### 73rd Geneva International Motor Show

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# At the Geneva Motor Show the preview for the Pirelli P Zero Corsa, original equipment on the Ferrari Challenge Stradale

Geneva, 4 March 2003 - Pirelli has chosen the 73rd International Geneva Motor Show and the help of its special partner, Ferrari, to unveil its new P Zero Corsa tyre, an ultra-low profile for the ultra-high performance car segment of road-going sports cars, which are also destined for use on the track.

Born to race, P Zero Corsa is a car's guarantee of remaining 'glued to the asphalt'. The dry is its battle ground and an ideal condition in which to put down the might of the order of hundreds of horse power, to exalt the marriage between the most sophisticated chassis and its tyres, to provide the certainty of stopping how and when the driver must or pleases. Absolute grip, millimetric insertion precision, great lateral rigidity for cornering on the limit, fast response at the steering wheel are the tyre's racing qualities, achieved - among other things - by the development of innovative tread compounds, which produce the right amount of adhesion for the thermal conditions in which the tyre operates at any given moment.

The 'System' option of the P Zero Corsa - with its asymmetric tread pattern on the rear and directional on the front wheels to combat aquaplaning - is to make its debut at Geneva in sizes 225/35 ZR 19 front and 285/35 ZR 19 rear on the Ferrari Challenge Stradale, a direct result of experience gained in the Ferrari Challenge-Pirelli Trophy Championships of recent years, and of competing with the tyres on the Ferrari 360 GT in the FIA-GT Championship.

A collaboration which, in the case of the Ferrari Challenge-Pirelli Trophy, has reached its 10th year and was reconfirmed in an agreement signed between Pirelli and the Ferrari-Maserati Group - Pirelli, Ferrari, Maserati, three names that have written the history of motor racing in Italy - at the end of 2002. The technological partnership with Maranello will also continue this year in the FIA-GT Championship, with Pirelli fitting its tyres to the Ferrari 360 GT: the development of the P Zero Corsa System, which began with the racing slick, is today the most evident and immediate result of the two groups' close working relationship.

### And with Maserati, the Trophy is just around the corner

That same announcement in November 2002 included an exclusive technological partnership agreement on the track between Pirelli and Maserati for all the Trident's cars, top of the list those competing in the Maserati Trophy series of races, which will begin in a few days with the Maserati Coupé Cambio Corsa. At the same time, Pirelli and Maserati will work together, exchanging experience and technical knowledge, which will lead to the works Maserati team's cars being fitted exclusively with Pirelli tyres when they take to the track for the 2004 FIA-GT Championship.

#### From the Kubang to the Cayenne: the year of the Pirelli Scorpion

The number of new vehicles that slot into the so-called SUV market segment - various and well structured - increases with every motor show. A trend for which Pirelli had already prepared itself towards the end of the Nineties, by adding the Scorpion Zero to its range of tyres for off-road 4x4s that it had developed specifically for Sport Utility Vehicles. An initiative that has enjoyed overwhelming success and one which would soon lead to the '4x4 European Road'. From that moment, Scorpion Zero moved on and evolved into a range of sizes and tread patterns, becoming - like its road-going twin the P Zero - the point of reference for the SUV industry throughout the world. Today, the extreme sizes of Scorpion Zero are able to fit rims of up to 24 inches in diameter and vehicles that put out hundreds of horse power.

The Maserati Kubang project, which was unveiled recently at the Detroit Motor Show - where more vehicles were on Pirelli tyres than at any other North American show - is another vehicle that has adopted Scorpion Zero, which has also obtained its mass production homologation for the Porsche Cayenne and the Volkswagen Touareg. The contemporaneous homologation of the ultra-low P Zero Rosso for both the Porsche and Volkswagen SUVs does nothing if not reconfirm once more Pirelli's technological leadership in the Ultra-High Performance tyre segment.

The same Scorpion technological platform has enabled Pirelli to develop tyres with a 20 inch diameter, which equip another two interesting Geneva concept cars: the Alfa Romeo ... crossover and the sporty Volvo... Tyres for the crossover Volvo XC 90, which was recently elected 'Truck of the Year' in the United States, also belong to the Pirelli Scorpion family. The Scorpion range was the line that also led to the homologation of Pirelli as original equipment on the Ford Excursion and Ford Super-Duty F-250 and F -350 pick-ups produced by the American manufacturer.

# Lamborghini Gallardo: a Red P Zero for the new Raging Bull

There is keen anticipation at the 2003 Geneva Motor Show for the world preview of the new Lamborghini Gallardo, the latest direct descendent in a long line of, thoroughbred Toros for which Pirelli has supplied original equipment tyres since the Miura, one of the company's first car, back in the Sixties. The tradition has been renewed once again under the banner of the Pirelli super-low profile, forever the custodian of the Lamborghini supercars' power. So it will come as no surprise that the 'little' Gallardo fits the Pirelli P Zero Rosso as OE, a tyre the performance of which is well known and recognised by all car manufacturers for its sports handling, quick response and progressiveness at the wheel, its cornering power, precision of trajectory and realignment.

Then there is P Zero Rosso's safety in the wet: the result of years of profile, tread compound and pattern studies have been poured into the tyre to give the super-low Pirelli the maximum resistance to aquaplaning. The P Zero Rosso was later joined by an exclusive Pirelli System concept: two different Rosso tread patterns, one for the front axle tyres and the other for the rears, to produce exceptionally positive handling, both in the wet and dry.

P Zero Rosso - as well as the P Zero System and P Zero Nero - is one of the three top options Pirelli offers to leading car manufacturers under the P Zero brand, which has become synonymous with the term high performance. To be at the top is the basic concept with which P Zero was first conceived, designed, built and tested. It is a tyre that always becomes involved in the design and development of new cars, right from the earliest stages, blending itself step-by-step into the characteristics of a new model, thanks to Pirelli's use of the most advanced methods of calculus and design. To understand the vitality that has always inspired the P Zero Rosso project, it is sufficient to see the tyre on the Lancia... concept car at Geneva.

In effect, the 73rd Geneva Motor Show is a shop window for the ultra-low Pirelli P Zero Rosso, the latest homologations for which include the brand new Audi A3, the A6, A6 Allroad and

Quattro R6. The tyre will also be original equipment on the Mercedes AMG A 209 cabrio and SL55 roadster, as it will on the Volvo S60R and V70R. P Zero Asimmetrico has been approved for the Jaguar XJ-X 350 and the two latest Bentley models, the Arnage R and Continental GT.

## Pirelli P7 for the Audi A3: the evolution of high performance

Once again, the new Audi A3, also homologated on the Pirelli P7, is one of the most anxiously awaited new cars to appear at the Geneva Motor Show, and testifies to the technological continuity that links the P Zero to the new generation P6 and P7 high performance Pirelli tyres. Two tyres that represent the technological evolution of the P6000, a super-low tyre of which over 40 million units have been sold and which has become Pirelli's biggest-selling original equipment tyre. The P6 and P7 designations recall two of the most revered names in the world of motoring: the original P7 was developed in 1974 for the world rally championship-winning Lancia Stratos, and is considered the founding father of Pirelli's high performance road-going sports tyres. The appearance of the P6 in 1977 established, once and for all, the progressive dominance of super-low tyres among all of the world's car manufacturers.

An exciting new concept took shape with the introduction of those two new tyres in the Seventies: a modern concept of 'safety with high performance', which has since remained the DNA of all Pirelli tyres as technological progress has moved on to the P600 and then the P6000. With today's new P6 and P7, 'safety with high performance' takes its place in a new generation of technology: electronics. The integrated control of the car's functions, the global management of all the vehicle's safety devices: control of the vehicle's suspension, traction, stability, braking. P6 and P7 aim to meet the demand of today's motorists for reliability. The high performance P6000/P6000 Powergy and their successors the P6/P7 continue to demonstrate their vitality, having recently achieved original equipment homologations for the Jaguar XJ-X 350 and, particularly, for the forthcoming new BMW 5 Series.

# From Pirelli, the last frontier in car safety: the K-PRESSURE, so as never to drive under pressure

Pirelli will also introduce its K-PRESSURE at the 2003 Geneva International Motor Show. The new development is an innovative range of devices with which to monitor tyre pressure and temperature, and will transform a car's tyres from passive car components into an intelligent system, able to interact with that of the vehicle itself. K-PRESSURE is a TPMS - Tyre Pressure Monitoring System: it is the first of a family of products developed by Pirelli and, in particular, the first tyre pressure monitoring system to make its debut in the aftermarket.

K-PRESSURE is a simple yet intelligent device that enables the driver to travel in complete tranquillity and safety and to be quickly informed in the case of an anomaly in the pressure or temperature of his tyres, thanks to special acoustic and visual signals. An electronic sensor fitted to each of the car's rims transmits pressure and temperature data from inside the tyre to a liquid crystal display on the car's dashboard as the vehicle is being driven. By pressing a button, the driver can check at any moment the pressure/temperature parameters of his car's tyres, which are updated every seven seconds.

In the case of an anomaly, a warning light and an acoustic device are set off, while the display shows which wheel is giving cause for concern. K-PRESSURE is programmed to inform the driver on three levels: an initial warning when the tyre's real pressure changes by 10% from the correct level, a second when the pressure drops below 1.54 bar and a danger warning when the internal temperature of the tyre exceeds 80°C (in the latter two cases it is necessary to stop the car as soon as it is safe to do so).

Easy to install and use, K-PRESSURE requires no maintenance and is compatible with any car, SUV or light commercial vehicle with a maximum cold tyre inflation pressure of 4.4 bar.

The new Pirelli device is a concrete solution to a recurring road safety problem. Due to its highly sophisticated technology, the K-PRESSURE enables the driver to constantly ensure that his tyres are inflated to optimum pressure, providing greater driving safety, fuel savings and longer tyre wear. K-PRESSURE is already available throughout Europe from the various specialist tyre dealer chains associated with Pirelli.

But Pirelli's activity in the field of intelligent tyres does not stop at the TPMS. The Group has already begun a programme of collaboration with several centres of research leaders in the application of the technologies of miniaturisation of components (Pico radio, Micro Sensors etc.) using also MEMS techniques. In particular, Pirelli maintains a collaboration with the Berkeley Sensor and Actuator Center and the DOP Center for Embedded Systems of the California University of Berkeley.