



## Lamborghini Gallardo LP 560-4 Spyder

### A dynamic experience of unparalleled intensity

With the new Gallardo LP 560-4 Spyder, Lamborghini has created a driving experience like absolutely no other - fascinating design, breathtaking performance and extreme handling characteristics come together with all the intensity and open-air pleasure that only a soft top super sports car can deliver.

An even more powerful engine, permanent all-wheel drive and an all-new chassis mean that the Gallardo LP 560-4 Spyder offers yet another significant increase in performance against its predecessor. With its innovative design, the new LP 560-4 Spyder takes the unique Lamborghini styling ethic to the next level; the Spyder displays this powerful and elegant design language with even greater distinctiveness, making it all the more unmistakable.

The Gallardo LP 560-4 has been on the market since early 2008, as the successor to the most successful Lamborghini of all-time - since 2003, more than 8,700 models bearing the Gallardo name have left the production facility in Sant'Agata Bolognese.

"The new LP 560-4 Spyder adds another dimension to the Gallardo's lineage with extreme design language and class-leading performance," says Stephan Winkelmann, President and CEO of Automobili Lamborghini. "The open version of the successful Gallardo LP 560-4 is the result of Lamborghini's two model strategy including the Gallardo and Murciélago."

In its new generation, the Gallardo Spyder represents more than ever before automotive passion in its purest form. As in the Coupé, its enormous power is delivered by the new 5.2 liter V10 with an output of 560 horsepower (412 kW) at 8,000 rpm. The increase in 40 horsepower (29 kW) over its predecessor, as well as the 20 kilogram (44 pound) reduction in vehicle weight, improves the power-to-weight ratio to 2.77 kg (6.10 pounds) per horsepower, thus improving performance even further.

The LP 560-4 Spyder takes only 4.0 seconds to sprint from 0 to 100 km/h (0 to 62 mph), reaching 200 km/h (0 to 124 mph) in only 13.1 seconds and going on to a top speed of 324 km/h (201 mph). The new driveline, featuring the "Iniezione Diretta Stratificata" direct fuel injection system also makes for impressive efficiency. Despite the considerable increase in performance, fuel consumption and CO<sub>2</sub> emissions have been reduced by a staggering 18 percent.

Engineers at the Ufficio Tecnico Lamborghini, Sant'Agata-based Technical Department, have also improved traction, handling and stability at high speeds. The redesigned four-wheel drive transmission, the new suspension, the improved stiffness of the Spyder bodyshell and the optimized aerodynamics all contribute to the overall improvements in the vehicle, as do the reduced weight and decreased friction throughout the components.



Thus the Gallardo LP 560-4 Spyder presents itself as a razor-sharp super sports car with the precise reaction of a high-performance athlete. The car is also surprisingly suited to long-distance driving and, despite its extreme performance capabilities, is easy to control while maintaining utmost stability. Above all, the impressive Lamborghini technology takes on a new, intense edge in the Spyder, with the glorious feel of the open air rushing by.

## **The style**

### **Powerful elegance**

Every Lamborghini is a high-performance athlete. Its sensuality is based on precision, performance and on spontaneous action. A Lamborghini's elegance is that of sheer, pure power. This DNA of the Lamborghini brand is taken to the next level with every new car by the Centro Stile. Thus the Gallardo LP 560-4 Spyder displays the precise lines and clean surfaces of a minimalist design ethos that resists ornamentation or embellishment of any kind. Even more than the Coupé, the Spyder places emphasis on the powerful basic wedge form, complemented by the sharply cut soft top.

Each evolution of the Lamborghini form is strictly dictated by the demands of function. The redesigned front end lends the LP 560-4 a firm, low stance that also contributes to its aerodynamic efficiency. In line with the increased engine output, the enlarged and clearly accentuated air intakes increase the air flow critical to such a high-performance automobile. The spoiler, positioned low between the air intakes, improves aerodynamic stability at high speeds.

### **Characteristic LED daytime running lights**

The new headlights have characteristic daytime running lights integrated beneath the bi-xenon lamps. 15 LEDs are arranged in a Y form, with the same pattern repeating in the rear tail-lights. The rear and brake lights were inspired by the Miura concept, the Murciélago LP 640 and the Reventón. The Y-shaped elements are now signature features of contemporary Lamborghini models, appearing most recently in the Estoque concept car, the innovative super sports sedan from Sant'Agata.

The completely redesigned rear gives new meaning to the term "powerful elegance". The rear lights, air cooling vents, bumper and diffuser are precisely arranged to add tremendous visual breadth to the LP 560-4 Spyder, while sustaining its firm bond with the road surface. In addition, the streamlined covers left and right of the bonnet accentuate the powerful shoulders and the taut lines of the new Gallardo.

### **Significantly improved aerodynamics**

The new exhaust system is beautifully finished by four chrome-plated tail pipes. The rear diffuser has been redesigned to deliver more downforce and, together with the smooth underbody, it contributes to the vehicle's excellent directional stability, even at very high speeds. Overall, aerodynamic efficiency in terms of downforce has been improved significantly in comparison with its



predecessor - the Gallardo LP 560-4 Spyder tackles fast curves with even greater refinement.

The purist approach to design is perfectly complemented by the immaculate attention to detail demonstrated by the designers at Sant'Agata Bolognese. The fuel and motor oil fill caps, intricately-crafted from aluminum, bear testimony to this, as does the rear view camera, which has been integrated into a small fin in the automatically-deploying rear spoiler, as well as the finely-detailed grilles in the exhaust tail pipes.

### **Soft top perfectly suited to everyday use**

The flow of the lines, regardless of whether the top is up or down, clearly demonstrates that the Spyder is a fully self-contained model within the Gallardo range. Compared with the Coupé, the open top version comes across as just a little more radical; its shoulders have been raised slightly in order to make room for the soft top.

The fully-lined fabric top - available in black, blue, grey and beige - is operated via two switches located on the center console. They set in motion a choreography that is over in just 20 seconds. One hydraulic pump, six hydraulic cylinders, one electric motor and two electric actuators work together to perform this technical ballet.

### **Rear windscreen functions as wind deflector**

When the soft top opens, the rear windscreen disengages first, sliding downwards to avoid obstructing the remainder of the process. Four cylinders slightly raise the rear-hinged engine cover, before the hood folds gracefully into a stowage compartment located in front of the engine bay. Finally, the large engine cover made from a lightweight carbon fiber composite closes once more and the rear windscreen returns to its original position to function as a wind deflector. A switch mounted on the dashboard will stow the rear windscreen if preferred - even when the top is closed.

Whether open or closed, the Gallardo Spyder's soft top is designed for unrestricted high speeds. In order to ensure maximum safety, Lamborghini engineers have integrated two spring-loaded rollover bars behind the seats. Controlled by a sensor, they deploy in only 250 milliseconds should a potential roll-over situation arise. The seat belt tensioners spring into action at the same time.

### **The bodyshell Intelligent lightweight design**

Weight is undesirable in a sports car and lightweight design is good for dynamics. Aluminum is much lighter than steel - which is why the bodyshell of the Gallardo LP 560-4 Spyder has an aluminum structure that is more lightweight, yet stiffer. With its lighter engine, the two-seater boasts a dry weight of only 1,550 kg (3417.2 lbs) - 20 kg (44 pounds) less than its predecessor.

The design of the Gallardo LP 560-4 Spyder utilizes the 'spaceframe construction method.' Cast aluminum nodes and extruded profiles form its frame, with integrated friction-locked and form-fitted aluminum panels creating the bodyshell. The bodyshell is not only



extremely light, but also displays exceptional torsional stiffness and safety characteristics, thus forming the basis for the extraordinary handling characteristics of the LP 560-4. The aerodynamic underbody panel is also integrated into the overall design for structural stiffness. The Spyder incorporates specially-developed additional stiffness elements within the spaceframe to compensate for the absence of a fixed roof.

### **Integrated pedestrian protection system**

The bodyshell also incorporates the highest levels of passive safety. The Gallardo LP 560-4 Spyder even fulfils European directives for pedestrian protection that are not yet mandatory. Furthermore, the geometry of the entire front end of the car has been optimized, with a special combination of materials behind the front bumper that aim to absorb impact forces.

### **The interior Luxurious individuality**

Despite its low exterior height, the Gallardo LP 560-4 Spyder welcomes its passengers with a spacious interior - even when the top is closed. The sports seats are upholstered in either fine leather or Alcantara® and provide firm hold and support. The seats are mounted low, as is typical for sports cars, and behind them is additional luggage space to complement the 110 liter capacity luggage compartment at the front of the vehicle.

The wide middle console is one of the elements that characterize the impression of sporty dynamism in the interior. It accommodates the standard Lamborghini audio and multimedia system, as well as the dual-zone climate control. Between these two units is a newly designed module housing classically elegant toggle switches. Seven instrument dials boasting new graphics provide the driver with essential engine data, while a multi-functional display between the speedometer and rev counter furnishes him with important information from the on-board computer.

### **Highest quality workmanship**

The Miura and the other models of the '60s were characterized by their excellent quality of workmanship, which was far beyond the general standards of the day. Lamborghini has built extensively on this tradition, and to this day delivers automobiles of the highest standards.

The Gallardo LP 560-4 Spyder indulges with materials of the highest quality in both look and feel. Leather interior choices include a range of colors and stitching in matching or contrasting tones. As an optional extra, Lamborghini can deliver the Gallardo with an expanded range of leather or Alcantara® equipment, as well as carbon packages, where elements like the surround for the air-conditioning control panel, the handbrake and the gear-stick console are finished in carbon fiber composite. The Ad Personam individualization program fulfils personal preferences - at the end of the day, a new Lamborghini has to fit in perfectly with the lifestyle of its owner.



## **The engine**

### **Extreme power in every situation**

The engine of the Gallardo LP 560-4 Spyder is a completely new development. All that remains is the number of cylinders, - that magical ten - which provides a perfect synthesis of high-revs, pulling power, athletic agility, compact dimensions and low weight that is unique within this performance class.

The engine has a displacement of 5.2 liters (5204 cm<sup>3</sup>), generating an extreme 560 horsepower (412 kW) at 8,000 rpm - giving class-topping output per liter of 107.6 horsepower. The engine delivers a maximum torque of 540 Nm (398 lb-ft) at 6,500 rpm. The ample torque curve guarantees outstanding thrust at all engine speeds. With acceleration of 4.0 seconds from 0-100 km/h (0-62 mph) and a top speed of 324 km/h (201 mph), the Gallardo LP 560-4 Spyder shoots into the orbit of the most extreme high-performance sports cars and is only one km/h less swift than the LP 560-4 Coupé.

Even more astounding is the fact that engineers at Sant'Agata succeeded in lowering the fuel consumption and CO<sub>2</sub> emissions of the super sports car by 18 percent, despite a considerable improvement in performance. Relative to engine power and performance, the average fuel consumption of the Gallardo LP 560-4 Spyder e.gear is astonishingly low at only 14 l/100 km combined (extra urban: 10 l/100km/city: 21 l/100 km city).

### **Perfect weight distribution, optimal dynamics**

The engine in this new model is also located longitudinally behind the driver - hence the model denomination "Longitudinale Posteriore." The mid-engine concept is peerless in sports car design, creating the basis for the perfect weight distribution of the LP 560-4 Spyder of 43 percent on the front axle and 57 percent on the rear. In combination with the permanent all-wheel drive transmission, it guarantees the Gallardo's superior handling stability in all situations.

### **Low mass for impressive high-revving**

The cylinder bore surfaces of the new Lamborghini ten-cylinder are made of a hypereutectic aluminum alloy. The hard silicon crystals of the bore surfaces are chemically released following the honing process. The connecting rods are made from forged steel and the pistons from aluminum alloy. The systematic reduction of mass and internal friction contributes to the engine's impressive high-revving characteristics.

The engine is unusually wide for a V10, with a cylinder angle of 90 degrees. The advantage of this layout is the lower center of gravity. The dry sump lubrication serves the same purpose, as well as guaranteeing a reliable supply of oil even during extreme lateral acceleration on the race track.

### **Direct fuel injection makes for efficient combustion**

The new V10 uses the direct fuel-injection system "Iniezione Diretta Stratificata" as an innovative way to optimize performance in all



conditions, while achieving moderate fuel consumption. The fuel is injected directly into the combustion chamber from a common-rail system at pressures of up to 100 bar via laterally-position injectors. This ensures the perfect “tumble” of the homogeneous fuel/air mixture and forms the basis of highly efficient combustion.

Direct injection boosts the extremely efficient full-load performance of the V10, reduces its knock sensitivity, provides an internal cooling effect and thus facilitates a very high compression ratio of 12.5:1. The cylinder heads have been optimized to deliver a rapid charge cycle, while the variable valve control system on all four camshafts improves charge efficiency across the entire engine speed range.

## **Transmission**

### **All-wheel drive refinement**

Such extreme power must be delivered to the road safely. The driver of a Gallardo LP 560-4 Spyder can thus rely on the viscous traction permanent all-wheel drive system - the number 4 in the model name serves as a reminder of this. Lamborghini introduced this system as early as 1993, with the Diablo VT - and for good reason. Four driven wheels achieve more grip than two and permit earlier acceleration when exiting a curve.

Located in the driveline is a central viscous coupling, which requires no electronic control. In this Lamborghini-specific configuration, driving power is distributed between front and rear at a standard ratio of 30:70, adapting to variations in road conditions within a matter of milliseconds. A mechanical differential on the rear axle providing up to 45% limited slip, and an electronic differential lock at the front complete the all-wheel drive system.

### **Superior traction and handling**

It is not only maximum traction that benefits from permanent all-wheel drive, but also the car's clearly superior handling. Ultimately, each wheel can only transfer a certain amount of power to the road. As the drive power is distributed to all four wheels via the viscous traction system, there is thus greater potential for directional control. These reserves in every situation are what distinguish a perfectly made sports car.

With all of that engine thrust, changing gears in the Gallardo LP 560-4 is also one of the most exciting aspects of this vehicle. It remains a matter of personal preference whether the driver uses the short gear stick to work manually through the precision motion of the six-speed gearbox, or whether he chooses to let his fingertips control the e.gear's paddle-shift system located behind the steering wheel - the option preferred by the majority of Lamborghini customers.

### **Shift times reduced by 40 percent**

The automated e.gear transmission has been completely redesigned and improved in all aspects. The complete system is not only considerably lighter, but the time required to change gear in corsa mode has also been reduced by 40 per cent. The driver can change gear manually using the shift paddles mounted on the steering



wheel - or he can leave it entirely up to the automatic mode, which ensures extremely refined dynamics.

If the driver changes gear manually using the steering wheel paddles, he can choose from three different drive programs. Alongside the standard program, the Gallardo also offers the sport mode with even shorter shift times, while the corsa program delivers optimum engine acceleration.

ESP is active in all drive programs, engaging later in the sport and corsa modes and reducing the impact of the traction control. The corsa mode also permits greater drift and enables the complete dynamic spectrum of the LP 560-4 Spyder to be appreciated on the race track - while still leaving plenty of room for safety. The Lamborghini thrust mode facilitates maximum acceleration from a standstill. The throttle valve angle and clutch travel have been optimized specifically for this purpose.

## **The chassis** **Hi-tech components with Lamborghini expertise**

The predecessor to the Gallardo LP 560-4 Spyder was already one of the world's best super sports cars in terms of handling, precision and driving stability. However, the latest model delivers an even more intense driving experience across the board. The new chassis improves the car's handling, its driving comfort and its directional stability at high speeds.

The chassis of the Gallardo LP 560-4 Spyder is uncompromisingly hi-tech. Its technical design comes directly from motorsport. The aluminum double wishbones with re-designed kinematics serve the wheels, while the springs and shock absorbers have been recalibrated for stiffness and optimum grip. The rear axle now has an additional track rod, bringing an extra element of control to the super sports car.

One all-new development is the rubber-metal bearings. These truly hi-tech components contribute to the unique Lamborghini dynamics with intelligent design and specific material combinations. The precise set-up of the springs and dampers has been adjusted to accommodate the slightly higher weight of the Spyder to give it exactly the same characteristics as the Gallardo Coupé.

## **Intense road holding**

The rack and pinion steering works with relatively little power assistance - giving the driver a direct and close connection with the road, and providing intense experience of the power and forces at play. The steering has its own cooling system for the power steering fluid.

Precise, breathtakingly fast, yet stable and free from surprises - the Gallardo's dynamics deliver a sensuous experience. At the limit, the tires (235/35 ZR 19 front and 295/30 ZR 19 rear) appear to bond with the road surface. The wheels are clad in Pirelli P-Zero series tires, specially developed for Lamborghini. They boast particularly low rolling resistance and thus contribute to reduced fuel consumption without any compromise in performance. At speeds of more than 120 km/h (over 75 mph), an automatically-deploying rear



spoiler increases the down force on the rear axle. It works together with the specially formed underbody, which directs the airflow under the car.

### **Optional carbon fiber ceramic brake system**

The new brake system comes with brutal stopping power. At the front, eight-cylinder Brembo calipers grip 365 mm (14.37 in) diameter discs, while four-cylinder calipers and 356 mm (14 in) discs take up the rear. The new disc ventilation also improves brake fade under extreme load conditions.

High performance carbon fiber ceramic discs are available as an option. At the front the CCB (Carbon Ceramic Brake) discs measure 380 mm (15 in) diameter and at the rear 356 mm (14 in). They deliver improved performance with reduced weight. The CCB system significantly reduces weight, which improves dynamics and comfort.

### **Equipment and trim Top-class individuality**

Lamborghini has equipped the Gallardo LP 560-4 Spyder with an exceptionally sporty standard equipment package that includes the automatic top; driver, passenger and side air-bags; dual-zone climate control with sun regulator; stereo system with USB interface; sports seats with electrically adjustable back rests; leather upholstery and bi-xenon headlamps with LED daytime running lights. The new series production "Apollo" wheels feature a double-spoke design.

A range of optional extras brings additional comfort and convenience - including a navigation system, a hands-free Bluetooth® mobile phone connection, anti-theft device and a rear view camera. A further option is a lifting system for the front axle - which raises the body at the touch of a button to ease negotiation of obstacles. New options include black painted "Cordelia" wheels.

The possibilities available in the "Ad Personam" individualization program are virtually inexhaustible. Behind this program stands the philosophy that a super sports car, as a significant expression of the personality of its owner, should fit perfectly to his desires and expectations. This is particularly true for a car as highly emotional as the Spyder. As a consequence, the finest exclusivity is the trademark of Lamborghini's individualization program. "Think the Impossible" is its motto.

"Ad Personam" offers a host of options to bring highly individual style to both the interior and exterior of a Lamborghini. One new highlight in the program is three matte-luster color options - Nero Nemesis (matte black), Bianco Canopus (matte white), Marrone Apus (matte brown). These colors, applied using a specialist and highly sophisticated process, bring particular emphasis to the purist precision of Lamborghini design.





## Gallardo LP560-4 Spyder Technical data - E.U & U.S.A

### Frame & Body

Frame	Structural aluminum space frame, based on aluminum extruded parts welded to aluminum-cast joint elements
Body	Aluminum with thermoplastic •hang on• parts
Rear Spoiler	Electronically controlled
Mirrors	External mirror with electrical closing system
Suspension	Double wishbones front and rear suspension system, anti-roll bar anti-dive and anti-squat
ESP 8.0	Full ESP System with ABS, ASR and ABD

### Airbags

Front	Front Dual-Stage driver and passenger airbags, side Head-thorax airbags
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Tires (front/rear)	Pirelli Pzero 235/35 ZR 19 - 295/30 ZR 19
Wheels (front/rear)	Aluminum alloy, 8.5• x Ø19"- 11" x Ø19"
Steering	Power-assisted rack and pinion
Curb-to-Curb turning circle	11.50 m (37.73 ft)

### Brakes

Steel brakes	Power vacuum, aluminum alloy calipers: 8 cylinder front calipers and 4 cylinder rear calipers EU - Ventilated discs (front-rear) Ø 365 x 34 mm front - Ø 356 x 32 mm rear US - Ventilated discs (front-rear) Ø 14.37 x 1.34 in front - Ø 14 x 1.26 in rear
CCB brakes	Power vacuum, aluminum alloy calipers: 6 cylinder front calipers and 4 cylinder rear calipers EU - Ventilated discs (front-rear) Ø 380 x 38mm front - Ø 356 x 32 mm rear US - Ventilated discs (front-rear) Ø 15 x 1.5 in front - Ø 14 x 1.26 in rear

### Motor

Type	10 cylinders V90°, DOHC 4 valves, common-pin crankshaft
Displacement	5.2 liter
Compression ratio	12.5:1
Maximum power	560 hp at 8,000 rpm
Maximum torque	540 Nm (398 lb-ft) at 6,500 rpm
Engine management system	Bosch MED 9
Cooling system	Engine and gearbox radiator
Cooling system oil	Oil to Water cooler
Cooling system water	Two water radiators
Emission control system	Catalytic converters with lambda sensors
Lubrication system	Dry sump

### Drivetrain

Type of transmission	Permanent four-wheel drive with viscous traction system
Gearbox	6 Speed + reverse, an optional robotized sequential e.gear system with actuation by paddles on the steering column
Clutch	Double plate Ø 215 mm (8.46 in)
Rear Differential	45% limited slip
Front Differential	Slip limitation by ABD function



### Performance

Top speed	324 Km/h (201 mph)
Acceleration 0-100 km/h (0-62 mph)	4.0 sec
Acceleration 0-200 km/h (0-124 mph)	13,1 sec

### Dimensions

Wheelbase	2560 mm (100.7 in)
Overall length	4345 mm (171 in)
Overall width	1900 mm (74.8 in)
Overall height	1184 mm (46.6 in)
Track (front/rear)	1632 mm - 1597 mm (64.3 - 62.9 in)
Dry Weight	1550 kg (3417.2 lbs)
Weight distribution (front/rear)	Front 43%/rear 57%

### Capacities

Engine oil	10 liters (2.6 gal US)
Fuel tank	80 liters (21.1 gal US)
Engine coolant	20 liters (5.3 gal US)

### EU - Consumption with E.Gear

Urban	21 l/100 Km
Extra urban	10 l/100 Km
Combined	14 l/Km
CO2	330 g/km

### EU - Consumption with manual transmission

Urban	23 l/100 Km
Extra urban	10 l/100 Km
Combined	15 l/100 Km
CO2	351 g/km

### US - Consumption with E.Gear

City	13 mpg
Highway	20 mpg
Combined	16 mpg

### US - Consumption with manual transmission

City	12 mpg
Highway	20 mpg
Combined	14 mpg