## **1. News from Porsche AG**

More Power, More Safety, More Driving Pleasure

## Double Launch in July: Two Versions of the new Porsche 911 On The Starting Grid



For the first time since 1977, Dr. Ing. h.c. F. Porsche AG, Stuttgart, is launching two new 911 models simultaneously: the 911 Carrera with 239 KW (325 BHP) 3.6-litre Boxer engine and the 911 Carrera S, powered by a newly developed 3.8-litre engine that achieves 261 KW (355 BHP). With a torque of 400 Nm, the S model sprints from a standing start to 100 km/h in just 4.8 seconds. The Carrera completes this challenge in exactly five seconds. The top speeds are 285 km/hr (Carrera) and 293 km/hr (Carrera S). The two new 911s from the "997" series will be launched throughout Europe on 17th July 2004.

Both 911 models have a newly developed 6-speed transmission and a redesigned chassis, which includes active suspension as standard on the S model. For the 911 Carrera, this chassis is available as an option under the name "Porsche Active Suspension Management". In its "normal" position, PASM provides a sporty but comfortable basic shock absorber setting, while pressing the "Sport" button activates a harder shock absorber identification to support a particularly agile and sporty driving style. As well as PASM, a 20 millimetre lower sports chassis with mechanical rear axle differential lock is available as an option for both models.

The format of the wheels and tyres has grown. The 911 Carrera model will now come with 18J wheels as standard, with a size of 8J x 18 with 235/40 ZR 18 tyres (front) and 10J x 18 with 265/40 ZR 18 tyres (rear). The Carrera S type is fitted with 19-inch wheels/tyres in the dimensions 8J x 19 with 235/35 ZR 19 (front axle) and 11J x 19 with 295/30 ZR 19 (rear axle).

The design of the new Porsche 911 is a consistent continuation of the 40-year story of this famous model. The new exterior design – including a wider track and increased emphasis of the mid-section – has given the 911 an even more dynamic, clear, powerful and yet stylish look. Other notable features of the evolutionary design



include the new circular headlamps with separate additional headlamps in the nose section, stronger emphasis of the wings, new twin-arm outside mirrors, altered joint appearance and an aerodynamically optimised rear spoiler.

The basic Euro price for the 911 Carrera will be 64,700.– Euro, or 73,300.– Euro for the 911 Carrera S. In Germany, prices (including VAT and country-specific requirements) will be 75,200.– for the Carrera and 85,176.– for the Carrera S.

More information about the new Porsche 911 can be found on our homepage at: **www.porsche.com** 

Porsche AG Press Department

### How a Porsche Cup Car Is Brought To Life A Look Behind the Scenes at the Customer Sport Department in Weissach.





Every Porsche fan knows about them, but hardly any of them know how they are developed - we are talking about the high-speed vehicles that enter the Porsche margue trophies. The story of their development starts in Weissach. often dubbed the Porsche think tank. In actual fact, this is where the ideas behind the production of the Cup cars are created. "First of all, it is important to create a good basis," explains Marcus Stolzenthaler, Racing Vehicles Product Manager, when asked to describe the process. Anyone who doesn't take a far-sighted view from the beginning has already as good as lost the race, as the cornerstone of a successful Cup car is an intelligently designed homologation vehicle. Therefore the road car designed to act as a basis, the GT3 for example, is essentially given all the technical refinements that are intended to help the Cup vehicle to achieve fast lap times.

However, when setting out the basic concept for a road car and the corresponding racing vehicle, the experts in Weissach need to take into account the demands of various sets of rules, as the racing Porsche should ultimately not just be suitable for use in marque trophies. The design also reflects customer requests and safety regulations.

Ideally, the vehicle intended for the road would be completely developed followed by the racing car, but in practice things are quite different. The two cars are not only developed in parallel, but the Cup version is actually launched first. The idea is that it will demonstrate on the racetrack the potential of its road-going brother.

Implementing this strategy demands a great deal of experience and sure instincts. The development and realisation of a Cup vehicle involves a relatively small team, made up of staff from the Motorsport department, Production and Purchasing as well as series development specialists. This flexible team, combined with the fact that the legal requirements for a racing vehicle are easily met and there is no time-consuming approval procedure, allows the design to be implemented very quickly. However, one





consequence of this is that testing of the Cup car developed almost at racing speed can involve the use of some series components from its road counterpart, which have not even reached the pre-series stage.



Nevertheless, following a target catalogue specified in advance the first car soon takes shape, and it is a really exciting moment when prototype number 1 rolls out of the workshop for its first test lap. This takes place on the testing track in Weissach and at the wheel of the still disguised vehicle is normally Roland Kußmaul - an engineer, test driver and racing driver in one. He takes the initial calibration drives, before the Porsche works drivers then take over as test pilots. "To start with, it is nothing to do with driving quickly, you drive a maximum of one lap and test all the functions", Kußmaul explains, and adds, "All the human sensors are 110 percent active". A range of on board measuring instruments are his silent passengers, and include temperature meters for the brakes and the coolant or spring travel sensors for monitoring the chassis. The findings from the extensive tests then go into designing and building a second prototype.

Just as the project plans for the drive, chassis, bodywork and electrical components are produced at the beginning of development, detailed plans for the test drives are also drawn up. One of the important aspects to consider is that the Cup cars, which in principle are identical throughout the world, will subsequently need to prove themselves under a wide range of climatic conditions, as there is a Carrera Cup in Australia, Asia and now also in Scandinavia. The prototype is therefore tested not just on the track at Weissach, but also on international circuits, which are used as necessary. Marcus Stolzenthaler gives two examples: "If we are looking for a track with intensive braking, we go to Adria or Imola".

The Cup car thus gradually reaches maturity, but that is just one side of the coin. In parallel, on-time production of the car also needs to be guaranteed. What may surprise some people is the fact that these racing cars are 90 percent produced in Zuffenhausen, in fact they use the normal production facilities for the 911 Carrera and the Boxster vehicles. However, not all of the numerous racing car parts can be fitted on the production line. One example is the roll cage. On the GT3 this is screwed on but on the racing version it is welded on away from the production line. And parts where there is a risk of confusion with series components are fitted by the engineers in the workshop at Weissach.

The finishing touches are also put to every Cup car in Weissach, including a functional test and a short test drive. Even though the silhouette of the racing version closely resembles that of the road vehicle and the engine power has been increased by only a minimal amount, primarily through the use of a special intake and exhaust system, the two cars are actually worlds apart. Dispensing with all the comfort, saving weight and using a significantly more dynamic and direct chassis design make the Cup cars into the extremely fast machines that we all know and love.

Bernd Woytal

# The next dates for the Carrera Cup:

Germany		Japan:	
27.06.04	Norisring,D	04.07.04	Suzuka, J
01.08.04	Nürburgring,D	29.08.04	Ti Aida, J
08.08.04	Motopark Oschersleben, D	21.11.04	Suzuka, J
05.09.04	Zandvoort, NL		
19.09.04	Brünn, CZ	Asia:	
03.10.04	Hockenheimring, D	20.06.04	Bira, Thailand
		18.07.04	Taebaek, South Korea
France:		15.08.04	Beijing, China
20.06.04	Dijon	26.09.04	Shanghai, RC
05.09.04	Albi	21.11.04	Macau, RC
26,09,04	Le Mans		

#### Australia:

13.06.04	Barbagallo, AUS
04.07.04	Queensland Raceway, AUS
25.07.04	Winton Raceway, AUS
12.09.04	Sandown Motor Raceway,
	AUS
10.10.04	Bathurst, AUS
24.10.04	Surfers Paradise, AUS

# 25.07.04 Croft, GB 08.08.04 Knockhill, GB 22.08.04 Brands Hatch – GP, GB 05.09.04 Snetterton, GB

13.06.04 Mondello Park, IE

17.10.04 Magny-Cours

26.09.04 Donington Park, GB

#### Scandinavia:

**Great Britain:** 

20.06.04 Mantorp, Sweden
04.07.04 Falkenberg, Sweden
01.08.04 Alastaro, Finland
15.08.04 Gelleråsen, Sweden
05.09.04 Jyllandsringen, Denmark
19.09.04 Mantorp, Sweden