

Autobahn Ambition

The PORSCHE Tuner Magazine

2012 Winter Issue

'12 Rolex 24 at Daytona Preview



> 2012 911 & 2013 Boxster



GT2 RS

2011 997 GT2 RS

C-GTS

2011 Carrera GTS

Cay R

2012 Cayman R

Table of Contents

>> Top Story

16 | Rolex 24 Hours of Daytona Preview

>> Article By: Kevin Sims & Photos By: Randy Stevens



>> Features



09 | TA GTstreet RS

The Blue Max Missile

>> Article By: Kevin Sims



24 | 2013 Boxster

Wider, Longer, and More Aggressive

>> Article By: Kevin Sims



21 | 2012 GT3 Cup

Grand Am GT Class Gets More Competition

>> Article By: Kevin Sims

>> Additional Coverage



26 | Delavilla Cayman R1

05 | Porsche Racing History

03 | Porsche News

Porsche News

Porsche to Build West Coast Experience Center

By: Porsche Press
Photo By: Porsche Press

ATLANTA - The recently unveiled Boxster E project demonstrates Porsche's commitment to energy conservation. The fully functional prototype will help them fine tune their electric vehicle technology for a future model.

"The electrical vehicle is a central challenge of the coming years, and the engineers at Porsche would like to con-

tribute with their usual excellence to help it to be resolved," claimed Porsche chief executive Matthias Muller at the prototype's unveiling ceremony, as reported on the Expert Reviews website. "The Boxster E prototypes will help us, serving as mobile laboratories in solving the practical problems of electric vehicles the way that our customers expect."

The engine in the Porsche Boxster E comes with approximately 240 horsepower, good for a 0-60 mph time of 5.3 seconds and an estimated driving range of 100 miles per charge. Since the prototype is an all-electric vehicle, the quick trip from 0 to 60 also comes with zero emissions and zero eco guilt.

While Porsche works on fine-tuning its electric engine, the company is continuing to expand its hybrid vehicle lineup. The Porsche Panamera S Hybrid is currently available. The four-door hybrid vehicle is also quick, with a 0 to 60 mph time of 5.7 seconds and a top speed of 167 mph. This is obviously a hybrid vehicle designed for the typical Porsche driver. Porsche is awaiting the official EPA fuel efficiency estimates for the Panamera S Hybrid but the vehicle has achieved 7.1 L/100 km (approximately 33 mpg) fuel efficiency in European testing. **AA**



PCNA Reports Significant 2011 Sales Increase

By: Porsche Press
Photos By: Porsche Press

As part of an extensive personnel recruitment campaign, Porsche AG is increasing the capacities of its development center in Weissach, Germany. The company's first step will be to appoint around 100 additional engineers for the areas of research and development. The company is looking for

experts in the fields of electromobility, lightweight construction, energy management as well as engine and chassis design. These experts will be deployed, for example, in the further development and optimisation of alternative drive concepts or will cooperate in new vehicle projects such as the 918 Spyder super sports car.

With this increase in staffing levels, Porsche will take a leading role as a competence center for modern sports cars. "Weissach is synonymous with top engineering made in Germany. Additional highly talented experts will help us to further increase our position as the innovation leader in car construction", said Thomas Edig, Deputy Chairman of the Board of Management and Director of Human Resources and Social Affairs.

Research and development are traditionally some of the core competencies of Porsche. The know-how from Weissach not only sets standards in the international sports car and premium segment, but is also often used by other companies that seek advice and support from Porsche engineers regarding their own projects. Past clients have included Ford, GM and Volvo. **AA**



Porsche Racing History

1984 Porsche 962

By: Kevin Sims
Photo By: Porsche Press

Porsche exploited a loop-hole to allow them to reintroduce the 962 into LeMans competition for 1994. The newly created ACO GT1 class rules required a road-worthy version had to be built, however no production volume requirements were specified. Since Jochen Dauer had been converting 962's for street use with German VIN numbers for years

it seemed a joint venture was in order. The Dauer 962s featured briefcase space under the front bonnet which also met an important ACO GT1 rules requirement.

The 2,994 cc, water-cooled twin-turbo engine delivered around 600 hp at 7,700 RPM to the rear axle via a five-speed gearbox. The Dauer 962 Le Mans weighed 2,204 lbs. with its fuel tank filled. At Le-

Mans's long straight the Dauer reached top speeds at around 226 MPH.

Compared to Group C race cars, the Dauer's flat underbody and the narrower tires (14 inches instead of 16) were major disadvantages. However, it's larger fuel tanks (31.7 gallons instead of 21) and more power (600 HP instead of 550) proved to be advantageous.

The 1994 campaign was jointly operated by an experienced Joest team along with Porsche personnel. Mauro Baldi, Yannick Dalmas and Hurley Haywood lapped the Le Mans circuit exactly 344 times in 962 LM GT003 and collected the 13th overall victory for Porsche. The Dauer 962 with chassis number 962 LM GT002 secured the third place position and was driven by Thierry Boutsen, Hans-Joachim Stuck and Danny Sullivan. For 1995, ACO GT1 rules specified a production number thus ending the Dauer 962's racing career. **AA**



2000 Porsche 996 GT3 R

By: Kevin Sims
Photos By: Porsche Press

Initially in 1981 Porsche planned to focus their entire attention on entering multiple 924 Carrera GTR and GTP race cars at Le Mans and leave the overall win to someone else. Corporate ego stepped in and it was decided late to also challenge for the overall victory. The belated commitment meant Porsche lacked

sufficient time to develop a new race car. Luckily, they had an arsenal of rennwagens to build upon.

Engineers started with the 1977 LeMans winning 936/77, then adopted an aborted Indianapolis 500 engine to the existing frame. In Indy configuration, the alcohol-fueled powerplant cranked out

800 HP. Redevelopment yielded a 2,650cc engine with 620 HP that delivered the reliability needed for an endurance race.

The flat-6 engine was partially air and water-cooled. It had four valves per cylinder and incorporated twin turbos. Combined with an aerodynamically enhanced body, the 936/81 reached speeds of 223 MPH through the more than 5-mile long Mulsanne straight. The reincarnated Porsche proved to be the fastest car running down the monster straight in 1981.

The open top, two seat 936/81 driven by Ickx and Bell started from pole and ran the race with no issues. It appeared in the pits for only normal maintenance and refueling. The car's longest pit stop was a mere four minutes. With a lead of 14 laps over a Rondeau-Ford, Ickx and Bell captured the checkered flag. The Porsche victory marked their 30th year competing at the French endurance classic. **AA**



2012 Rolex 24 Preview

Grand Am >> 2012 Roar Before the 24

By: Kevin Sims
Photos By: Randy Stevens



Daytona Beach, FL – January 30th, 2011 - Driving the TRG Porsche GT3 Cup #67 race-car, Andy Lally (USA), Wolf Henzler (Germany), Brendan Gaughan (USA), Spencer Pumpelly (USA) and Steve Bertheau (USA) drove to a two lap GT victory in the 49th running of the Rolex 24 at Daytona. The TRG victory enabled Porsche to capture its 73rd class win and 39th class win for the Porsche 911 at the Rolex 24.

Porsche was in the thick of the action from the starting grid. In the GT class, TRG's GT3 #66 started from pole position, however, the team's #67 car had actually won the pole as it was clearly the fastest GT car on the track. The TRG GT3 # 67 car had to start the race in dead last as they were penalized for a rear wing violation. Other





significant Porsche GT starting positions were held by Magnus Racing's GT3 #44 in third and Burtin Racing's GT3 #17 in fourth. In the DP class, Flying Lizard Motorsport's Porsche-Riley #45 started at pole while Action Express Racing's LBP Porsche-Riley #9 commenced the race in twelfth and #5 in thirteenth.

The Third Hour

By the third hour of the race, Kevin Buckler's TRG # 66 had given up its pole setting position when Ben Keating had a flat tire after a spin to move the car down to thirteenth in the GT class. The Magnus Racing Porsche 911 GT3 Cup also as gave up a promising position when Richard Lietz hit track curbs and damaged the rear sway bar thus losing three laps in the pits. Other strong GT class Porsche positions by the third hour include Brumos Porsche #59 in second and the TRG/Black Swan Racing Porsche, currently driven by Patrick Pilet, in third.



2012 Roar Before the 24

In the DP class, the Flying Lizard Motorsports Porsche Riley #45, started by Joerg Bergmeister (Germany), turned the fastest lap of the race (1:40.417) during the first hour and lead for the first 52 minutes, however during the second hour several incidents put the car in the garage for repairs, losing 18 laps to the leaders. Bergmeister lost some time to the field when he made a green-flag pit stop for fuel and a driver change just before a caution flag that enabled the rest of the field to pit under yellow. Patrick Long spent almost an hour in the car, and brought it back up to second place, when another yellow and driver change took place. Car owner Seth Neiman climbed in the car and was shortly thereafter hit in the fender. To add insult to injury the Lizards received front splitter, under-tray and radiator damage when Seth Neiman had to go off-track to avoid a spinning GT car. The #45 car was repaired and at the third hour marker was seating in sixteenth place with Johannes van Overbeek at the wheel. The Action Express Team was having a much better race opener. During lap 67, Action Express's LBP-Porsche-Riley #5 driven by David Donahue took the overall lead from Spirit of



2012 Roar Before the 24

Daytona's Chevrolet-Coyote #90. During lap 85, Action Express #5 gave up the lead to #55 BMW-Riley to make a pit stop.

The Seventh Hour

As night was beginning to set in at Daytona during the seventh hour, Brumos Porsche's GT3 Cup #59 reclaimed the GT class lead with endurance racing legend Hurley Haywood driving. During the fifth hour with Lieb driving, Brumos had secured the GT class lead; however, the driver change to Haywood along with a splash of fuel in the sixth hour temporarily lost the lead. The Paul Miller Racing Porsche 911 GT3 Cup # 48 was in second place at the seventh hour. The Paul Miller team had led at the six-hour mark, but ended up in second place caused by a caution period pitstop. The qualify penalized TRG Porsche 911 GT3 Cup #67 had worked its way from last to third place by the seventh hour to put them in a strong position for a possible race victory.

In the DP class, the troubled Flying Lizard Porsche Riley #45 continued their streak of misfortune as they were plagued by a flat tire at the seven-hour. With Seth Neiman back in the car, the Lizards were in a disappointing thirteenth place and 18 laps behind the leader. The boys at Action Express once again run a smooth race and avoided trouble. On lap 191, Action Express Porsche-Riley #5 with Buddy Race driving took the lead as the former leader, #6 Ford-Riley, pits for fuel and tires. With Buddy Rice at the helm, the Action Express #5 maintains the lead for sixteen laps until Ganassi Racing's BMW-Riley #01 executes a pass and takes the lead on lap 207. A fuel stop and driver change on lap 211 pushed Action Express #5 further back to sixth position just behind teammate Action Express #9.

The Seventeenth Hour

At around 5am, the track was under a yellow flag as a Ferrari 430 spun off the track. During that time fog had beset Daytona and a yellow flag remained in place for three hours as visibility was nonexistent. The teams cruised the racetrack in single file with no real action. Liberation from the yellow flag came around 8am with daylight in its fullness. At hour 17, one lap behind the leading Dempsey Rac-





ing Mazda RX-8 sat the TRG Porsche 911 GT3 Cup #67 with Lally currently driving.

"We have three of the top five and four of the top 10 in GT. The No. 67 car has been running without a clutch since midnight. That requires finesse by the drivers with the throttle blip on downshifts and a lot of pushing by some tired crew to get the car rolling out of the pits to get into first gear," said TRG owner Kevin Buckler.

Only four seconds behind is the TRG/Black Swan Racing Porsche with Pappas behind the wheel. One lap behind them is the Paul Miller Racing Porsche with Sellers driving. In fifth place and four laps back, is the GT pole-sitting TRG Porsche #66. The Brumos Porsche #59 was in the lead during the first part of the overnight; however, a broken radiator resulted in a lengthy stop putting them in eighth place.

In the DP class, Flying Lizard continued their calamity of fortune when the team suffered another long pit stop to change and bleed the brakes. As a result, Flying Lizard #45 is in a dismal twelve place and seventeen laps behind the leader. For Action Express, the cloak of fog presented a welcomed opportunity. Both Ganassi's BMW-Riley cars were in a 1-2 position going into the caution around 5am. The race leaders had to pit for fuel, tires, and brakes at around 6:30am handing Action Express #5 the lead. Once the green flag waved around 8am, Action Express #5 held the lead, but for only two laps as the Gannasi Racing #01 driven by Scott Pruett captured the lead.

The Finish

With eight minutes and the race standings seemingly sit in stone, Spirit of Daytona's Chevrolet-Coyote #90 handed all race teams present cause for alarm. The #90 car had just entered the track from a pit stop when a faulty installed tire exploited and caused the speeding racecar to heavily damage its rear. The resulting incident sent racecar debris all over the entire track as #90 had to do a lap to pit. Sweet anticipation for race leaders Ganassi Racing #01 in DP and TRG #67 in GT turned to anxiety pieces of #90 debris fell on the track. A clear path to victory for had been lettered with obstacles and a caution period that reduced lead margins. Luckily for #01 in DP they had Ganassi Teammate #02 in sec-



Roar Before the 24 Lap Times

Engine

Engine: 3.8 L, flat-6 cylinder

Power: 450 hp at 7,500 rpm

Redline: 8,500 rpm

Bore / Stroke: 102.7 mm / 76.4 mm

Valvetrain: DOHC, 4 valves / cylinder

Lubrication: Dry Sump

Fuel Management: Bosch MS3.1

Fuel Injection: Sequential multi-port

Technical Data

Factory Weight: 2,646 lbs

Chassis: Unitary Steel

Front Suspension: McPherson struts with height adjustment, lower control arms with 6-point adjustment, forged supporting mounts with Unibal,

double coil springs, gas pressurized twin-tube shocks, anti-roll bar

Rear Suspension: Multi-link with solidly mounted subframe, double coil springs, 2-piece lower control arms for camber adjustment, Unibal suspended control arm top, gas pressurized shocks, suspension struts height adjustable, double-blade anti-roll bar with 7 setting options per side

Drive: Rear Wheel Drive

Steering: ZF variable rack and pinion

Brakes: carbon ceramic (Supercup Series only), ventilated discs, all-round, ABS

Gearbox: 6-speed sequential

Tires

ond place to act as a buffer. Action Express #9 driven by Joao Barbosa attempted to pass to claim second place, but fell short.

“I thought on the last lap I could have pushed a little bit for second place, but I had to defend third place at the same time, so I couldn’t push too hard,” said Barbosa, who piloted the winning car one year ago. Barbosa had to settle for third, but the underlining anxiety caused by the #90 carnage created another exciting finish.

Flying Lizard’s luck continued to plummet shortly after the twenty-third hour as #45 driven by Jorg Bergmeister experienced a fire at the rear of the car. The team attempted to repair the damages with no success and had to retire the race.

The overall victory was won by Gannasi Racing’s BMW-Riley #01 with a 0.492 minute margin of victory over the #02 car.

In GT, the TRG Porsche #67 took the class checkered flag. Second place in GT went to the #48 Paul Miller Racing Porsche. The Magnus Racing Porsche 911 GT3 Cup #44 brought home fourth place while the Brumos Porsche #59 finished fifth. **AA**







2012 Porsche 997 GT3 Cup

Breed from a More Pure Blood Line

By: Kevin Sims
Photos By: Porsche Press



Stronger, wider, faster - the 2011 Porsche 911 GT3 Cup offers racers around the world, including Grand-AM teams in the US, an even greater performing rennwagen. For the first time the Cup racer is based on the 911 GT3 RS. At 2,646 lbs, the weight of the Cup car is reduced significantly versus the road-going version.

The GT3 RS pedigree also gives the new GT3 Cup a 1.73 inch wider body at the rear, providing sufficient space for the wider 12 J x 18 wheels running on 27/68-18 Michelin racing tires. Wider wheel arches at the front clearly indicate evidence of the new Cup's half inch wider 9.5 J x 18 featuring 24/64-18 Michelin racing rubber. Engine capacity is up by 0.2 liters to 3.8 liters over the former model, raising engine output by 30 bhp.





The front body panels are the same as on the 911 GT3 RS. The front spoiler lip is 0.6 inch lower to provide more downforce. At the rear, downforce is increased by an extended rear wing from 57.5 to 66.9 inches that's mounted higher. The rear air dam comes straight from the road model. An additional vent was placed on the hood to provide a better supply of fresh air to the driver.

The power unit featured in the new 911 GT3 Cup is largely identical to the production engine in the 911 GT3 RS - same output of 450 bhp and same maximum engine speed of 8,500 rpm. A racing exhaust system with a fully controlled catalytic converter helps to reduce harmful emissions to a minimum. The new 911 GT3 Cup comes with a modified, exhaust system offering a more muscular sound. Additional Unibal joints are featured on the track control arms and the anti-roll bars front and rear are now adjustable to seven different positions on both sides.

Porsche expects the new Cup racer to close the competitive gap established in Grand Am by the Mazda RX-8 last year. Already at the 2011 Roar Before the 24 test days, the Cup car consistently ran improved lap times over the Mazda. **AA**

Porsche 911 GT3 Cup Specs

Engine

Engine: 3.8 L, flat-6 cylinder

Power: 450 hp at 7,500 rpm

Redline: 8,500 rpm

Bore / Stroke: 102.7 mm / 76.4 mm

Valvetrain: DOHC, 4 valves / cylinder

Lubrication: Dry Sump

Fuel Management: Bosch MS3.1

Fuel Injection: Sequential multi-port

Technical Data

Factory Weight: 2,646 lbs

Chassis: Unitary Steel

Front Suspension: McPherson struts with height adjustment, lower control arms with 6-point adjustment, forged supporting mounts with Unibal, double coil springs, gas pressurized twin-tube shocks, anti-roll bar

Rear Suspension: Multi-link with solidly mounted subframe, double coil

springs, 2-piece lower control arms for camber adjustment, Unibal suspended control arm top, gas pressurized shocks, suspension struts height adjustable, double-blade anti-roll bar with 7 setting options per side

Drive: Rear Wheel Drive

Steering: ZF variable rack and pinion

Brakes: carbon ceramic (Supercup Series only), ventilated discs, all-round, ABS

Gearbox: 6-speed sequential

Tires

Front: Michelin 24/64-18

Rear: Michelin 27/68-18

Body

Weight optimized, widened body shell based on 2nd Gen GT3 RSR. Carbon-Fiber doors, rear lid, & adjustable rear wing. Synthetic rear body panels.



2013 Boxster and Boxster S

More than Just Extra Displacement

Edited By: Kevin Sims
Photos By: Porsche Press



ATLANTA – The 911 GT3 RS has been given a final, thrilling injection of thoroughbred motorsport technology resulting in a new 2011 version called the GT3 RS 4.0. Limited to 600 vehicles worldwide, the 911 GT3 RS 4.0 brings together in a sports car the attributes that have made the Porsche 911 GT3 a consistent winner on the race track.

The motorsport-derived 4.0-liter engine, already the highest displacement 911 engine ever, also features the highest per-liter output -- 125 horsepower (hp) per liter -- from a naturally aspirated Porsche flat-six engine. The engine uses forged pistons, titanium connecting rods, and the crankshaft from the current GT3 RSR. The 4.0 will be the last GT3 to use a M97 "Metzger" based-engine which traces its heritage to the 962 and GT1 motors.





It achieves 500 hp at 8,250 rpm and a maximum torque of 339 ft/lbs at 5,750 rpm with electronic port-based injection. The next-gen GT3 will be graced with direct injection.

The 911 GT3 RS 4.0 offers truly impressive performance, lapping the famed Nürburgring-Nordschleife in 7 minutes and 27 seconds. Available exclusively with a six-speed manual transmission, the 911 GT3 RS 4.0 sprints from 0 to 60 mph in only 3.8 seconds, and with gearing designed for racing it reaches 124 mph in under 12 seconds.

The 911 GT3 RS 4.0's outstanding driving dynamics come from numerous details including suspension components typically encountered in motor racing. With weight reduction a supreme importance, the GT3 4.0 comes equipped with lightweight components such as carbon fiber sport bucket seats, carbon fiber front fenders and luggage compartment lid, and weight-optimized carpets. Weighing in at a ready-for-action weight of just 2,998 lbs with a full fuel tank, the GT3 RS 4.0's power-to-weight ratio is a scant 5.99 lbs/hp.

Signature GT3 4.0 characteristics are the wide track, the low vehicle position, a large rear wing with side plates, central twin tailpipe, and an aerodynamically optimized body. Air deflection vanes mounted on either side of the front bumper – called 'flics' – create increased downforce on the front axle, and incorporated with the steeply inclined rear wing, provide aerodynamics on par with its performance capabilities. As a result, at its 193 mph top speed, aerodynamic forces exert an additional 426 lbs of downforce, thus pushing the GT3 RS 4.0 closer to the road. **AA**



Porsche 997 GT3 RS 4.0 Specs

Engine

Engine: 4.0 L, flat-6 cylinder

Power: 500 hp @ 8,250 RPM

Torque: 339 lb/ft @ 5,750 RPM

Bore / Stroke: 102.7 mm / 80.4 mm

Valvetrain: DOHC, 4 valves / cylinder

Compression Ratio: 12.6:1

Aspiration: Atmospheric Pressure

Steering: ZF variable rack & pinion

Brakes: Six-Piston aluminum monobloc fixed calipers at front and four-piston aluminum monobloc fixed calipers at rear. Carbon-fiber brake discs are internally vented and cross-drilled.

Gearbox: 6-speed (No PDK offered)

Tires

Front: 245/35 ZR19

Rear: 325/30 ZR19

Performance

Specific Power: 125 hp per liter

Power-to-Weight: 5.99 lbs per hp

Top Speed: 193 mph

0 to 60 mph: 3.8 seconds

Nurburgring Lap: 7 mins 27 secs

Technical Data

Weight: 2,998 lbs

Chassis: Unitary Steel

Front Suspension: McPherson struts, lower control arms, coil springs, gas pressurized twin-tube shocks, anti-roll bar

Rear Suspension: Multi-link, coil springs, single sleeve gas pressurized shocks, anti-roll bar

Drive: Rear Wheel Drive

TechArt 997 GTstreet RS

Piecing Together a New Model

By: Kevin Sims
Photos By: TechArt Press



For 2011, TechArt has released comprehensive performance packages for both the Porsche 997.1 Turbo and the 997.2 Turbo that not only increase power but intensify the driving experience through exhaust systems that project dramatic sound and make the extra power audible to the world. The company notes that the knowledge gained from their 2009 and 2010 SportAuto Tuner Grand Prix victories were applied to these packages.

According to TechArt, they have improved upon the TA 097/T1 engine found in the 997.1 turbos by boosting power to 570 HP at 6500 RPM, an increase of 70 HP compared to stock. They claim they were able to reach such power with the introduction of a TechArt sport air filter, an enhanced flow carbon fiber intake, and a re-programmed Motronic ECU. The TA 097/T1 package also includes a TechArt

TechArt 997 GTstreet RS

sport exhaust with variable valving and twin exhaust tailpipes with a glossy chrome finish that's embossed with the TechArt logo. As a result of TechArt's tweaking, they claim that a 997.1 turbo with their package will skyrocket to Zero to 60 MPH in a brisk 3.2 seconds.

If that performance sounds satisfying, TechArt's additions to the 997.2 Turbo engine will overwhelm you. According to TechArt, their performance kit for the TA 097/T2 engine will launch an equipped car to Zero to 60 MPH in 2.9 seconds - that's under the 3 second barrier. Does this sound incredible? Well, it is! They claim they achieved these acceleration numbers through installing the company's sport air filter, a specially designed carbon fiber higher flow intake, a re-programmed Motronic ECU and the addition of a tailor-made sport exhaust system. They claim horsepower will be increased by 120 to make 620 HP. They have not specified whether the horsepower numbers were at the fly or the rear wheel. Only a stop watch can actually judge and we look forward to using ours. **AA**



Delavilla Cayman R1

Piecing Together a New Model

By: Kevin Sims
Photos By: Delavilla Press



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