operate within a specific temperature range.

In the V8 on the Cavenne Turbo and Cayenne S, we've used a special coolant management system offering effective control of operating temperatures throughout every part of the engine. While 20% of coolant is supplied to the crankcase, the remaining 80% cools the cylinder heads using proven cross-flow technology.

On both the Cayenne Turbo and V6 engines, each of the piston heads is cooled using an oil-spray iet supplied by the main oil circulation system.

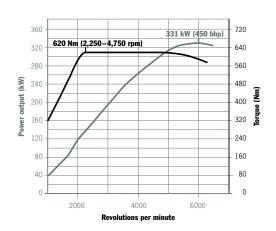
The engines are thus maintained at optimum operating temperature, enabling reduced component clearances and therefore minimum wear. The entire cooling system is specifically designed for prolonged heavy-duty operation, either in difficult, high-torque off-road terrain or when pulling or carrying heavier loads.

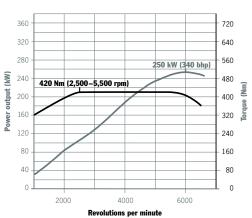
As well as reducing emissions and noise, the system helps maximise performance and fuel economy while extending service intervals.



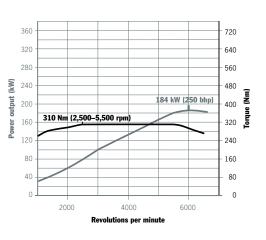
Cayenne Turbo











Lightweight alloy engine.

The V8 engine uses a 'closed-deck' design in which the aluminium crankcase is separated from the cylinder heads. The cylinder block and its associated coolant channels thus form a fully closed system. This elegant solution not only makes the engine that much lighter, it also improves its tightness and strength.

The lower section of the crankcase is made of lightweight aluminium with cast-iron bearing brackets. This proven technology helps minimise bearing play caused by changes in engine temperature. This in turn reduces mechanical noise, thus obviating the need for external soundproofing measures.

With less bearing play, there's also less oil to move, which means the oil pump can be smaller and lighter. Another key factor in the engine's lightweight design is the two-piece aluminium cylinder heads. In order to cope with the extreme temperatures and forces generated during combustion, the Cayenne Turbo is equipped with high-tech alloy heads featuring the same race-proven technology as the 911 Turbo. Forged aluminium pistons help minimise weight for a more free-revving engine response. In the Cayenne S, we've used a cast piston concept that's specifically tailored to the car's naturally aspirated performance. The V6 engine on the Cayenne features a grey cast-iron crankcase and one-piece cylinder heads in die-cast aluminium for a high specific output.

All in all an excellent foundation for a high service life offering everything you'd expect from a Porsche – including the distinctive Porsche sound.

Lubrication.

For a Porsche, one of the most important prerequisites for the high-performance engine is fast and consistent lubrication. On the Cayenne model range, we've ensured consistency on every type of terrain and, when required, with a high trailer load.

The integrated dry-sump technology on the V8 engines ensures a secure oil supply in all driving situations on- and off-road and uses an oil reservoir located inside the

engine instead of an external tank. As well as saving space and cutting down on weight, this intelligent solution ensures optimum oil delivery precisely where it's needed most.

Excess heat is extracted from the oil using a dedicated oil-water heat exchanger. Not only does this improve the quality of lubrication, it also helps to cool the engine. Oil is circulated around the V8 engines using a two-stage oil scavenging system, ensuring optimum delivery in even the most extreme off-road scenarios. Indeed all three Cayenne models can traverse, climb and descend at anything up to 45°. On the Cayenne Turbo, we've used a dedicated oil-spray cooling system to maintain lower temperatures on each of the pistons.

To improve off-road performance, each of the water-cooled twin turbochargers is equipped with a separate lubrication system, including an oil tank, check valve and dedicated oil scavenge pump.

The V6 engine uses a wet-sump lubrication system. The sump and the oil/water heat exchanger are designed for extreme conditions on- and off-road.



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VarioCam in the V8.

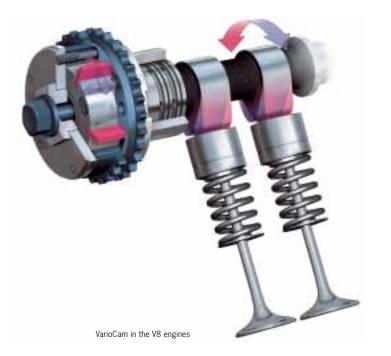
VarioCam is a system for speed and load-related adjustment of the intake camshaft. Operating under the direct control of the Motronic ME7.1.1 engine management system, VarioCam uses a rotary-vane actuator on each bank of cylinders to continuously adjust the phase angle of the intake camshafts – and thus intake valve timing. The result is a surprisingly simple and highly effective means of improving power and torque, while at the same time reducing fuel consumption.

At lower engine speeds, timing is adjusted to help maximise available torque. At higher engine speeds, the system helps to attain maximum power output. Another feature is hydraulic valve clearance compensation. This lowers emissions in the warm-up phase and reduces running noise. In addition, regular adjustment of the valves is no longer necessary.

Variable camshaft settings on the V6.

Under the continuous control of the Motronic ME7.1.1 engine management system, the camshafts are adjusted by means of a rotaryvane actuator. Each of the six cylinders is served by two inlet and two exhaust valves, each of which is actuated by means of a roller cam follower with hydraulic valve clearance adjustment.

How do you know? By the reduced fuel consumption, the lower exhaust emissions and, especially, by the high specific performance and the high torque of the engine which is already evident at low speeds.





Engine management: Motronic ME7.1.1.

Cultured performance demands maximum control – particularly when it comes to the engine. The Motronic ME7.1.1 is a powerful engine management system designed specifically for the special features of Porsche engines. It controls and governs the optimum interaction of the engine functions and assemblies in all operating conditions (see diagrams).

The basic principle of the Motronic ME7.1.1 engine management system is simple. Throughout every journey, the system monitors a wide range of variables from a variety of sensors and engine components. This data is then compared with a corresponding set of reference values. Based on this comparison of data, the most important engine functions, such as the ignition and fuel injection are seamlessly controlled and governed, thus delivering improved fuel economy and lower emissions, as well as even greater power and torque in every operating condition.

One of the most important systems On the Cayenne Turbo, the eleccontrolled by the Motronic ME7.1.1 engine management system is, of course, the throttle position (ETC = electronic throttle control). This is a prerequisite for the Porsche Stability Management (PSM). Other key functions include on-board diagnostics and cylinderspecific knock control with automatic adaptation to any change in fuel

quality.

tronic engine management system is also used to regulate the turbo boost pressure, while on the Cayenne it's used to control the variable-tract intake manifold.



The functions of the digital engine management on the Cayenne Turbo.

The functions of the digital engine management on the Cayenne S and the Cayenne.

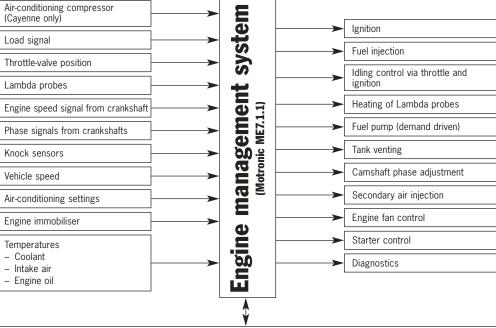
Input data

Load signal

Coolant

– Intake air Engine oil

	E –	>	Ignition
.oad signal	 E –		Fuel injection
Throttle-valve position	 system		Idling control via throttle and ignition
ambda probes			Heating of Lambda probes
Engine speed signal from crankshaft		>	Fuel pump (demand driven)
Phase signals from crankshafts			Tank venting
Knock sensors			Camshaft phase adjustment
Vehicle speed			Secondary air injection
Air-conditioning settings	 anagem (Motronic MEZ.)		Engine fan control
Engine immobiliser	 Ë		Starter control
Temperatures	e		Diagnostics
- Coolant			Air-conditioning compressor
- Intake air - Engine oil	ligi		Wastegate frequency valve
]	ш —		Boost pressure recirculating valves



Used to regulate/control

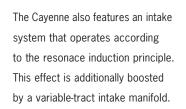
CAN interface with vehicle stability control system, transmission control unit, engine immobiliser, instrument cluster, etc.

Air intake system.

The air intake system on the Cayenne Turbo and Cayenne S functions according to the resonance induction principle. The dimensions of the inlet manifold are matched with tuned inlet ports to achieve a much richer and flatter torque curve. The system is augmented by VarioCam technology, offering continuous adjustment of the intake camshaft. In order to meet the strength and weight requirements of modern engine design, both models are equipped with a new air intake system featuring multiprocessing technology.

tive manner. It combines the advantages of a long intake manifold, higher torque at low speed, with that of a short intake manifold for high specific performance. The changeover takes place at around 4,250 rpm. To achieve the required high component strength and low component weight, the manifold is produced using fusible-core technology.

This operates in a simple but effec-
tive manner. It combines the advan-
tages of a long intake manifold,The results for both air intake
systems are copious torque at
low engine speeds and a more
eager throttle response.







Ignition system.

The engines used on the Cayenne models feature a static high-voltage ignition system with separate ignition coils on each individual plug. As well as providing a more consistent ignition spark, this technology offers a more reliable alternative to conventional ignition systems. The function of the distributor is handled by the Motronic ME7.1.1 engine management system.

Improving combustion not only benefits performance, it also reduces emissions and improves fuel economy. And it's easy to maintain. The platinum-based plugs on the Cayenne and Cayenne Turbo have a lifespan of 60,000 km (approx. 37,000 miles), whilst the nickel yttrium plugs with a four-ground electrode design on the Cayenne S only need replacing after 90,000 km (approx. 56,000 miles). Using a non-return fuel supply system at an operating pressure of 4 bar, the fuel is supplied by means of sequential injection to the combustion chambers via the injection valves.

Fuel system.

The sequential injection is controlled by the Motronic ME7.1.1 engine management system in accordance with the actual power requirements. It always ensures the right fuel-to-air ratio. Emissions are monitored by the stereo Lambda sensors (see overleaf). As a result, the system is not only easy on fuel; it's also easy on the environment.

Exhaust system.

The lightweight exhaust system is made from special, ultra-durable stainless steel alloys.

Downstream from the main catalysts on the Cayenne S and Cayenne, a crossover link allows dynamic interaction between the two streams of gas from each of the cylinder banks. The key benefit of this link is an even greater level of torque at low engine speeds.

Short exhaust manifolds ensure rapid heating of the primary catalysts, a basic precondition for effective emission control, from the earliest possible time.

A decoupling element between the pre-catalytic converter mounted on the engine and the main catalytic converters mounted on the body prevent the transfer of vibrations from the engine to the cabin.

The Motronic ME7.1.1 engine management system also has an important role to play in eliminating emissions at source. A pair of Lambda sensors inside each of the two primary catalytic converters supplies a real-time analysis of exhaust gas composition. This information can then be used by the engine management system to adjust the air/fuel mix as required.

This stereo Lambda closed-loop control keeps the exhaust emissions at the lowest possible level in all engine operating modes.



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Cayenne S exhaust system



The primary and main catalytic converters provide a high level of efficiency, faster warm-up and a long service life as well as lower emissions (for more information see section on environmental compatibility).

The twin exhaust channels are combined in the silencer unit. The system then exits the car through a set of elegant sports tailpipes – two at each side on the Cayenne Turbo and a pair of single pipes on the Cayenne S and Cayenne.

Cayenne S and Cayenne Despite these external differences,

Single-tube twin tailpipes on

the exhaust systems have two key features in common: as well as sharing the distinctive Cayenne sound – so evocative of previous generations of Porsche – the Cayenne models also comply with the stringent new Euro 4 emissions legislation in Europe and the LEV 1 regulations in the United States.

Turbocharging system in the Cayenne Turbo.

The twin exhaust turbochargers on the Cayenne Turbo are arranged in parallel for optimum use of space. The low-volume intake pipes combine with short exhaust manifolds to enhance the immediacy of response.

Incoming air is compressed by each turbocharger and is then passed through an intercooler system where the heat generated during compression is reduced. Since cooler air is more dense than warm air at the same pressure, the volumetric efficiency of the engine is improved and, with it, the car's overall performance. In addition, the temperature stress on the components is reduced.

Boost pressure is controlled by the Motronic ME7.1.1 engine management system, reaching 1.6 bar (absolute) under full acceleration from just 2,250 rpm. If driven moderately and consistently in part-throttle mode, the boost pressure setting is optimised for maximum fuel economy. Driven more assertively, the turbines are 'pre-spun' to increase the amount of pressure on tap. When the throttle is finally opened, the boost can be applied immediately, thus eliminating the problem of lag.

Both turbocharger units are cooled by dedicated circuits from the main engine cooling system. This highly effective solution helps prevent oil degradation, a problem typically encountered at higher operating temperatures.

For the driver, the system offers seamless delivery for a more fluent and manageable drive.



The increased power of the Cayenne Turbo.

Cayenne Turbo, the name alone sounds like extreme performance in all situations. Like hardly any other vehicle it combines power, dynamics and agility. An extremely high standard. Even so, it's one that Porsche can set even higher. After all, it's part of the Porsche philosophy to constantly achieve improvements.

The performance of the Cayenne Turbo can be further improved upon. Through the increased power of the Cayenne Turbo in production. Or retrofitted at your Porsche dealer. An increase from 450 to 500 bhp that can satisfy the highest demands with regard to durability and performance characteristics. Which is typically Porsche.

The increase in performance for the Cayenne Turbo is also achieved by noticeably enlarged and outputoptimised intercoolers, which through a flow-optimised design, has significantly reduced pressure losses thus providing the thermodynamic foundation for an effec-



Power kit for Cayenne Turbo*

Fuel consumption:

Total

 According to the currently valid version of 80/1268/EC.

 Urban in I/100 km (mpg)
 21.9 (12.9)

 Extra urban in I/100 km (mpg)
 11.9 (23.7)

 Total in I/100 km (mpg)
 15.7 (18.0)

 C0, emissions:
 20.20

378 g/km

* Due to the enlarged brake system, 19 inch Porsche wheels must be fitted with the appropriate clearance.

tive increase in performance. In addition, a newly applied engine control is used. The result: one of the finest engines in the world today, its athletic capability is all the more remarkable when you consider its modest dimensions and weight. Add in a cooling system perfected in the deserts of Dubai and you have the ideal power plant for even the most demanding applications. 368 kW (500 bhp), whereby the maximum value in the rev range is between 5,500 and 6,000 rpm. The torque has been increased over a rev range between 2,250 and 4,750 rpm by 80 Nm to a maximum of 700 Nm. Acceleration from 0 to 100 km/h (0 to 62 mph): 5.3 seconds. Top speed: 270 km/h (168 mph). Figures that allow dreams to become a reality. Or simply to drive. And which can make a major contribution towards your active safety.

In addition, a larger brake system matches the increased power.

On the front axle there are 6-piston aluminium monobloc brake callipers as well as internally ventilated two-piece brake discs with a diameter of 380 mm (standard: 350 mm) and a thickness of 38 mm (standard: 34 mm). On the rear axle there are 4-piston aluminium monobloc brake callipers as well as internally ventilated brake discs with a diameter of 358 mm (standard: 330 mm) and a thickness of 28 mm. The chassis on the front axle on the tie rods, control arm mounts and shock absorbers, in conjunction with optimised software for the air suspension has also been adapted to the higher demands. Driving the Cayenne Turbo is thus even more fun.

Transmission.

Six-speed Tiptronic S on the Cayenne Turbo.

When a car is as powerful as the Cayenne Turbo, it requires a very special transmission system. A system that is not only capable in the extreme, but also sensitive to the way you like to drive. The six-speed Tiptronic S does all this and more, delivering controlled performance in all terrain – not least on the racetrack or road.



In automatic mode, the system can choose from a number of different gearshift patterns, ranging from maximum fuel economy for everyday road use, to maximum sports performance with immediate downshifts for more rapid acceleration.

As you travel, Tiptronic S monitors your driving style and the terrain, and then selects the most appropriate pattern. The gearshift points are infinitely adjusted between the two extremes of Economy and Sport for a more natural transmission response. The system also offers a kickdown function, which enables you to select a lower gear under full acceleration.

For complete manual control, simply slot the system into manual mode and use the gearshift controls on the steering wheel. Press up to change up, and down to change down. If you prefer, you can also change gear manually using the gear selector lever on the centre console.

Whichever method you use, the response from the system is immediate and precise, with virtually no interruption in drive to the wheels.

In low-range mode, the system automatically adapts the gearshift pattern to achieve optimum offroad performance. Another special feature of the reduction gearbox of the Tiptronic S is that it can be engaged and disengaged both when the brake is applied as well as when on the move, at speeds of up to 15 km/h (9 mph) and 30 km/h (18 mph) respectively.

Under heavy braking, a lower gear is automatically selected to make the most of engine braking. An incline sensor detects when the car is on a gradient, enabling the system to modify the shift



inpulsing a steering inteel on

points for better uphill acceleration as well as more effective engine braking on descent.

Mid-corner gearshifts are automatically suppressed for a smoother and therefore safer ride. In off-road terrain, the gearshift points are specially adapted for optimum power delivery. The gearbox itself is equipped with a dedicated cooling system to maintain the optimum operating temperature. Specifically configured to match the enormous potential of the Cayenne Turbo, the cooling system is particularly important for heavy-duty transport and towing applications, as well as in difficult off-road terrain. Tiptronic S also features the Porsche Hill Holder, which facilitates hill starts by preventing the car from rolling backwards without the driver having to operate the brakes when the gear selector is in position D or M.

Six-speed Tiptronic S is also available as an option on the Cayenne S and Cayenne.

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Tiptronic S
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Six-speed manual gearbox on the Cayenne S and Cayenne.

The six-speed manual gearbox has been designed to match the car's exceptional torque output.

The design objective was maximum sports performance. By combining short-throw operation with a pre-

cision gear linkage, we've achieved the optimum blend of immediacy and power, coupled with exceptional driver comfort. As a result, gear selection is both reliable and smooth. The car combines exceptional on-road performance and driver comfort with exemplary off-road capability, particularly in water or on gradients of up to 45° (equivalent to 100%). A further special feature is the Porsche Drive-off Assistant, a Porsche Hill Control function for vehicles which facilitates hill starts on steep gradients. For optimum comfort, the gearbox features an external cable-operated gearshift to minimise vibration in the gear lever. A dual-mass flywheel consisting of two outer sections separated by torsional-elastic elements also prevents noise and

vibration from the engine unit being transferred into the driveline. By the way, the gearbox casing is made of lightweight die-cast aluminium.





The chassis displays a very special affinity. To the road. (As well as to virtually every other type of surface).

One thing is certain: on a Porsche of this size, every chassis component must satisfy very specific requirements. The ability to handle the unbelievable power. And at the same time to permit the typical Porsche feel on all road surfaces. The axles, the springs, the steering – everything must be attuned 100% to the Cayenne models. Providing 100% performance. And 100% practicality. Then and only then does one obtain the following result: Porsche handling on any terrain. Experienced from the cockpit, the ride is agile and secure, regardless of surface, payload or speed.

The steering is direct, responding with immediacy and precision to every driver input. Mid-corner balance is smooth and assured, with minimal disturbance from changing wheel loads. The brakes, of course, apply proven Porsche technology to achieve literally breathtaking levels of deceleration.

Most remarkable of all, however, is the fact that all these characteristics can also be enjoyed off-road.

To achieve that performance, we've used large suspension travel and ground clearance, selflevelling air suspension with height adjustment and Porsche Active Suspension Management (PASM) – all of that is standard on the Cayenne Turbo and optionally available for the Cayenne S and the Cayenne.

The result is a car that combines high-tech performance with complete practicality.

Axle concept.

The front axle.

The front axle concept on the Cayenne models is designed as a double wishbone suspension with a suspension sub-frame.

The carefully devised geometry of the upper and lower wishbones helps minimise distortion under load. With its accurate wheel location, the car is not only stable at speed, it's also more agile and responsive.

Another advantage of the sub-frame assembly is its ability to shield the rest of the car. Attached to the



The rear axle.

chassis by means of large rubber

in the passenger compartment for

a more relaxed and enjoyable ride.

The lightweight, high-tensile steel

sub-frame is specially designed

to enhance the overall rigidity of

The benefits are not only more

comfort and stability, but also

even greater passive safety. In the event of an accident, the

sub-frame deforms in a prede-

fined manner to help maintain

the integrity of the passenger cell.

the bodyshell.

mounts, it helps minimise noise

In order to achieve all the precision and handling you'd expect from a Porsche, we've developed a new suspension layout featuring a sophisticated multi-link geometry. This configuration is designed to cope not only with the prodigious traction of the Cayenne models, but also with the exceptional loadcarrying capability.

As on the front axle, a steel sub-frame assembly featuring hydraulically damped rubber mounts helps maximise comfort and minimise interior noise. Here again, the sub-frame consists of lightweight high-tensile steel so as to reduce the weight and achieve greater rigidity.



<image>

In order to meet the unique demands of off-road driving, the lower suspension links and track rods are made of high-strength steel. The upper links are located high in the wheel arches and are forged in lightweight aluminium. The angled strut layout facilitates longer suspension travel as well as a deeper and wider cargo area.

Advanced axle kinematics reduce pitching under braking and acceleration, keeping the car level at all times. The rear suspension geometry uses toe-angle control to improve mid-corner stability, while compensating for any throttle or brake inputs. The result is the famous 'Weissach effect', so characteristic of Porsche sports car design. The car's longer suspension travel is, of course, specifically designed for optimum off-road use. On the Cayenne Turbo, the standard air suspension offers maximum compression and rebound travel of 102 mm and 118 mm, at the front, followed by 124 mm and 125 mm at the rear. On the steel-sprung Cayenne S and Cayenne, there's 104 mm of compression and 116 mm of rebound at the front, followed by 135 mm and 98 mm at the rear. Air suspension is also available as an option on both of these models.





Front axle Cayenne S

Rear axle Cayenne S



Front axle Cayenne



Rear axle Cayenne



Steering.

Prodigious power demands total control.

This is why we've developed an all-new steering system for the Cayenne model range, based on proven Porsche technology. Offering a familiar blend of immediacy, precision and exceptional sensitivity.

To enhance the car's agility, both on- and off-road, we've combined a variable steering ratio with special valve settings on the powersteering system. Lock-to-lock travel is a modest 2.65 turns, while the turning circle measures just 11.7 metres. The rack-and-pinion steering features flexible mountings to help minimise vibration for a more relaxing and comfortable drive. Lightweight design is used throughout the system, including a hollow bore steering rack and a twopiece steering gear casing in die cast aluminium.

Inside the cockpit, there's 40 mm of height adjustment and 50 mm of reach adjustment on the elegant three-spoke steering wheel. Both adjustment options are electrically assisted in the Cayenne Turbo and are manual in the Cayenne S and Cayenne. Electric adjustment is also available as an optional extra on the Cayenne S and Cayenne in conjunction with the Comfort seat package or sports seat option.

The electrically adjustable steering column also features an 'Easy Entry' function, which raises the steering wheel clear of the seat whenever you enter or leave the cockpit. The Comfort seat package (standard on the Cavenne Turbo. optional on the Cayenne S and Cayenne) includes a driver memory function, making it possible to store the wheel position preferences on the driver's key. Using this function, the steering wheel automatically adopts your preferred position each time you enter the car.

Servotronic.

Servotronic is a speed-sensitive power steering system available as an option on all Cayenne models.

When travelling at speed, the system provides a much firmer feel and more accurate response while enhancing driver comfort.

At lower speeds, the steering is remarkably light, making for easy manoeuvrability in traffic or when parking.



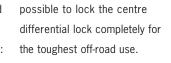


Porsche Traction Management (PTM).

Intelligent four-wheel drive.

The Cayenne models are equipped with a highly complex and exceptionally powerful high-tech system: Porsche Traction Management (PTM). Like every good idea it's extremely simple: depending on the situation, it actively distributes the torque from the engine to wherever it's most effective.

How does it work? At the heart of PTM is an intelligent permanent four-wheel drive system with a lockable centre differential. The standard ratio is 38% at the front and 62% at the rear. It's also



PTM also incorporates a reduction gear (low-range) for extreme offroad use, an Automatic Brakeforce Differential (ABD) to optimise traction, as well as a Traction Control System (TCS) for greater stability under acceleration.

If one of the wheels is about to lose traction, PTM uses the ABD system to apply the brake on that wheel. Torque that would otherwise be delivered to that axle is then fed to the opposite wheel. If both wheels on one axle are in danger of slipping, the traction control system TCS intervenes in engine management in order to maintain grip. The ABD and TCS thus ensure the traction on all four wheels. All PTM functions are fully automatic, enabling more dynamic handling characteristics as well as greater active safety. The result is a car with all the agility required to master the power of Cayenne.

As always at Porsche, a special idea focuses directly on the driver: a facility for actively influencing the all-wheel drive.

Using a single control in the centre console, the driver can select between 'high-range' and 'lowrange' mode. In low-range mode, the gearing is reduced to facilitate more challenging off-road manoeuvres or to maximise traction when towing a heavy trailer load.

Consequently, the driver can decide whether he requires the high-range mode for optimum on-road performance or the lowrange mode for maximised traction control.

Once low-range mode has been selected, the same control can then be used to fully lock the centre differential lock.





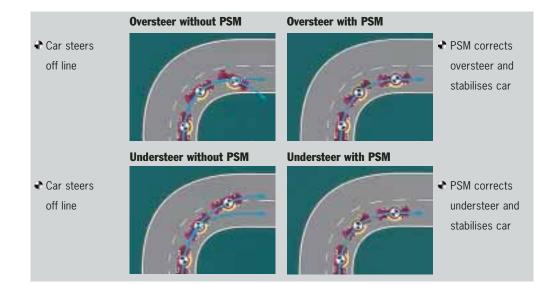
Transfer box

Porsche Stability Management (PSM).

All Cayenne models come with Porsche Stability Management (PSM) as standard. This powerful electronic system uses a range of control functions such as anti-lock braking to help stabilise the vehicle – and trailer, if fitted – in difficult driving conditions. To do that, the system uses a series of sensors to monitor direction, speed, yaw velocity (speed of rotation around the vertical axis) and lateral acceleration. PSM is then able to calculate the actual direction of travel. If the car begins to oversteer or understeer, PSM applies selective braking on individual wheels so as to stabilise the vehicle. If braking isn't enough to maintain control, PSM then intervenes in engine management to modify engine output as necessary. PSM also accesses a number of PTM systems, including the centre differential and longitudinal interlock. For off-road use, the ABD has been expanded by a tractionoriented off-road control strategy.

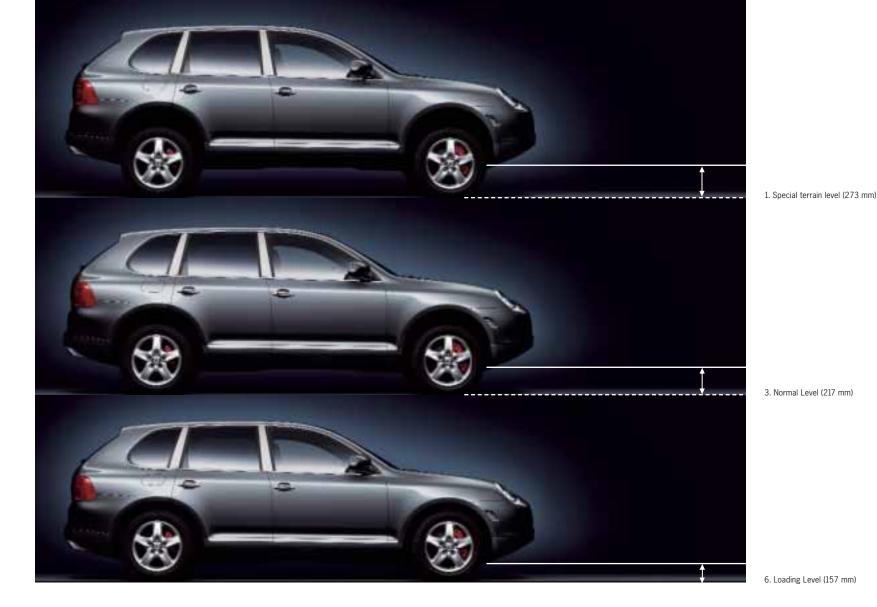
The driver is made aware of system operation by the PSM indicator on the instrument cluster which provides a significant improvement in control.





PSM makes an important contribution to keeping the vehicle safely on the course selected by the driver, within the physical limits. As well as compensating for loss of stability caused by mid-corner throttle or brake inputs, PSM helps optimise traction and directional stability when accelerating on difficult road surfaces.

The system can also reduce oversteer induced by sudden steering inputs – for example, when changing lanes or negotiating a rapid sequence of bends, as well as understeer encountered when entering a corner at speed, especially in low-grip conditions. Braking is stable in all types of weather, while braking distances are reduced to a minimum, particularly when braking in a bend. If you'd rather enjoy your Cayenne unassisted, the system can also be disabled. For reasons of safety, the system remains active in the background and is automatically enabled if required under braking.



1. Special terrain level:

56 mm above normal level (max. ground clearance: 273 mm)

2. Terrain level: 26 mm above normal level (max. ground clearance: 243 mm)

3. Normal level: (max. ground clearance: 217 mm)

4. Low level: 27 mm below normal level

(max. ground clearance: 190 mm)

5. Lower level:

38 mm below normal level (max. ground clearance: 179 mm)

6. Loading level:

60 mm below normal level (max. ground clearance: 157 mm)

Air suspension with automatic levelling and height adjustment.

The Cayenne Turbo features air suspension with automatic levelling and height adjustment and PASM as standard. This system is also available as an option on the Cayenne S and Cayenne. The self-levelling capability ensures optimum ground clearance, regardless of loading or terrain. The ride-height itself can be manually

adjusted using a single control on the centre console. The current ride-height setting is permanently displayed on the instrument cluster as well as on a series of LEDs next to the control. The full capability of the system is explained in detail on the following pages.

· 76 ·



Manual ride-height control.

Loading level: the lowest possible position with a ground clearance of 157 mm, which is about 60 mm lower than the standard setting. This ultra low option is designed for easier loading when the vehicle is stationary. When moving off, the ride-height automatically reverts to normal. Low level: this is 27 mm below the normal level, and is thus comparable with a typical sports suspension. The chassis is stiffer, the aerodynamics improved, for a more stable and agile ride. For safety, all higher ride-height settings automatically drop to low level at around 125 km/h (78 mph). At approximately 210 km/h (130 mph), the ride-height is lowered by an additional 11 mm to the lower level (not available for manual selection).

Normal level is the standard rideheight on all Cayenne models, offering a maximum ground clearance of 217 mm at unladen weight (DIN empty/EC).

High level provides increased ground clearance for difficult terrain. The ride-height is raised to 26 mm above normal level for a maximum clearance of 243 mm. To maintain stability, this option is only available at speeds of up to 80 km/h (50 mph).

The higher level is designed for extreme off-road conditions and is only available at speeds of up to 30 km/h (18 mph), offering a total ground clearance of 273 mm and an approach angle of approximately 32°.



And how does the level control function? When a vehicle is heavily laden, the clearance on the rear axle is usually reduced. With the new standard air suspension on the Cayenne Turbo (optional on the Cayenne S and Cayenne), there is virtually no discrepancy between front and rear and the car remains parallel to the road at all times. Another useful benefit of the air suspension is that it doubles as a compressed air supply. Simply connect the air-delivery hose stored beneath the rear seat to the rapid action coupling on the base of the front passenger's seat, and the system can be used to inflate the optional spare wheel.

Porsche Active Suspension Management (PASM).

PASM is an electronic damping control system offering continuous and active adjustment of damper force.

The system responds to changing road conditions and driving style to maintain a more consistent and comfortable ride. In high-speed racetrack use or on uneven offroad terrain, most vehicles suffer from pitch and roll, i.e. inertial movement of the body of the car under acceleration, braking or cornering.

With PASM, the dampers automatically oppose any unwanted movement before it has a chance to occur.

To do that, the system uses three g-force sensors that monitor the movement of the body. The PASM control unit then evaluates this data and can initiate a response if



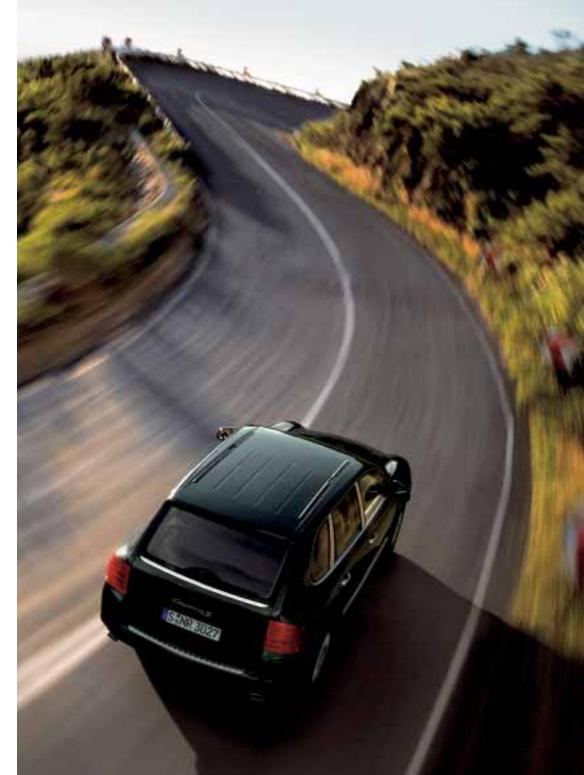
required. If pitch or roll exceeds a predefined threshold, PASM stabilises the car by adjusting the force on each individual damper.

The driver can choose between three basic damper settings. The system offers the following programs: 'Comfort', 'Normal' or 'Sport'. To ensure optimum safety, PASM remains active at all times.

Rocker switches

If, for example, the car is driven more assertively while still in Comfort mode, the system automatically switches to the much stiffer Sport damper setup.

PASM is standard equipment on the Cayenne Turbo and optional on the Cayenne S and Cayenne (only in conjunction with the optional air suspension system).



Off-road performance.

The Cayenne model range is designed to offer pure driving pleasure - no matter how unpleasant the terrain.

Simply shift the transfer gearbox into 'low-range' mode – possible in conjunction with Tiptronic S at speeds of up to 15 km/h (9 mph) thanks to 'shift-on-the move' functionality – and the car is ready for off-road use. Porsche Traction Management (PTM) combines with PSM to adapt a number of

on-board systems for optimum all-terrain performance. The seamless transition from road to trail involves off-road ABS and ABD to ensure optimum traction. while the maximum ground clearance can be raised to 243 mm (terrain level) on vehicles with air suspension (standard on Cavenne Turbo, optional on Cavenne S and Cavenne). The current vehicle status is always clearly displayed in the cockpit instrument cluster.

If greater manoeuvrability is required, simply raise the rideheight setting to the special terrain level (273 mm) and lock the centre differential lock.

The chassis on the Cavenne models is more than prepared for some formidable off-road gradients. At the highest ride-height setting for special terrain, the generous approach angle of 32° is followed by 27° on departure. The ramp breakover angle is 24°. ensuring safe manoeuvrability in difficult, undulating terrain. The approach angle represents the



angle of gradient that can be safely approached from the horizontal plane without grounding the front of the car, while the departure angle is exactly the same concept applied to the rear of the vehicle. The ramp breakover angle defines the ability of the vehicle to negotiate a sharp ridge or ramp without grounding (see page 187).

Ably assisted by Porsche Hill Control (PHC), all three models can tackle steep gradients of up to 45° (equivalent to a gradient of 100%). The hill holder function on Tiptronic S, and the Porsche Drive-off Assistant on vehicles with manual transmission, allows the driver to stop on a hill and drive off again without having to operate the brakes.

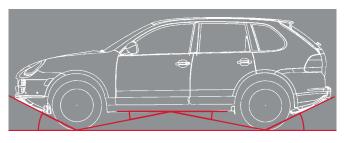
It also enables a steady slow descent down steep slopes or icy mountain roads at speeds of up to 20 km/h (12.5 mph) using engine braking. This is provided by the engine drag-torque control (EDTC) system, which prevents wheel lock-up on overrun or following downshifts on low-grip surfaces. Selective braking is applied



to individual wheels resulting in a considerable increase in steering precision.

Thus equipped, the Cavenne model range is uniquely prepared for virtually every terrain there is. From mud and rock to shifting desert sands, the engine applies every ounce of its torque precisely where it's needed most.

Even when the way is barred by water, your Cayenne can still bring you safely through. With an innovative seal concept, high-level air



Approach angle

intake and transmission ventilation. as well as a fully encapsulated 'dry door sill' system, all three Cayenne models can easily negotiate virtually any water crossing up to half a metre in depth. Equipped with air suspension, they can travel through water up to a depth of 555 mm.

Ramp breakover angle **Departure angle**

Advanced Off-road Technology pack.

In order to master the most demanding terrain, we've created the Advanced Off-road Technology pack. This optional equipment package includes high-strength rockrails with integrated skid plates, a reinforced engine bay guard, enhanced protection for the fuel tank and rear axle, a headlamp cleaning system, a second towing lug, plus two advanced off-road systems for particularly tough conditions.

The first of these systems is an electronically variable and lockable rear differential, which provides measured distribution of torque to the rear wheels in the most challenging off-road conditions – without any need for driver intervention.

The rear differential forms an integral part of the intelligent all-wheel-drive system. If either of the rear wheels is in danger of losing traction, the differential immediately adjusts the torque distribution, thereby stabilising the car.

When low-range gearing is selected, the differential can also be manually locked using the main off-road control on the centre console. In locked mode, both rear wheels receive the same amount of torque, regardless of surface conditions. The Advanced Off-road Technology pack also includes a set of hydraulically disengageable anti-roll bars (front and rear).

In normal road driving, on all Cayenne models, the chassis is designed for minimum lateral roll. By splitting each anti-roll bar into two separate sections, however, the 'stiffness' of the suspension can be reduced. As a result. each wheel has a much greater degree of articulation – up to 60 mm on each axle. With more freedom of movement, the car is not only more versatile off-road and capable of tackling larger obstacles, such as rocks and logs. it's also more comfortable to drive. Back on tarmac, the bars are automatically re-engaged when the car reaches 50 km/h (30 mph) to ensure maximum safety.

From here, the Cayenne regains its unique combination of Porsche road performance and off-road handling.



Cayenne Turbo with anti-roll bars engaged



Cayenne Turbo with anti-roll bars disengaged

Safety and security

Self-control and stability. Major characteristics. Not only where people are concerned, but also for Porsche.

The Cayenne model range is impressive due to its high reserves of safety. Active as well as passive. That creates trust.

So that you can enjoy one thing in your stride: assured driving pleasure.





Irresistible force meets immovable object.

The Cayenne braking system.

With a top speed of 270 km/h (168 mph) and a maximum braked trailer load of 3.5 tonnes, the Cayenne Turbo with power kit represents an awesome combination of power and momentum. To keep all that in check, we've developed a braking system based on the latest Porsche technology.

All around the world, Porsche braking systems are acknowledged as the benchmark in power and durability. Hardly surprising when you consider that the technology has been further refined and perfected through decades of experience on the track, and consequently fitted as standard.

Just like the other Porsche sports cars, all three Cayenne models are equipped with internally ventilated brake discs all-round. This proven technology ensures consistent brake temperatures and therefore optimum performance, even under prolonged downhill use.

The front discs are gripped by six-piston monobloc aluminium fixed callipers aided by fourpiston equivalents at the rear. All four callipers feature a red paint finish on the Cayenne Turbo, with titanium on the Cayenne S and black on the Cayenne.

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.

For optimum leverage, the front set of internally ventilated discs on the Cayenne Turbo and Cayenne S have a diameter of 350 mm and a thickness of 34 mm (330 mm and 32 mm respectively on the Cayenne). Since no extra cooling is required, the discs are not perforated, which means dirt cannot penetrate when used off-road.



The performance enhanced Cayenne Turbo has internally ventilated two-piece brake discs on the front axle, which are 380 mm in diameter and 38 mm thick. The pistons on the front callipers are fitted with temperature-resistant insulation elements. By reducing the amount of heat that is transferred from the pads to the brake fluid, this simple solution helps optimise consistency and performance.

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

Another major factor in the safety of the Cayenne model range is the powerful acceleration and flexibility of the engines, particularly during overtaking manoeuvres. With smooth and steady handling in even the most challenging bends, the car offers a truly exceptional standard of active safety.



Standard brakes on Cayenne: 330 mm disc brake on the front axle



Standard brakes on Cayenne S: 350 mm disc brake on the front axle



Standard brakes on Cayenne Turbo: 350 mm disc brake on the front axle



380 mm two-piece brake disc on the front axle

Lighting system.

The standard equipment of the Cayenne Turbo features Bi-Xenon headlights including an automatic headlamp levelling control and headlamp cleaning system. An additional characteristic of this system is the dynamically controlled cornering function. As you turn into a bend, the headlights automatically adjust to provide even better illumination of the road. To do that, the system uses a series of sensors that measure the steering angle and speed of the car. Based on this data, the system then calculates the optimum illumination for the corner. As a result, the corner is easier to negotiate, as are any potential obstacles on the road.

The system is also available as optional equipment on the Cayenne S and Cayenne, which come with H7 dipped beam with manual headlamp levelling and main and auxiliary high beam lights as standard. The sidelights and indicators are integrated in the main headlight module as they are on the Cayenne Turbo. The module itself features a simple mounting system for much easier servicing and maintenance.

Another practical feature of the Cayenne lighting system is the 'Welcome Home' function included in the optional Light Comfort pack. When the car is parked at night, the headlights remain illuminated for a predefined period to improve visibility on foot. The length of that delay can be individually configured to suit your personal requirements.



Headlights Cayenne S and Cayenne

Exterior lights.

The headlights are augmented at the front of the car by a pair of powerful H11 fog lights. The rear light modules incorporate all rear lights, i.e., indicators, fog lights (right and left), reversing lights, brake lights, sidelights and reflectors. Another feature: additional indicators are mounted in the front wheel arches for optimum visibility from front, side and rear. This simple solution is not only more distinctive, it also adds to the exceptional active safety of the Cayenne model range.

The high-level third brake light consists of LEDs and is neatly integrated in the stylish roof spoiler.

All four doors and the tailgate are equipped with red safety lights.



Additional indicators



High-level third brake light



Tail light unit



Door exit light



Passive safety. Safer by design.

The most important consideration on every car we make is, of course, your safety. So when we tested the Cayenne models at our research facility in Weissach, we paid particular attention to occupant protection. As one of the first manufacturers to introduce crash testing on our cars, it's something of a speciality.

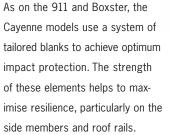
As a result, the Cayenne model range complies with all legal requirements for all types of crash protection, including frontal, side, diagonal and rear impact, as well as rollover and frontal or side post impact.

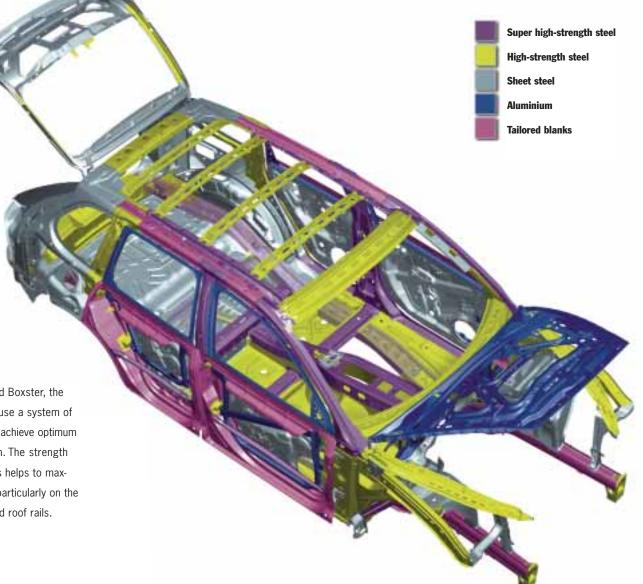
Our ongoing development of lightweight steel design is one of the crucial factors in the enhanced passive safety and unparalleled rigidity of the body.

The shell itself uses a triple-skin structure with robust three-box sections. The laser-welded and bonded construction provides exceptional rigidity and occupant protection, particularly in the all-important roof and pillar area.

A system of side and cross-members at the front of the car helps to channel impact energy in a controlled, safe 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.

One of the special features of the Cayenne model range is its innovative use of multiphase steels. With their unique combination of exceptional rigidity and consistent deformation properties, these highly versatile alloys fulfil two key safety requirements.





Passive safety. The passenger cell.

The powerful performance of the Cayenne models necessitates a corresponding degree of occupant protection – for every type of impact. The switch panel and centre console feature deformable structures and generous padding to maximise energy absorption. The seats, doors, pillars, roof and upper belt deflection points are also fitted with energy-absorbing elements and padding. The seats offer a quality of build that is well in excess of legal requirements. With the exception of the central rear seat, all head restraints are height adjustable. The steering column is equipped with multiple collapsing sections linked by a series of universal joints. A special deformation element offering 70 mm of travel provides added safety in the event of a front impact.



Airbags.

As long ago as 1991, Porsche became the first manufacturer to equip its vehicles with driver and passenger airbags. This unique expertise has been applied to the Cayenne model range along with a number of new improvements.

All three models come with full-size airbags for both front occupants. The front airbags are augmented by a new side-impact protection system featuring side airbags integrated into each of the front seats. Curtain-type airbags running along each side of the roof provide optimum head protection for both rows of seats. When it's deployed, the curtain airbag forms a protective cushion along the side of the car with a total volume of around 23 litres.



The Cayenne features two additional sensors at the front of the vehicle to detect head-on collisions. This allows deployment of the front airbags to be adapted to complex crash situations, thereby maximising protection.

All Cayenne models feature threepoint seat belts for all five occupants, as well as seat belt pretensioners (front and outer rear seats) and force limiters (front only). On vehicles equipped with the Comfort seat or Sports seat option (standard on the Cayenne Turbo), the belt deflection points are electrically adjustable on both front seats and manually adjustable at the rear (outer seats only). Passive safety is particularly important when it comes to the youngest members of the family, which is why we've developed a special range of child seats for all age categories. Each can be fitted to the front passenger's seat or either of the outer rear seats using the standard ISOFIX anchors. If the front passenger seat is used, the corresponding airbag can be quickly deactivated using a special key-operated switch.

Comfort and practicality

Everything is precisely where you need it. Everything is precisely as you like it.

That's typical for Porsche. Not only where comfort is concerned.

The Cayenne model range also embodies a significant feature: inner space.

The cars are exceptionally practical, as well as providing space for any hobby.





Space to explore.

Inside and out.

The interior.

Like every Porsche before it, the interior of the Cayenne models is specifically designed around the driver. Every feature, from driving position to cockpit layout, has been carefully refined for maximum comfort and control.

The high-tech materials and instrument cluster are elegantly tempered by the classic lines of the interior. The Cayenne S and the Cayenne Turbo feature leather upholstery as standard, and in the



Cayenne Turbo it provides a tasteful contrast to the genuine aluminium trim on dashboard and doors. The sun visors feature a special twopiece design enabling simultaneous front and side protection.

The Cayenne Turbo also features a three-spoke, heatable leather steering wheel as well as electrically assisted height and reach adjustment. The Cayenne S and Cayenne come with manual adjustment as standard and electric adjustment as an option. A heatable steering wheel is also available as an option on both models (only in conjunction with heated seats).

Optional equipment on all Cavenne models includes a three-spoke multifunction steering wheel. This advanced solution combines added convenience with even greater active safety. A number of vehicle systems can be easily controlled without moving a hand from the wheel, or your eyes from the road.



The left-hand keypad includes volume adjustment and mute controls for all audio or telephone output, as well as a 'disconnect' button for terminating hands-free telephone calls (if an optional telephone module is fitted).

The right-hand keypad can be used to receive incoming calls, select an audio source, or search for a radio station or CD track.

All models come with electric windows front and rear. When closing the window, an anti-trap sensor detects any obstruction and automatically lowers the glass to prevent injury or damage.

If more than one window is open, they can all be closed simultaneously by holding the key in the locking position.

The instruments.

Multifunction steering wheel

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The elegant cluster of five round instruments is familiar to every Porsche driver. In the middle: a generous central display. The display is flanked by matching

round dials housing the analogue rev counter and speedometer. This multi-purpose field offers a range of key information resources, proportions and high resolution including a digital speedometer, digital clock, trip odometer and current radio selection.

The standard instrument cluster in the Cayenne Turbo features a 5 inch colour display. The generous ensure optimum legibility at all times.



Instrument cluster in Cayenne S

The Cayenne S and Cayenne come with a 3 inch monochrome dot-matrix display.

The multi-purpose display acts both as a central source of information and as an operating menu for a number of vehicle systems. Key features include the gear

selection indicator for Tiptronic S, the PTM off-road system display, the PSM indicator light and the on-board diagnostics display.



Instrument cluster in Cayenne



Instrument cluster in Cayenne Turbo

Air-conditioning.

Both the Cayenne Turbo and Cayenne S feature an automatic air-conditioning system with glove compartment cooling and independent temperature control on both front seats. Key features include an active carbon filter which prevents dust, pollen and external odours from entering the passenger compartment, as well as an air-recirculation system that is automatically enabled whenever external pollutants are detected.

At the push of a button, the airconditioning system can be set to automatic mode. When the car is stopped, the passenger compartment can be heated for a period of up to 20 minutes using the residual warmth of the engine.

The Cayenne comes with a manually operated air-conditioning

system as standard (automatic air-conditioning is available as an option). Optional equipment on all models includes a four-zone air-conditioning system for the rear cabin area. This convenient system operates fully independently of the front air-conditioning, and offers separate temperature settings for left and right. The electronic controls are located between the front seats on the centre console, where they can be easily accessed by all rear occupants.

Switch panel.

All controls are ergonomically designed for optimum ease of use. Key functions are easy to locate thanks to their prominent dimensions and design. Less important features, such as the air distribution controls, can be completely concealed when not in use.

The hazard-warning switch is located at the top of the panel for immediate emergency access.

Centre console.

On the left-hand side of the centre console is the PTM control, which is used for activating the off-road applications. The control is designed for easy access and



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Porsche Communication Management and air-conditioning controls with cover retracted

accurate selection in every type of terrain. To the right of this control is the ride-height selector for the self-levelling air suspension system, as well as the PASM buttons (standard on the Cayenne Turbo, see page 80 for details). On either

side of the centre console is a robust grab handle offering added comfort and safety in extreme off-road conditions.

Panoramic roof system.



In addition to offering sporting performance both on- and off-road, the Cayenne models can be optionally fitted with an electrically operated, multifariously adjustable panoramic roof system, consisting of grey tinted safety glass, for an open-top driving experience. The system offers a wide range of preset adjustment options for optimum ease of use.

This roof system is almost four times the size of the optional slide/ tilt roof and covers around 1.4 m².

The panoramic roof system truly lives up to its name, even when closed (figure 1). You can enjoy the generous panoramic view but are also protected from unpleasant weather. Operating the rotary control then reveals its amazing versatility.

The system comprises three movable segments with multiple opening options, and one fixed segment.



The forward segment (marked 1 in the illustrations above) lifts upwards (figure 2) to act as a wind deflector, minimising noise and turbulence even at high speeds.

The two centre segments (2 and 3) can be opened separately to deliver fresh air exactly where you want it. Sliding segment 2 over segment 3 reveals the first row of seats, while segment 3 disappears beneath the fixed fourth segment to uncover the second row of seats (figure 2). Both central segments (2 and 3) can also be fully retracted for maximum

open-top enjoyment (figure 3). As an additional variation, segment 3 can be tilted to increase ventilation. A total of 15 different roof positions are possible.

If an obstacle is encountered when the roof is being closed, the direction of travel is automatically reversed.

Roof positions are selected by means of an illuminated rotary control on the forward roof console or, when stationary, by means of the ignition key in the door lock.



figure 2

An electrically operated fabric screen protects the interior of the car against excessive sunlight and cold. It can be operated independently of the roof position via a separate button in the roof

console.

Leaving you to enjoy even greater freedom in the Cayenne or simply an occasional view of the sky.



Exterior pack (black monochrome).

Off-road Design pack.

SportDesign pack*.

This optional pack features black side window frames, including B and C-pillar trim, tailgate finisher, door handles without inlays and side trim. On the Cayenne Turbo, the roof rail system fitted as standard is also finished in black. The pack allows vehicles in dark exterior colours to be styled accordingly, while the window elements in particular provide an attractive contrast on light-coloured vehicles. The optional Off-road Design pack comprises lower front and rear mouldings, side protection mouldings and wheel arch extensions in black. It also includes side running boards with integrated skid plates and a reinforced engine bay guard. Front end protection is a further feature of this pack (not on the Cayenne Turbo).

The dynamic properties of the Cayenne models can be highlighted even further by the optional SportDesign pack. It includes an optimised nose section with integrated, round fog lamps, a modified rear section, a larger roof spoiler and side mouldings. All components have been tested in the Porsche wind tunnel for maximum aerodynamic performance. In addition to making a bold style statement, they also reduce lift at both front and rear. Note that the vehicle's off-road capability is reduced when this pack is fitted.



Cayenne Turbo with Off-road Design pack and 20 inch Cayenne SportDesign wheels



Cayenne Turbo with Exterior pack (black monochrome)

* Recommendation: preferably to be combined with dark exterior colours.



Cayenne Turbo with SportDesign pack, roof rails, sports tailpipes and 20 inch Cayenne SportTechno wheels



Slide/tilt sunroof

Slide/tilt roof.

Optional equipment on all Cavenne models includes a slide/tilt sunroof with tinted safety glass, and a manually adjustable sunscreen and anti-jamming protection. An illuminated rotary switch control with an automated preset system ensures ease of operation.

All Cavenne models come with an integrated roof-rail system as standard. The optional roof bars can be mounted across the rails at any position to accommodate any of the current range of standard Porsche accessories. These are designed for a wide variety of cargo, including bikes, skis and general luggage. The roof bars

Roof transport systems.



Roof rails in matt aluminium look

and accessories are carefully styled to match the flowing lines of the car. All load-bearing parts are made of robust aluminium. enabling a maximum payload of 100 kg. Aluminium roof rails are offered as optional equipment in a matt aluminium look or black paint finish. Featuring the ideal combination of form and function, they can be used in conjunction with the adjustable roof bars



Door panel

(maximum payload of 75 kg). A set of four optional drip mouldings, finished in matt aluminium or black paint to match the car's exterior, can also be fitted to protect the surface of the roof.

Storage.

The Cayenne models offer a wide range of easily accessible and versatile storage options at the front and rear of the cabin. In addition to the glove compartment, door storage bins and pockets on the front seat backrests, all models come with a drawer beneath the front passenger's seat (not on vehicles with PCM), a sunglasses holder in the roof console and a two-layer compartment in the centre console.





The 2 adjustable cup holders at the front and 2 at the rear can each hold a variety of bottles and cans.

Interior lighting.

All Cayenne models feature a switch-off delay for the roof light, door handle illumination, front and rear footwell illumination.





front and rear reading lights, and illuminated vanity mirrors in the sun visors.

Additional lighting is provided for the luggage compartment, engine bay, ashtray, glove compartment and centre console storage. For added convenience, all models are equipped with door entry lights and generous illumination of the tailgate area.



Roof transport system



Bike carrier







Rear cup holders



Wiper system and rain sensor.

The front wiper system features aerodynamically enhanced, flat-bar wiper blades offering improved visibility over conventional systems.

In addition to a choice of two fixed wiper speeds, the system includes an infinitely variable rain sensor. The rain sensor incorporated in the base of the rear-view mirror controls the wiper speed and the wipe intervals. If the car slows to less than 4 km/h (2.5 mph) when the wiper system is switched on, the system automatically switches to the rain sensing mode. If the vehicle speed increases above 8 km/h (5 mph) once more, the system reverts to the original wiper setting.

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

The rear wiper system is also designed for maximum visibility at all times. The rear washer jet is incorporated within the high level third brake light in the integrated roof spoiler at the top of the rear screen.

Cruise control.

All Cayenne models can also be equipped with optional cruise control, which offers added comfort on long-distance journeys.

The cruise control can be engaged at any speed between 40 and 210 km/h (25 and 130 mph) by using a dedicated control stalk on the steering column.

Anti-theft protection.

The three Cayenne models are not only among the most powerful cars on the road, they are also amongst the most desirable. Which is why they're equipped with advanced central locking and a sophisticated engine immobiliser.

On standard-specification models, all four doors plus the rear screen or tailgate can be opened or closed using the key remote.

When locking the car, you can also choose from two different locking modes:

Level 1 is selected by pressing the key remote once. This activates the 'SAFE' lock: the doors can now be opened using the key remote, but not from inside the car. It's therefore impossible to unlock the car through an open sunroof or window. Level 2 is selected by pressing the key remote twice in quick succession. Once locked, the car cannot be accessed from outside, but can be opened from within. This mode is designed to provide added security for passengers waiting in the car.

The electronic immobiliser 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.

For added security, the steering column is automatically locked whenever the key is removed.

Porsche Entry & Drive.

For added security and greater ease of use, all Cayenne models are also available with the Porsche Entry & Drive system. As the name suggests, this optional system enables you to enter the car without the inconvenience of a standard key.



Despite its high-tech capability, this practical new system is simple and easy to use.

Whenever you want to enter the car. simply reach for the door handle as normal. As you do so. the electronic key in your pocket communicates with the system on-board the car, which confirms the key access code. If the correct code is found, the doors are automatically unlocked and you are free to enter the car. Once inside, you can start the engine using a simple key switch on the dashboard. After checking the code on your key once more, the system unlocks the engine immobiliser and brings the engine to life.

At the end of your journey, simply press the button on the outside of the door handle and the car is automatically locked. As well as locking the tailgate and doors, the system activates the engine immobiliser and steering column lock. If you prefer, you can lock the car as normal using the standard key remote.



Porsche Entry & Drive

Alarm system.

All Cavenne models are protected by a sophisticated alarm system with ultrasonic interior surveillance and tilt sensor.

The system incorporates all four doors as well as the bonnet, tailgate, rear screen, interior, ignition and trailer (if fitted).

To enable the system, simply press the button on the key remote to activate the central locking. If you press the button twice, the vehicle will be locked on the outside with only the interior surveillance and tilt sensor disabled. Use the key remote to open the car and the alarm will be automatically disabled.

If the car is unlocked manually, i.e. using the key in the lock, the alarm remains active except for the interior surveillance function. If the engine isn't started within 15 seconds, the alarm signal is triggered.

When this happens, the system uses the hazard warning lights and an emergency horn to draw maximum attention to the car. It's also

possible to block the alarm signal when using the door lock by simply disabling the alarm using the key remote. With the optional Porsche Entry & Drive system, the alarm is automatically disabled whenever you enter the car. If it's triggered, the alarm signal continues for a period of 30 seconds.

Vehicle Tracking System.

A fixture for retrofitment of the Porsche Tequipment Vehicle Tracking System is available as an option in production for the Cayenne and Cayenne S. This system permits a stolen vehicle to be located virtually throughout Europe and, depending on the vehicle and equipment type, requires the prior fitment of a higher capacity battery (standard on the Cayenne Turbo).

ParkAssist.

To make parking easier, we've included the latest ParkAssist technology as standard equipment on the Cayenne Turbo (optional on the Cayenne S and Cayenne).

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ParkAssist display (front)



ParkAssist display (rear)

Its sensors are harmoniously integrated in the front and rear.

How does the ParkAssist system work? The system is equipped with six ultrasonic sensors on the front and rear aprons that monitor the distance to the nearest obstacle. This information is then relayed to the driver via two LED displays: one in the centre of the dashboard switch panel, and one on the roof at the rear of the car.

A series of yellow and red LEDs provide a clear visual indication of how close the car is to an obstacle. The system also uses an intermittent warning tone which increases in rapidity as an obstacle is approached.

Reversing camera.

The reversing camera provides a crisp, detailed colour image on the PCM display to allow precision reversing into tight spaces, and is invaluable when hooking up a trailer. The camera automatically retracts into the rear tailgate after use, protecting it against dirt. There are also significant benefits in off-road use, where objects that might damage the tyres, chassis spotted more easily. The camera

or bodywork when reversing can be can also help detect treacherous surfaces (such as sand and water)





Reversing camera deployed



Reversing camera image on PCM



Front seats.

The Cayenne models are equipped with a generation of Porsche seats designed to the very highest specifications: not only in terms of adjustment options and weight reduction, but also in terms of safety which go far beyond the statutory requirements.

On the Cayenne Turbo, the Comfort front seats feature 12-way electrical adjustment and an enhanced memory function for up to three sets of preferences. The driver-side memory can also be used to store Cavenne Turbo. mirror, steering wheel and beltheight positions. On the passenger side, up to three different seat positions can be stored.

The seats are designed for the and feedback from the road. Lateral support is secure through corners, yet totally unobtrusive on the straight.

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 feature adjustable head restraints as well as lumbar supports with electric height and depth adjustment.

The seat belt buckle is located on the seat itself, which means the belt is always correctly positioned. no matter how the seat is adjusted. Belt height adjustment provides added passive safety and is electrically assisted on the

The Cayenne S and Cayenne come with 12-way electrically adjustable seats as standard, featuring fore/aft, height, as well as backrest and cushion adjustment. Both optimum balance between comfort front seats also feature lumbar supports with electric height and depth adjustment.

All Cavenne models are available with optional sports seats (a no-cost option on the Cayenne Turbo). The added depth and contoured backrests provide enhanced lateral support for a more dynamic drive. All adjustment options are identical to those on the standard seats





Rear seats.

When we designed the rear seat system for the Cayenne model range, we had two objectives in mind: safety and comfort combined with maximum variability for optimum use of the luggage compartment.

To improve safety and comfort, both outer seats are equipped with adjustable head restraints. The head restraints on all three seats can be fully detached when not required. After all, safety has the highest priority for every passenger, irrespective of where they are seated.

The 60/40 split rear backrest

of load space and seating.

enables the optimum combination

Additional features include a no-cost optional ski bag incorporated into the seat backrest. and a central armrest with integrated storage compartment. See the Practicality section for further details.

Child seats can be fitted on both outer seats as well as on the front passenger's seat using the standard ISOFIX anchors.

Porsche audio.

Cockpit acoustics have always played an important part in Porsche sports car design. Over the years, this uncompromising approach has led to a number of key innovations. Now the latest audio technologies have been exclusively tailored to the refined acoustics of the Cayenne model range, even though this has nothing to do with the harmonious sound of the powerful Porsche

engine.

CDR-23 CD radio.

The CDR-23 audio package (standard on the Cayenne S and Cayenne) includes 12 speakers, four 18 Watt amplifiers, and the latest in CD drive technology. Using RDS two-tuner frequency diversity, the system constantly searches for the strongest available signal from the station currently selected. With this intelligent technology, you can now enjoy optimum reception at every stage of your journey. You can also select your favourite station from a choice of 20 FM and 10 MW presets. The Dynamic Autostore function searches the airwayes throughout your journey to offer

the nine strongest signals at any given time. The EON function can also search for traffic bulletins from any other station and fade them in over current audio output. Other features include speeddependent volume control and a high-resolution dot-matrix display for optimum legibility at night.

Mobile phone facility.

This optional facility enables you to fit a GSM mobile phone in your car. The package includes an integrated antenna in the rear roof spoiler as well as a wiring harness, microphone and an in-car holder for your mobile. Using a VDA plug connector, an upgrade kit for hands-free use via the speakers

can also be fitted by your Porsche ATT D



dealer. This mobile phone option is only available in conjunction with the CDR-23 audio system.

Instrument cluster display.

A range of audio and communications data can also be displayed on the instrument cluster. The audio system, for example, can supply the name of the current radio station or title of the current CD. The display can also be used for visual route guidance instructions from PCM (if fitted) as well as details of incoming calls (only in conjunction with PCM and optional telephone module).

MOST[®] bus technology.

Audio and communications data is exchanged between the CDR-23 CD radio, CDC-4 CD autochanger, PCM (including telephone module) and BOSE[®] Surround Sound System using a new digital bus technology known as Media Orientated Systems Transport, or MOST[®] for short. This important innovation uses high-speed fibre optics to transfer audio, navigation and CD autochanger data between system components with total integrity and minimal exposure to external interference. The MOST® bus system is particularly effective when it comes to enhancing audio output. Amplifiers, the CD autochanger, and even the telephone module beneath the

front passenger's seat are all digitally linked for a much higher quality of sound reproduction, and a more engaging audio experience.

CDC-4 CD autochanger.

This optional CD autochanger holds up to six CDs and features a six-second anti-shock memory. Fully compatible with both the CDR-23 CD radio and Porsche Communication Management (PCM). this ultra-compact device installs in a special easy-access niche in the luggage compartment and is operated using the cockpit CD controls.





Rear speaker

Front speaker

BOSE® Surround Sound System. Standard on the Cayenne Turbo.

Sound, performance and emotion: these are the qualities that are inherent in every Porsche. The product of powerful engineering and powerful on-board stereo. Now Porsche and BOSE® have combined their expertise to create the ultimate audio experience.

Panoramic stereo is delivered with lifelike clarity to every seat position. To do that, we've applied the latest BOSE[®] in-car technology to complement both the Porsche **Communication Management** (PCM) system and CDR-23 CD radio. Standard on the Cayenne Turbo, the digital BOSE® Surround Sound System offers the ultimate synthesis of in-car audio with the distinctive sound of the Cayenne V8. Every component has been custom-engineered to the car's spacious interior with the aid of BOSE[®] Signal Processing (BSP).



BOSE® Surround Sound System speaker

Simply push a button, and immediately you're immersed in the breathtaking audio of the BOSE® Automotive Surround Sound system. This powerful, panoramic and true-to-life sound is delivered throughout the cabin using a series of additional audio channels at front and rear.

A digital amplifier delivers 250 Watts sine output through eight separate channels. A total of 13 loudspeakers in the dashboard, doors, luggage compartment and D-pillar, plus a subwoofer unit in the spare wheel well, provide balanced audio output through-out the car.

The BOSE® Nd bass speakers integrate neatly into the doors thanks to their ultra-slim profile and lightweight design. The rich bass foundation is further enhanced by a 100 Watt subwoofer in the spare wheel well. AudioPilot[™] patented Noise Compensation Technology monitors the sound in the cabin, seamlessly adjusting audio output to compensate for unwanted noise. The dynamic loudness function modifies bass output to compensate for the reduced sensitivity of the human ear at lower volumes.

The results are lifelike music quality with full, rich bass at any volume level, as well as natural voice reproduction. The system can even reach concert hall volumes with no audible distortion. Active compression circuitry enables precision fine-tuning of the dynamic range for a more enjoyable quality of sound.

Together, these technologies create a panoramic soundstage that's the perfect accompaniment to the sound of your Porsche.



Porsche Communication Management (PCM).

The Cayenne Turbo comes with PCM as standard (optional on the Cayenne S and Cayenne). This comprehensive communications package has been further refined to make an even greater contribution to comfort and safety. Key features include a high-resolution 6.5 inch TFT display with 16:9 screen ratio, an MP3 capable highend CD radio with twin-tuner technology, a DVD navigation module and additional computer functionality. Selected information from the audio, navigation and optional telephone menus can also be displayed on the information field in the instrument cluster.

User interface.

The PCM user interface is designed for intuitive operation and maximum convenience. The high-resolution TFT display provides an effective overview of all essential information. The left-hand rotary control serves both as an On/Off switch and as the volume adjuster.

The right-hand control (with integrated 'enter' button) allows easy navigation through the various menus. The optional GSM telephone module is operated by means of a 10-digit keypad.

Basic PCM functions, such as satellite navigation and on-board computer, can be accessed directly using a range of dedicated keys.

Voice control.

Available as an extra-cost option, voice control allows convenient operation of the DVD navigation system, telephone and audio system (radio, CD player, CD autochanger) by means of spoken commands, so the driver can concentrate on the road. Cayenne models with this feature enjoy a corresponding increase in active safety. Also included is a 'memo' feature for easy recording of ideas when driving.



Audio system.

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An integrated MP3-capable CD audio drive is located centrally above the PCM display. Radio functionality includes 20 FM and 20 MW presets. Dynamic AutoStore and RDS two-tuner frequency diversity. The PCM audio system is fully compatible with the CDC-4 six-disc CD autochanger featuring a sixsecond anti-shock memory and the enhanced digital audio of the BOSE® Surround Sound System.

TV tuner.

The optional TV tuner is suitable for the reception of analogue terrestrial television signals. Users can choose between a 4:3 (standard) and 16:9 (widescreen) picture format in accordance with their personal preference.

The PCM computer supplies a wide

On-board computer.

range of information, including date, time, average fuel consumption, average speed, and time and distance travelled. It can also monitor the remaining range from the fuel onboard, as well as the distance to destination and the estimated time of arrival. With output in kilometres or miles, as well as support for a wide variety of languages and international time zones. PCM is equipped for every corner of the world.

GPS navigation.



At the heart of PCM is a GPS navigation system with integrated antenna. Selecting a destination is extremely simple, with a range of input options to choose from. The computed route is compared with the latest traffic information (RDS/TMC) and a new route is

quickly, precisely and automatically provided where necessary.

As well as entering an address, junction or town/city centre, you can simply point and click on the map. Alternatively, you can choose from a range of special destinations such as railway stations, hotels or shopping centres.

The navigation system then guides you on your way using spoken instructions, visual directions and the PCM map display. A range of information is also provided via the instrument cluster, including direction arrows, street names, distance to destination and distance to next turning.

All key information is available at a glance exactly when it's required.

Extended navigation module.

An extended navigation module is optionally available for PCM. Using a combination of GPS and on-board compass, the system offers a range of practical functions: wavpoint navigation based on up to 50 user-defined navigation points, route history function enabling easy recording of all off-road travel, manual setting of waypoints while recording a route. and reverse route navigation along a previously recorded route. When the system is in use, the current vehicle location is permanently displayed on the PCM terminal screen.

An optional electronic logbook is available for the PCM. The electronic logbook permits the automatic logging of the current mileage, distance covered, date and time as well as the start and destination address for every trip. After reading out the logbooks from the PCM, the data can be easily evaluated at home with the supplied PC software. The software complies with all the requirements of the Inland Revenue.

Electronic logbook.

GSM mobile.



The optional GSM telephone has a transmit power of 8 Watts and features a hands-free facility for added convenience.

An optional handset with its own display and keypad can also be fitted to enable rear passengers to make calls. Special features include SMS (text) messaging, as well as being able to call the emergency services without a SIM card being inserted. The telephone antenna is neatly concealed and protected from the elements in the spoiler at the rear of the car.



There are more things in life than pure driving pleasure. Explore them all with Cayenne.



Trailer coupling.

One of the most rewarding aspects of Cayenne ownership is its ability to integrate with the other interests in your life.

Whatever your passion, all three models offer a host of benefits that go beyond the pleasure of driving. When it comes to towing, for example, all three engine variants can easily handle a maximum braked trailer load of 3.5 tonnes.

We've developed two alternatives for the Cayenne model range: an electrically retractable and a manually detachable trailer coupling. Both options are available on all three Cayenne models and offer

a maximum braked trailer load of 3.5 tonnes (with a maximum noseweight of 140 kg). The prepared facility is standard.

standard.

Cayenne Turbo.

Luggage compartment.

The performance, comfort and safety of a Porsche make even the longest journey a pleasure. With the Cayenne model range, that's a pleasure you can enjoy with all the family on board.

In addition to the spacious passenger area, all three Cayenne models have a generously proportioned and variable rear luggage compartment. The tailgate features a power closing mechanism as

With a total volume in standard configuration of approximately 540 litres, there's more than enough space for up to four large suitcases. Total payload is 785 kg in the Cayenne, 855 kg in the Cayenne S, and 725 kg in the

Even when the car is fully laden, the self-levelling air suspension on the Cayenne Turbo (optional on the Cayenne S and Cayenne) maintains a constant ground clearance from front to rear.

The pneumatic suspension package also features ride-height adjustment, enabling the car to be lowered by approximately 60 mm for easier loading of heavy items. When moving off, the suspension automatically reverts to the standard ride-height setting. The floor of the luggage compartment is completely flat and features a lowprofile load sill above the rear apron. On all three models, the load sill is protected by robust reinforcements in brushed stainless steel.

The rear seat backrest features asymmetric folding (60/40), and can be combined with a ski bag (a no-cost option which is also suitable for use with a snowboard). When the seat backs are fully folded, the available load space expands to no less than 1.770 litres.

So no matter what you want to carry, you can do so with ease. Even when loaded to maximum weight, each Cayenne model remains agile and easy to control.

Personal items can be stored out of view using a retractable cover with detachable storage cassette. A pull-out luggage net is also provided, offering added occupant protection in the event of emergency braking.

The luggage compartment includes two additional storage spaces as standard, discreetly located behind the side trim (volume varies according to option choices). The tyre repair system is located beneath the floor and offers a low-weight alternative to a conventional spare wheel. Collapsible and full-size spare wheels are also available as options.

Luggage compartment with luggage net extended (total volume 540 litres).

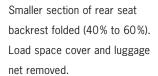


For example, this variant provides space for:

4 x trolley case (XL)







For example, this variant (with luggage net) provides space for: 2 x trolley case (XL)

3 x travel bag (L) 2 x trolley case (M)

Loading option with smaller section of backrest folded and load space cover not extended:

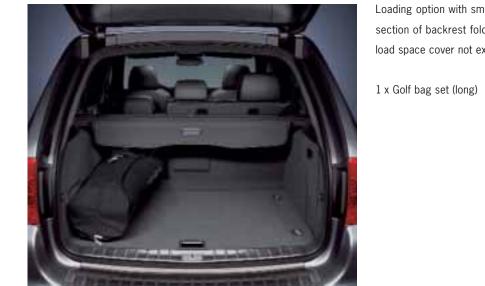
space cover:

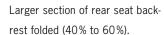
1 x pram

Loading option without load space cover and luggage net:

4 x trolley case (XL)



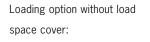






For example, this variant provides space for:

4 x trolley case (XL) 2 x travel bag (L)



1 x Porsche Diesel Pedal Tractor







Both sections of rear seat backrests folded and luggage net extended.

For example, this variant provides space for:

3 x trolley case (XL) 3 x travel bag (XL) 2 x travel bag (L) 3 x Porsche Design golf bag

Loading option with backrests upright and load space cover extended:

3 x PTS trolley large









Tailgate.

The tailgate offers a generous opening angle for easier access to the luggage compartment. A power closing mechanism is now fitted as standard on all Cayenne models.

The rear screen can be opened independently using either the key remote or a microswitch located beside the rear wiper. The screen can also be opened if the optional external spare wheel holder is fitted.



Power socket

Inside the cabin, a series of six 12 Volt sockets (five in conjunction with the optional non-smoker package) provide a reliable source of power for your notebook and any other electrical appliances.



To aid access at night, the ground around the vehicle is amply illuminated by a courtesy light in each of the doors and two on the tailgate itself.

Privacy glass on all rear windows

Three sockets are located at the front of the car (two with the non-smoker package), one in the rear seat area, and two at the side of the luggage compartment.

All three Cayenne models feature green tinted glass with a grey top-tint windscreen as standard. Optional equipment on all models includes special heat-insulating laminated glass with enhanced



Tailgate with opened rear screen

reflectivity, as well as heavily tinted privacy glass on all rear windows (not available in conjunction with heat-insulating glass).

Environment

What do we develop even further in vehicle design? Environmental protection.

After all, it should also be possible to enjoy the Cayenne models outdoors, without polluting the environment.

In all sectors we consider the environment, not just with regard to the emission levels and recycling ratio, but during all stages of the vehicle manufacturing process.

So that you can enjoy your favourite pastime to the full, in the most environmentally friendly manner possible.







The Cayenne is designed to give both the occupants and the environment maximum protection.

Exhaust emissions.

The Cayenne models use the very latest exhaust technology to meet both the stringent EU 4 emissions legislation in Europe and LEV 1 regulations in the United States. Many pollutants are eliminated at source, thanks to the advanced Cayenne engine with VarioCam on

the Cayenne Turbo/Cayenne S and variable valve timing on the Cayenne, as well as on-board diagnostics.

Any emissions that do emerge are immediately contained by a system of primary and secondary catalytic converters on each of the two exhaust lines. Due to a much quicker warm-up from cold, the catalysts reach optimum temperature more quickly which, in turn, leads to a reduction in emissions.

Another key factor when it comes to reducing emissions is the car's stereo Lambda control. Each of the two banks of cylinders is equipped with a separate Lambda control circuit, which the Motronic ME7.1.1 engine management system uses to determine the optimum air/fuel mix and ensure correct functioning of the catalytic converters.

Fuel system.

The Cayenne fuel system uses the latest Porsche technology to reduce fuel evaporation to a minimum.

One of the most important features of the system is the nonreturn fuel supply system which considerably reduces evaporative emissions. The fuel lines are made partly from steel, while those carrying volatile vapours are made of composite plastics. but also through more effective management of component noise throughout every area of the car.

All unwanted noise has been eliminated at source by using stiffer components as well as lighter and more temperature-resistant materials. Reducing the play between moving parts means there's less mechanical noise, so there's no need for engine encapsulation.

Additional noise reduction is provided by the induction system as well as heavy-duty silencers in each exhaust line, features which remain effective throughout the life of the car.

Tyre noise has also been drastically reduced during the development phase in collaboration with our official tyre partners. With the car's sleek aerodynamics smoothing a path through the air, there's also less susceptibility to wind noise.

Think of a Porsche and what do you hear? One of the most distinctive sounds on the road. A sound that's created not only by the engine,

In addition there is a large active

carbon filter and a composite plas-

tic fuel tank so that everything is

as impermeable as possible. The

integrity of the fuel tank system is

monitored at all times by a leak

detection pump.

Acoustics.

As a result of all these measures, the Cayenne models easily comply with all noise regulations worldwide. But inside the cockpit there's still the legendary sound you'd expect from a Porsche.

Maintenance.

Although every journey in your Cayenne is a pleasure, we've made sure there's one you won't be making too often. With service intervals of up to 30,000 km (or 20,000 miles) – or every two years – we may not be seeing you for some time.

The number of maintenance tasks has been reduced to a minimum with the aid of long-life, low-wear materials and components. The air filter, for example, only needs replacing after 120,000 km (or 80,000 miles). Many of the lubricants, fluids and components in the car are designed to match the life of the respective assembly or system. The powersteering fluid and coolant, for example, never need replacing at all.

The ancillary drive belt and fuel filter are also designed to last the life of the car. When changing the oil filter, a paper element is replaced, rather than the entire unit. All moving components inside the engine feature full automatic control. Valve clearances, for example, are hydraulically adjusted, while the camshafts and intermediate shafts are driven by high-strength chains that never require any form of maintenance.

With single-spark coils on each of the cylinders, the entire ignition system, with the exception of the spark plugs, is completely main-

Materials and recycling.

easy on resources.

Owning a Porsche should be a lasting pleasure.

tenance-free. The plugs them-

selves only need replacing after

60,000 km (or 40,000 miles) on

the Cayenne Turbo and Cayenne

or 90.000 km (or 60.000 miles)

With such a high proportion of low-

maintenance parts, the Cayenne

maintain, they're also remarkably

models are not only easy to

on the Cavenne S.

Which is why every Porsche is built to endure in terms of both engineering and design. For example, the lightweight exhaust on the Cayenne uses ultra-durable stainless steel to achieve truly long-lasting performance.

As you would expect, lightweight materials are fundamental to Porsche design. By using a greater proportion of high-strength steels, aluminium alloys and composites, we've successfully reduced the

production processes have been honed and refined to achieve maximum compatibility with the environment. All three Cayenne models are entirely free of asbestos, CFCs, and components manufactured using CFCs. All legal requirements are exceeded by some margin, while a comprehensive system of labelling enables separate recycling of individual materials. While more than 85% of the car can be recycled using current technologies, the chances are your Cayenne may never need recycling at all.

weight of the Cayenne and there-

fore its fuel consumption. All

After all, approximately two thirds of all the cars we've ever made are still on the road today. This remarkable longevity is fundamental to the Porsche philosophy and our positive approach to the environment.



Personalisation

Designing your Cayenne model precisely as you see it in your mind's eye. That's personalisation.

You alone decide on how your ideal should look.

On the following pages we provide the opportunity for more sports and even more comfort. Even more Porsche.

Whatever you decide, we don't want to limit your freedom to choose.





Colours.

The Cayenne model range is available in a choice of three solid and eight metallic paint finishes.

The interior is available in 5 different paint finishes: Black, Palm Green and the two-tone combinations Stone Grey/Steel Grey and Havana/Sand Beige. The leather interior is also available in pure Sand Beige.

Solid exterior colours.

Metallic exterior colours.



Black



Ocean Blue



Basalt Black Metallic





Lapis Blue Metallic



Titanium Metallic



Sand White



Dark Olive Metallic



Jarama Beige Metallic



Carmon Red Metallic

Prosecco Metallic

Standard interior colours.

Switch panel/trim/seats.	Roof lining.*	Carpet.
Black	Steel Grey (Black on Cayenne Turbo)	Black
Stone Grey/Steel Grey	Steel Grey	Steel Grey
Havana/Sand Beige	Sand Beige	Sand Beige
Palm Green	Palm Green	Palm Green
Sand Beige**	Sand Beige	Sand Beige



Cayenne Turbo with SportDesign pack, roof rails and 20 inch Cayenne SportTechno wheels with paint finish

Exterior.	Cayenne	Cayenne S	Cayenne Turbo	l No.	Paga
Option	5	0	0		Page
Metallic paint	0	0	•	Code	159
 SportDesign pack*: Nose section, side skirts, rear section, roof spoiler; in conjunction with Advanced Off-road Technology pack without side mouldings 	0	0	0	2D1, 2	114, 115
Side skirts	0	0	0	2D3	-
 Off-road Design pack: lower front/rear sections, side protection and wheel arch extensions in black, side running boards with integrated skid plates, reinforced engine bay guard, front end protection 	0	0	-	PM1	114
 Off-road Design pack: lower front/rear sections, side protection and wheel arch extensions in black, side running boards with integrated skid plates, reinforced engine bay guard. Does not include front end protect 	1	-	0	PM2	114, 115

* Note that off-road capability is reduced.

* Fabric on Cayenne and Cayenne S, Alcantara on Cayenne Turbo.

** Only available as leather interior with steering wheel in Sand Beige.

Exterior.

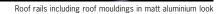




ParkAssist (rear)



Sunblinds, rear side windows

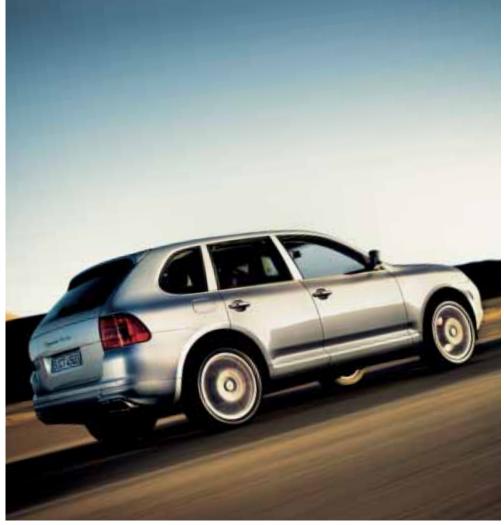




Stainless steel front apron

	nne	Cayenne S	Cayenne Turbo		
Option	Cayenne	Caye	Caye	I No.	Page
Stainless steel front apron	0	0	0	2JC	162
Porsche Entry & Drive system	0	0	0	4F2	119
Bi-Xenon lighting system	0	0	•	PC1	90
Headlamp cleaning system	0	0	•	8X1	90
ParkAssist at front and rear	0	0	•	7X2	120,162
• Privacy glass on all windows rear of B-pillar	0	0	0	PJ2	149
Heat-insulating laminated glass on all windows	0	0	0	PJ1	149
Panoramic roof system	0	0	0	3FU	112
Electric slide/tilt glass sunroof	0	0	0	3FE	116
• Sunblind on rear side windows	0	0	0	3Y4	162
Roof transport system (adjustable roof bars)	0	0	0	3S8	116
• Roof rails: matt aluminium look finish	0	0	0	387	116, 162
Roof rails: black	0	0	0	382	-
Roof rails incl. roof mouldings: matt aluminium look finish	0	0	0	3S1	162
Roof rails incl. roof mouldings: black	0	0	0	385	-
• Exterior package (black): side window frames o o O QJ4 114 including B and C-pillar trim, tailgate finisher, handles without inlays and side trim in black; additionally on Cayenne Turbo: roof-rail system in black					
Deletion of model designation	W	W	W	ONA	-
• Four-tube sports tailpipes	0	0	0	OP3	115

Engine and chassis.



Cayenne '	Turbo
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	Cayenne	Cayenne S	Cayenne Turbo		
Option	Cay	Cay	Cay	I No.	Page
Power kit for Cayenne Turbo*:	-	-	0	E81	58
368 kW (500 bhp) including modified					
brake system and adapted chassis.					
Includes modified charge air cooler,					
optimised engine control and larger-sized					
brake system: 380 mm diameter					
and 38 mm thick two-piece brake discs					
(front axle); 358 mm diameter and					
28 mm thick brake discs (rear axle).					



Cayenne turbocharged engine, turbocharger

Not in conjunction with 18 inch collapsible spare wheel.
 Not available

 as I No./option available at extra charge
 Standard W No cost option

 For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list.

• Six-spe

- Air sus
- incl. Po
- Servot
- Advance diseng
- electro integra headla
- Electri (maxin
- Trailer





Tiptronic S

0

Electrically extendable trailer coupling

	Cayenne	Cayenne S	Cayenne Turbo		
Option	Cay	Cay	Cay	I No.	Page
Six-speed Tiptronic S	0	0	•	GOR	60, 166
• Air suspension with self-levelling and height adjustment incl. Porsche Active Suspension Management (PASM)	0	0	•	1BK	76, 78
Servotronic (speed-sensitive power steering system)	0	0	0	1N3	71
• Advanced Off-road Technology pack: hydraulically disengageable anti-roll bars front and rear, electronically variable rear differential, rock rails with integrated skid plates, reinforced engine bay guard, headlamp cleaning system, second towing lug	0	0	0	PB1-4	84
• Electrically extendable trailer coupling (maximum towing capacity 3.5 tonnes)	0	0	0	1D9	140, 166
• Trailer coupling with removable ball joint (maximum towing capacity 3.5 tonnes)	0	0	0	1D2	140

Wheels.







18 inch Cayenne S wheel

20 inch Cayenne SportDesign wheel



20 inch Cayenne SportTechno wheel



Spare wheel on external holder

19 inch Cayenne Design wheel

	nne	Cayenne S	Cayenne Turbo		
Option	Cayenne	Caye	Caye	I No.	Page
• 18 inch Cayenne S wheel	0	•	-	CJ2	167
• 18 inch Cayenne Turbo wheel	0	0	•	CJ6	167
• 19 inch Cayenne Design wheel	0	0	0	CJ3	167
• 19 inch Cayenne Design wheel paint finish	0	0	0	CP7	-
• 20 inch Cayenne SportDesign wheel	0	0	0	CS5	115, 167
• 20 inch Cayenne SportTechno wheel*	0	0	0	CY3	115, 167
• 20 inch Cayenne SportTechno wheel paint finish*	0	0	0	CY4	161
• All-Season tyre for 17 inch aluminium rim	W	-	_	H9E	-
• All-Season tyre for 18 inch aluminium rim	0	W	_	H9M	-
• Full size spare wheel with external holder, 17 inch (Cayenne only) 18/19/20 inch	0	0	0	1G3	167
• 17 inch collapsible spare wheel	0	-	-	1G6	-
• 18 inch collapsible spare wheel	0	0	0	1G1	_
• Tyre pressure monitoring system (TMS)	0	0	0	7K3	-
• Wheel centres with full colour Porsche Crest	0	0	0	1NP	167



Option

- Light lightin lamp
- and e with d
- HomeL
- Three-s (multi
- Cruise
- Comfo
- Sports

* Not in conjunction with full size spare wheel on external holder

- Not available o as I No./option available at extra charge • Standard W No cost option For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list. – Not available o as I No./option available at extra charge • Standard W No cost option For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list.

Interior.



Sports seat



Control unit for Comfort seat system

Option	Cayenne	Cayenne S	Cayenne Turbo	l Nr.	Page
• Light Comfort pack: dimmable interior comfort lighting, courtesy lights on mirrors, automatic head- lamp activation, automatically dimming interior and exterior mirrors, programmable courtesy lighting with dipped headlamps ('Welcome Home function')	0	0	0	P01, 2	91
\bullet HomeLink® (garage door opening device)	0	0	0	VC1	-
• Three-spoke multifunction steering wheel in leather (multiple variants, see separate price list)	0	0	0	PI1, 2	102
Cruise control	0	0	•	8T1	118
Comfort seats (front) with 12-way adjustment	0	0	•	PE1	122,169
 Sports seats (front) with 12-way adjustment, smooth leather finish 	0	0	W	PE2, 3	122, 169

Interior.



Switch for heated seat



4-zone climate control



Door entry guards in stainless steel

Option	Cayenne	Cayenne S	Cayenne Turbo	l No.	Page
-	-	-	•		Idge
• Driver memory pack for driver's seat and exterior mirrors (incl. mirror illumination)	0	0	-	PG1	-
• Heated front seats with heated steering wheel	0	0	-	PK1	-
Heated front and rear seats with heated steering wheel	0	0	•	PK2, 4	-
• Ski bag	W	W	W	3X1	_
• Climate control with separate temperature settings for the driver and passenger	0	•	•	9AD	110
• 4-zone climate control	0	0	0	9AH	110,170
Auxiliary heating system	0	0	0	7VL	-
Vehicle Tracking System fixture*	0	0	٠	7AT	120
Additional battery	0	0	0	J2C	-
Non-smoker package	W	W	W	9JA	-
• Fire extinguisher**	0	0	0	6A5, 7	-
Door entry guards in stainless steel	0	•	•	7M1	170

* Optional equipment available no earlier than 12/2005 ** With PCM fitted under the driver's seat

- Not available o as I No./option available at extra charge • Standard W No cost option

For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list.

Interior.



Dark walnut pack

Three-spoke multifunction steering wheel

with dark walnut trim



Light olive pack**

Option Leather interior	Cayenne	Cayenne S	Cayenne Turbo	l No.	Page
Leather interior in standard colours, smooth-finish leather	0	0	•	Code	102
• Soft ruffled leather interior (not with sports seats)	0	0	0	N7D, F	-
Porsche Crest on headrests (embossed)	0	0	0	3J7	-

Interior wood

Dark walnut pack* with high-gloss finish	0	0	0	5MG, PH4	172
\bullet Light olive** pack* with high-gloss finish	0	0	0	5TF, PH5	128, 172
 Light olive** pack* with silk matt finish 	0	0	0	5TK, PH6	-
• Three-spoke multifunction steering wheel with dark walnut trim, high-gloss finish	0	0	0	PH1	172
• Three-spoke multifunction steering wheel with light olive** trim, high-gloss finish	0	0	0	PH2	-
• Three-spoke multifunction steering wheel with light olive** trim, silk matt finish	0	0	0	PH3	-

Aluminium interior

Sport aluminium pack	0	0	•	5TE	106,125
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 * Together with Tiptronic S including selector lever in wood. ** Finished in ash with olive grain.

Not available ○ as I No./option available at extra charge ● Standard W No cost option For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list.

Audio and communication.





Six-disc CD autochanger

Option	Cayenne	Cayenne S	Cayenne Turbo	l No.	Page
Porsche Communication Management (PCM) with DVD navigation module	0	0	•	PF1	134, 174
• Porsche Communication Management (PCM) with DVD navigation and extended navigation module	0	0	0	PF2	137, 174
Electronic logbook	0	0	0	9NY	137
• Voice control for navigation, telephone and audio system	0	0	0	QH1	134
• TV tuner* for PCM (analogue terrestrial reception)	0	0	0	QV1	136
Reversing camera	0	0	0	7X1/3	121
Compass display in the instrument cluster	0	0	0	QR1	-
PCM telephone module without active handset	0	0	0	9W1	-
• PCM telephone module with wired active handset	0	0	0	9ZP	-
• Telephone preparation for mobile phone	0	0	-	9ZF	130
• BOSE [®] Surround Sound system (digital) with 14 speakers and subwoofer	0	0	•	9VL	132
Six-disc CD autochanger	0	0	0	7A2	131,174

* The reception of analogue terrestrial TV signals is not possible in some regions. – Not available \circ as I No./option available at extra charge • Standard W No cost option For full details of the options and packages listed in this catalogue, please refer to the Cayenne price list.

Factory collection Cayenne

The Cayenne model range is built at a new Porsche complex on a 200 hectare site, in the eastern German city of Leipzig. Here, you'll find one of the most advanced manufacturing facilities in the world, alongside a new customer centre offering a wide range of Porsche services.

The distinctive tower of the customer centre is not only a major new landmark on the Leipzig skyline, it's also a symbol of the positive momentum that Porsche is bringing to the region. Here you can take delivery of your Cayenne straight from the production line. Not only that, in the company of an expert Porsche instructor, you can familiarise yourself with the potential of the car by driving one of our demonstration vehicles.

There's a chance to sample its prowess on 2 special private test tracks that provide the opportunity to test the outstanding ability of this purebred Porsche both on- and off-road. What better way to get acquainted with your Cayenne, than with our exclusive factory collection and driver training package. This experience is what we consider befitting for the factory collection of your Cayenne.

Your visit begins at the customer e its centre with a general introduction to the Porsche marque and the benefits of Porsche ownership. A short film presentation is followed by a tour of the factory with a pause for refreshments at our customer restaurant. The driver training session begins out on the circuit, where a tour of the control station offers the perfect opportunity to view the layout

of the track.



Next, you'll explore the capability of the Cayenne model range in a series of on- and off-road training modules. Once you're familiar with the potential of the car, it's time for the ultimate highlight of your visit: the moment you take delivery of your new Porsche Cayenne.

Factory collection Cayenne means: 18,000 seconds, 300 minutes or 5 hours of pure Porsche.

Please note that a number of formalities must be completed when you take delivery of your car. Depending on market, some local restrictions may apply. For full details, please consult your Porsche dealer, who will be happy to assist you when planning your trip.



Test track.

Our on-road training sessions are conducted in factory demonstration vehicles while final checks are being made on your car. The circuit itself is 4 kilometres (2.5 miles) in length, 12 metres in width, and is fully prepared for professional competition use. Some sections of this circuit consist of elements replicated from world-renowned race tracks. After completing one circuit, you will have become acquainted with the Corkscrew at Laguna Seca, the Parabolica at Monza and the Bus Stop at Spa Francorchamps.



Off-road circuit.

Off-road training sessions are held on a 6 km (3.7 mile) circuit and are also supervised by a Porsche instructor. As well as learning how to use the car's off-road capability to maximum effect, you'll discover some of the secrets of all-terrain driving.

The session begins outside the customer centre with three challenging off-road tests: seesaw, twist humps and stepped ascent. Next, you'll negotiate a 50 metre wading trough before arriving at the circuit itself.

Carefully designed for minimum impact on the local environment, the new off-road circuit occupies a 100 hectare site that was formerly a military training area. With up to 15 training modules to choose from, there's plenty of opportunity to explore the car's off-road potential on some of the most challenging terrain there is.





Porsche dealers

Your Porsche dealer is there to assist you with every aspect of purchasing and owning your Porsche, offering a wide range of services, genuine Porsche parts and accessories.

Porsche Assistance

Our Europe-wide breakdown and accident recovery service provides Porsche drivers with comprehensive assistance benefits. Membership is automatic when you purchase your Porsche.



Porsche Financial Services

We've developed a range of innovative financial services, carefully tailored to the needs of Porsche owners, including competitive finance and leasing schemes, insurance and the Porsche Card.



Porsche Exclusive

With our factory-fitted personalisation programme, you can now create your perfect Porsche. In terms of styling, specification or both. All modifications are uniquely handcrafted for your car.



Porsche Tequipment

This select range of aftermarket accessories is available from your Porsche dealer. Specially developed and approved for your Porsche, Tequipment products do not affect your vehicle's warranty.



Porsche Design Driver's Selection

This exclusive collection of clothing and accessories combines timeless elegance and unmistakable quality to complement the Porsche model range.

Service



Porsche online

For all the latest news and information from Porsche, visit www.porsche.com.

Porsche Used Car Programme

The Porsche Used Car Programme is designed to help you find the very finest examples of pre-owned Porsche vehicles. Each car is rigorously tested to the highest Porsche standards and comes with comprehensive warranty cover.

Porsche Classic

Specially tailored for all Porsche vehicles over 20 years old, Porsche Classic offers a dedicated resource for genuine spare parts and expert repairs, as well as general advice on making the most of your historic Porsche.

"Christophorus"

As a Porsche owner, you will receive a complimentary copy of our bimonthly magazine, Christophorus. Each edition is packed with news, articles and exclusive interviews covering every aspect of the Porsche marque.





Porsche Clubs

With more than 110,000 members worldwide, Porsche Clubs organise a wide range of social and motorsport events. For more information, visit www.porsche.com. Porsche Driving Experience 1. The Porsche Travel Club. Our exclusive collection of driving holidays combines luxury and adventure, on and off road. For more information, call +49 (0) 711 911-78155 to 78157. E-mail: travel.club@porsche.de

2. The Porsche Sport Driving School.

Improve your driving skills and discover more about your Porsche on some of the world's most famous racing circuits. For more information, call +49 (0) 711 911-78315. E-mail: sportfahrschule@porsche.de





The latest Exclusive, Tequipment, Porsche Design Driver's Selection and Porsche Driving Experience brochures are now available from your Porsche dealer.



Summary

The Cayenne Turbo. The Cayenne S. The Cayenne. Three genuine Porsche models with one thing in common: absolute strength of character.

Uncompromisingly sporty in design. Potent, powerful and agile. And created for the especially difficult environment of the road. So virtually everything has already been said. Except for the fact that they are also totally capable as all-terrain vehicles. As well as providing copious space for your pastimes.

So much for the theory. Now for the practical aspects. Time to demonstrate their temperament. For an indescribable driving experience.





Technical Specifications

	Cayenne Turbo	Cayenne S	Cayenne
Engine			
No. of cylinders	8	8	6
Displacement	4,511 cm ³	4,511 cm ³	3,189 cm ³
Power (DIN)	331 kW (450 bhp)/	250 kW (340 bhp)	184 kW (250 bhp)
	368 kW (500 bhp)*		
at rpm	6,000 rpm/	6,000 rpm	6,000 rpm
	5,500-6,000 rpm*		
Max. torque	620 Nm/	420 Nm	310 Nm
	700 Nm*		
at rpm	2,250-4,750 rpm	2,500-5,500 rpm	2,500-5,500 rpm
Compression ratio	9.5:1	11.5 : 1	11.5 : 1
Transmission Layout	All-wheel drive	All-wheel drive	All-wheel drive
Layout Six-speed manual	All-wheel drive	All-wheel drive Standard	All-wheel drive Standard
gearbox			
Six-speed Tiptronic S	Standard	Optional	Optional
Low-range ratio	2.7	2.7	2.7

* Power kit for Cayenne Turbo

	Cayenne Turbo	Cayenne S	Cayenne
Chassis			
Front suspension	Extra-large format	Extra-large format	Extra-large format
	double wishbone fully	double wishbone fully	double wishbone fully
	independent suspension	independent suspension	independent suspension
Rear suspension	Multi-link, fully inde-	Multi-link, fully inde-	Multi-link, fully inde-
	pendent suspension	pendent suspension	pendent suspension
Steering	Power-assisted, hydraulic	Power-assisted, hydraulic	Power-assisted, hydraulic
Brakes	6-piston monobloc	6-piston monobloc	6-piston monobloc
	aluminium fixed	aluminium fixed	aluminium fixed
	callipers at front,	callipers at front,	callipers at front,
	Aluminium-Monobloc-	Aluminium-Monobloc-	Aluminium-Monobloc-
	4-piston monobloc	4-piston monobloc	4-piston monobloc
	aluminium brakes at	aluminium brakes at	aluminium brakes at
	rear, discs internally	rear, discs internally	rear, discs internally
	ventilated, ABS	ventilated, ABS	ventilated, ABS
Wheels	8 J x 18	8 J x 18	7,5 J x 17
Tyres	255/55 R 18	255/55 R 18	235/65 R 17
Unladen weight	Tiptronic S	Manual/Tiptronic S	Manual/Tiptronic S
DIN	2,355 kg	2,225 kg/2,245 kg	2,160 kg/2,170 kg
According to	2,430 kg	2,300 kg/2,320 kg	2,235 kg/2,245 kg
EC directive*	2,000 lum	2 000 1 - (2 000 1	0.045 km /0.045 km
Permissible	3,080 kg	3,080 kg/3,080 kg	2,945 kg/2,945 kg
gross weight			
Maximum payload	725 kg	855 kg/835 kg	785 kg/775 kg

Optional equipment means greater weight. The figure given includes 68 kg for the driver and 7 kg for luggage.

	Cayenne Turbo	Cayenne S	Cayenne
Performance	Tiptronic S	Manual/Tiptronic S	Manual/Tiptronic S
Top speed	266 km/h (165 mph)	242 km/h (150 mph)	214 km/h (133 mph)
	270 km/h (168 mph)*	242 km/h (150 mph)	214 km/h (133 mph)
0–100 km/h (0–62 mpł	1) 5.6 secs/5.3 secs*	6.8 secs/7.2 secs	9.1 secs/9.7 secs
Flexibility (80–120 km/	6.1 secs/5.4 secs*	9.3 secs/9.1 secs	11.4 secs/12.2 secs
50–75 mph) in 5 th gear			
Fuel consumption	Tiptronic S	Manual/Tiptronic S	Manual/Tiptronic S
In accordance with 80/	1268/EEC (current version	on)	
Urban	21.9 (12.9 mpg)/	22.8 (12.4 mpg)/	17.8 (15.9 mpg)/
l/100 km	21.9 (12.9 mpg)*	20.9 (13.5 mpg)	18.4 (15.3 mpg)
Extra urban	11.9 (23.7 mpg)/	11.8 (23.9 mpg)/	10.6 (26.6 mpg)/
l/100 km	11.9 (23.7 mpg)*	11.2 (25.2 mpg)	10.7 (26.4 mpg)
Combined I/100 km	15.7 (18.0 mpg)/	15.8 (17.9 mpg)/	13.2 (21.4 mpg)/
	15.7 (18.0 mpg)*	14.9 (19.0 mpg)	13.5 (20.9 mpg)
CO ₂ emissions g/km	378/378*	380/361	320/324
Dimensions			
Length	4,786 mm	4,782 mm	4,782 mm
Width (with exterior	1,928 mm (2,216 mm)	1,928 mm (2,216 mm)	1,928 mm (2,216 mm)
mirrors)			
Height (with roof	1,699 mm (1,789 mm)	1,699 mm (1,789 mm)	1,699 mm (1,789 mm)
transport system)			
Wheelbase	2,855 mm	2,855 mm	2,855 mm
Luggage compartment	540 litres	540 litres	540 litres
volume (German Car Ma	nufacturers' Assoc.)		
With folded rear seats	1,770 litres	1,770 litres	1,770 litres
Tank capacity/reserve	100 litres/15 litres	100 litres/15 litres	100 litres/15 litres
* Power kit for Cayenne Turbo			
i ower mit for odyenne ruibu			

	Cayenne Turbo	Cayenne S	Cayenne
Off-road capability			
Wading depth	555 mm for very	500 mm	500 mm
	rugged terrain,	on steel suspension	on steel suspension
	air suspension		
Approach angle*	29.1° at normal level,	29.1°	29.1°
	air suspension	on steel suspension	on steel suspension
	32.4° very rugged terrain		
Departure angle*	24.8° normal level	25.7°	25.7°
	air suspension	on steel suspension	on steel suspension
	27.3° very rugged terrain		
Ramp break-over	20.4° at normal level,	20.4°	20.4°
angle*	air suspension	on steel suspension	on steel suspension
	24.7° very rugged terrain		
Differential locks	Controlled centre	Controlled centre	Controlled centre
(standard)	differential lock	differential lock	differential lock
Max. ground clearance*			
Special Terrain Level II	273 mm		
Terrain Level I	243 mm		
Normal Level	217 mm	217 mm	217 mm
Low Level I	190 mm		
Low Level II	179 mm		
Loading Level I	157 mm		

* At DIN unladen weight, ground clearance measured at axle centre, Cayenne Turbo with air suspension.

Some of the vehicles illustrated in this catalogue are fitted with optional equipment available at an extra charge. All information reproduced here concerning scope of delivery, appearance, performance, measurements, weight, fuel consumption and operating costs of the vehicles correspond to the information available at the time of going to print. Subject to alterations.

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