

Autobahn Ambition

The PORSCHE Tuner Magazine

2011 Winter Issue



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Can Action Express Repeat?



2011 Detroit Auto Show

> The Return of Porsche

GT3 Cup

2011 997 GT3 Cup Car

V8 911

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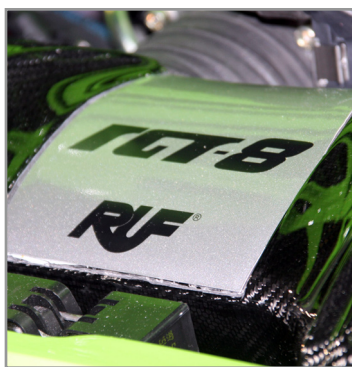
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Porsche News

U.S. Porsche Sales Recovery in 2010

By: Kevin Sims
Photo By: Porsche Press

ATLANTA, January 4, 2011—Porsche Cars North America, Inc. announced December 2010 sales of 2,567, a 21% increase compared to the same period last year when it sold 2,118.

December's results signify Porsche's best closing month since 2008 and represent the seventh straight month it recorded double or triple digit monthly

sales increases over the previous year. With December's strong finish, PCNA ended 2010 with total sales of 25,320—an increase of 29% ahead of 2009.

Indeed, much of Porsche's 2010 sales success can be attributed to its Panamera Gran Turismo. In December, Porsche sold 700 Panameras as compared to 521 the prior year - an increase of 34%. The Pana-

mera achieved U.S. annual sales of 7,741.

Porsche's next generation SUV introduced in 2010 has enjoyed increasingly steady customer demand. In December, PCNA sold 1,109 Cayennes compared to sales last year of 707 - an increase of 57 percent. In 2010, Porsche sold a total of 8,343 Cayennes, the company's highest performing model.

Sports cars continued to be challenging throughout 2010. Boxster sales in December were 137, compared to 138 in 2009. For the year, Boxster sales were 2,177, up 14% from 1,909 a year earlier. The Cayman model recorded December sales of 112 versus last year's mark of 208. For the year, Cayman sales were 1,322 compared to 1,966 a year prior. As for Porsche's 911, sales in December were 509 versus 544 during the same period in 2009. Overall 2010 911 sales were 5,735 compared to 6,839 in 2009. **AA**



Porsche Invests in the Future

By: Kevin Sims
Photos By: Porsche Press

Stuttgart/Atlanta — Porsche plans to upgrade its R&D center in Weissach. The sports car manufacturer is investing approximately \$200 million in a highly advanced wind tunnel, a state-of-the-art design center and an innovative electronics integration center.

“The new system will help us to main-

tain Porsche's top position in the fields of aerodynamics and design,” says Wolfgang Dürheimer, Porsche AG Board of Management Member for Research and Development.

The technology implemented in the new wind tunnel will be used to raise vehicle energy efficiency.

The system will be used for Porsche's internal developments, but will also be available for Porsche customer development, it offers direct access from the adjacent design studio and separate entrances for the discrete completion of customer development projects. Above all, a new studio will offer more space for Porsche designers.

Sub-areas which were previously scattered throughout several buildings at Porsche's Weissach site can be bundled in the future electronics integration center.

“This spatial proximity is a major advantage,” said Dürheimer. “The close interaction of our suppliers' various electronics/electrical system experts and colleagues from related specialist fields during development will contribute significantly to the success of every vehicle component.” **AA**



Porsche Tuning News

TechArt's New Centerlock Wheel for Racing

By: Kevin Sims
Photo By: TechArt Press

TechArt views a performance wheel to be a prerequisite to success in motorsports. With this thought in mind, they are offering customers a new 20-inch lightweight forged centerlock wheel designed for the race track. The new Formula Race wheel has an optimized rigidity and weight ratio as compared to other TechArt models. Such is

achieved by saving weight via the wheel's spokes and in the centerlock connection. As a result, the new wheel has a weight advantage of 10% over TechArt's Formula III forged wheel, thus reducing rotational and unsprung mass and supplying the driver a more agile driving experience.

The Formula Race wheel's centerlock design allows for quicker changes during

pit stops as compared to a conventional 5-bolt design's more involved process. This could also translate into a quicker service time at your local Porsche shop.

Improved braking is another advantage graced by the centerlock wheel. How do you ask? Well, it's easy. Since a centerlock hub is more centralized in the wheel's diameter there is more space available for brake venting. Cooler brakes mean reduced fade, thus better braking performance.

The new wheels will be available in 8.5J x 20 ET 40 and 8.5J x 20 ET 52 for the front axle and 12J x 20 ET 50 for the rear axle. For the necessary road grip, TechArt recommends Continental ContiSportContact 3 or Michelin Pilot Sport PS2 in sizes of 245/30R20 and 325/25R20 as well as Michelin Pilot Sport Cup+ in dimensions of 245/30R20 and 315/25R20 **AA**



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Porsche 918 RSR Racing Lab

Expanding on the GT3 R Hybrid Technology

By: Kevin Sims
Photos By: Porsche Press



Detroit, Jan. 10, 2011 – In the first appearance in the Detroit Auto Show since 2007, Porsche unveiled the hybrid 918 RSR. The two-seater mid-engine coupe represents a racing version of the 918 Spyder released last year and integrates technology from the 911 GT3 R Hybrid that raced last year at Nurburgring, Petit LeMans, and in China.

“We are back in Detroit with a clear message: Porsche further extends its competencies when it comes to performance and efficiency. The Porsche 918 RSR impressively demonstrates the passion of our engineers,” asserted Matthias Mueller, President and CEO of Porsche AG.

The 918 RSR adopts much of its technology from motorsports; like its light, torsionally stiff carbon fiber-re-

918 RSR



inforced plastic monocoque. The car's V8 engine is a further development of the DFI engine from the successful RS Spyder. It has an output of 563 hp at 10,300 rpm. Electric power is generated via electric motors on its two front wheels. Charging occurs when the two electric motors reverse their function during braking and operate as generators. The energy created is stored in an optimized flywheel accumulator that rotates up to 36,000 rpm. At the push of a button, the pilot is able to call up the stored energy and add 150 kW to the car's peak drive power to make 767 hp. The driver deploys the extra ponies for eight seconds during acceleration or overtaking maneuvers. In the 911 GT3 R Hybrid, the extra power was used to delay pit stops by reducing fuel consumption in strategic moments of the race.

In the 918 RSR, the two electric motors offer a torque vectoring function with variable torque distribution between the front axles to increase agility.





The six-speed constant-mesh gearbox is an upgraded unit from the RS Spyder. It employs longitudinally mounted shafts and straight-toothed spur gears and is operated using two shift paddles behind the race steering wheel.

Features such as upward swinging doors, two roof-mounted aerials for pit radio and telemetry, air splitters beneath the front lip, and racing slicks mounted on 19" wheels with central locking identify the 918 RSR as a purist racing machine. Its single racing seat along with its minimalistic steering wheel that displays the driver's current gear selection further illustrates the car's motorsport intentions. As the most unique interior feature, the flywheel accumulator occupies the space normally used by a passenger seat.

Rumors are circulating about the 918 RSR's legitimate changes of seeing actual competition. Sources close to Porsche Motorsports insist it will race and mostly will be at this year's LeMans. At Porsche green technology is only justifiable for sports cars if it wins races. **AA**

918 RSR Specs

Gasoline Engine

Mounted in front of the rear axles.
Direct Injected DOHC, 32v V8
derived from the RS Spyder.

Power:

W/o Charge: 563hp @ 10,300 RPM

W/ Charge: 767hp

Electric Motors

One bi-directional motor/charger per front wheel

Each motor generates 75 kW

Flywheel Acumulator: An electric motor in the passenger seat that stores the bi-directional charge from the motors in the front wheels. It rotates up to 35,000 rpm.

Drivetrain

RWD

Transmission: 6-speed constant-mesh and straight-toothed gears.

Swift Operation: Sequential using two paddles behind steering wheel

Wheels

Racing Slicks on 19" rims with center locking hubs

Frame and Body

Frame: Carbon Fiber-Reinforced Plastic (CFRP) monocoque

Body: CFRP

2011 Ruf RGT8

Building the V8 911 Porsche Will Not

By: Kevin Sims
Photos By: Ruf Press



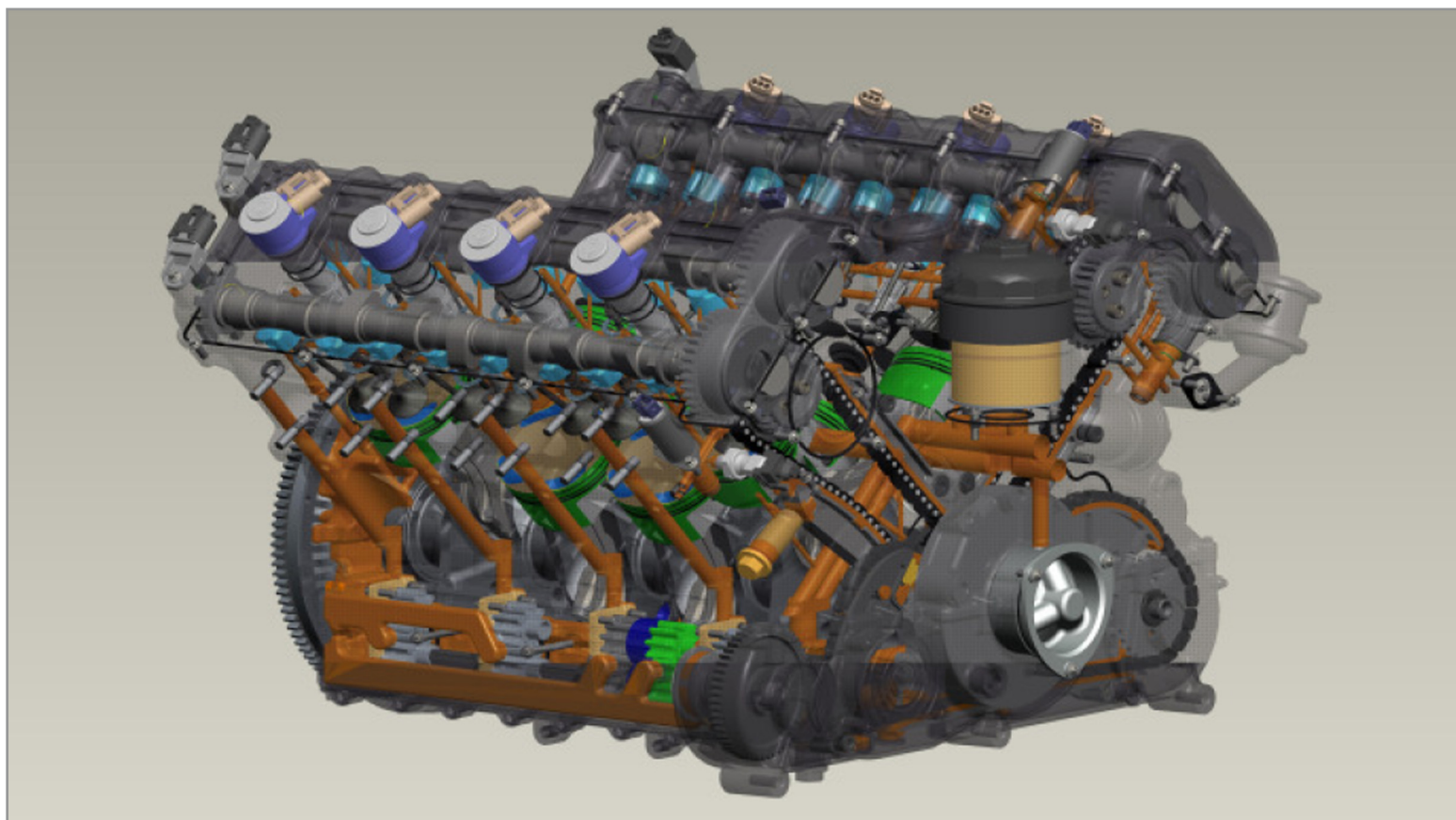
With the introduction of the 2011 RGT8, Ruf has pulled off another coup d'état by making the first production V8-powered 911. The 4.5 liter power plant is an in-house Ruf design meaning that it's not derived from a Porsche platform, a company first.

Realizing Ruf did not have the talents necessary for a complete engine development Alois recruited motorsport designers to fill in the gaps. Ruf's new engineering team gave him the ability to develop an engine with real racing DNA. As a result, the RGT8's 90-degree V8 encompasses ideas straight from the track. Reinhard Könniker spent nearly a decade at Mercedes-Benz until he was hired by Porsche to design street and track engines. After leaving Porsche, he consulted for many race teams on engine design. In addition, Alois employed Alan Brown who made his mark at McLaren perfecting electronics on F1 machines. Brown's resume includes teams such as BMW and Sauber.

In the days of old Colin Chapman stressed the importance of lightness in



Alois Ruf believes that sports car driving should not be limited to gasoline internal combustion powered cars. He builds the eRuf, an electric 911, to prove his point.



designing a race car, but the modern age has revealed that an engine's center of gravity is as important as its weight. With this in mind, the new Ruf V8 sports a unique 180 degree "flat" crankshaft design that allows cylinders to be positioned closer to the crankshaft thus lowering the engine's center of mass. The engine's dry sump lubrication was race-inspired to accomplish the same mass lowering goal. The gearing for a production dry sump lubrication system is usually placed directly underneath the crankshaft. Not so in the Ruf V8. Instead, the dry sump gears are positioned to one side of the engine's V and draw salvaged oil through individual chambers from each bank. The design reduces the mass below the crankshaft making the engine's center of gravity more centralized. In addition, the water pump, alternator, and air conditioning compressor are driven by chains to allow them to be positioned at the lowest point possible to drop their mass.

The 4.5 liter, 4-cam, 4 valve V8 tilts the scale at 441 pounds and is 88 pounds lighter than the current DFI 9A1 Porsche



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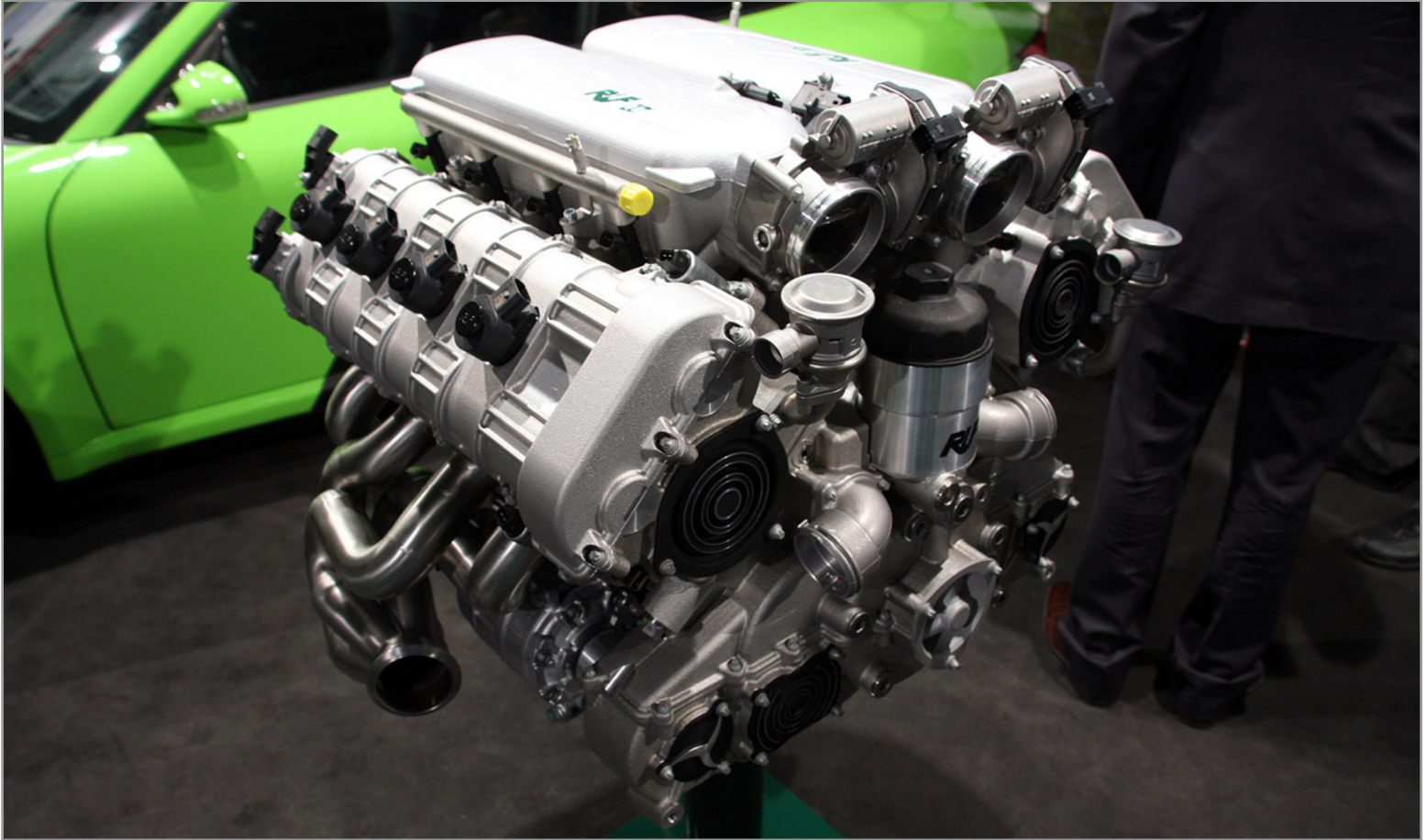
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flat-six engine. To add insult to injury, the Ruf V8 is more powerful as it cranks an entertaining 550 bhp at 8500 rpm and a generous 369 lb-ft of torque. Unlike the new Porsche motor, the Ruf V8 is not graced with DFI. It rather makes due with a Bosch electronically managed, sequential fuel injection system that works in unison with variable controlled valve timing on the intake and exhaust camshafts. Another technical uniqueness is that the exhaust cams are chain-driven via the crankshaft while the intake cams are gear-driven by way of the exhaust cam. The RGT8 introduced at the 2010 Geneva Auto Show utilized a Porsche 6 speed gearbox. However, Ruf has stated that the production version will use an Asian aftermarket gearbox to lower the powertrain's overall position in the frame.

Alois has been innovating the rear engine Porsche since the late 70's. He continues his tradition with the RGT8. Thanks to the foresight of Alois, perhaps we will see a V8 factory 911.

Only time will tell. **AA**

Ruf RGT8 Specs

Engine

Type: 4.5L DOHC, 32v V8
Power: 550 hp at 8500 rpm
Torque: 369 lb/ft at 5,400 rpm
Crankshaft: 180 degree 'flatcrank'
Crankcase/Heads: Aluminium
Lubrication: Dry sump
Fuel Injection: Electronic sequential
Cooling: Pressurized water
Ignition: Individual cylinder coils

Drivetrain

RWD

Transmission: 6-speed manual gearboxes.

Body

2 seat coupe with integrated rol-cage
2 racing type bucket seats
Aluminium doors & front hood
Carbon-fiber engine cover & rear spoiler

Chassis

Electronic stability control system, ABS, traction control, automatic limited slip differential

Wheels

Front: 9.0J x 19 with 245/35 ZR 19
Rear: 12J x 19 with 325/30 ZR 19

2011 Roar Before the 24

Grand Am >> Rolex 24 Hours at Daytona Preview

By: Kevin Sims
Photos By: Randy Stevens

Daytona Beach, FL – January 9th, 2011 – The 2011 Roar Before the 24, three days of test sessions at Daytona International Raceway, opened the Grand Am season by exposing us to the changing mix of Porsche's presence in the series. Brumos Racing is no longer competing in the DP class. The Jacksonville, FL based team is returning to the 911 roots that established them in American sports car racing by entering the GT class with a 2011 GT3 Cup car.

Many critics last season cited that tube-framed GT cars, like the class winning Mazda RX-8 of SpeedSource, had an unfair weight and rigidity advantage over the fully production based Porsche Cup cars. Such an advantage seemed to negate the purpose of the GT class as it was intended for street-based cars. Grand Am listened to the criticism and changed the rules





for 2011 by equalizing the balance of power between the two types of frames. As a result, the presence of Porsche in GT has risen in 2011 to twelve GT3 Cup cars being raced by nine teams. Since the testing event held in early January, The Racer's Group (TRG) has added another GT3 Cup car to make a team of four Porsches in total. As mentioned earlier, Brumos Racing was in attendance with their #59 GT3 Cup car and will campaign it for the whole season. Magnus Racing was at their second annual "Roar" event with their #44 GT3 Cup car applying knowledge gained by the team's exhaustive off-season development program. 343 Other teams running a GT3 Cup car at the "Roar" include Mitchum Motorsports, Paul Miller Racing, Muehlner Motorsports, Burtin Racing, Chris Smith Racing and Rick Ware Racing.

The rule change made its existence felt as Porsche won seven out of the eight test sessions during the "Roar" event.

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2011 Roar Before the 24

Brumos Racing posted the fastest lap time in GT with a smokin' 1:49.868 lap time at a blistering 116.649 mph. The time was achieved on the last day of testing and was the culmination of a gradual improvement throughout the weekend. The Brumos driving team of the legendary Hurley Haywood, Porsche factory driver Marc Lieb, and the full-time driver duo of Andrew Davis and Leh Keen captured first-place triumphs in two out of the eight sessions.

"We made a lot of progress with the new car and also learned a lot about the new pavement. We tried simulating a qualifying run on Sunday and I was able to get in one lap that turned out to be the fastest one for GT," commented Leh Keen, "All of the drivers are looking forward to the race and our entire team is definitely focused. The new track at Daytona is really nice to drive on, it's a lot smoother. And as always, Porsche is a great car to have at the Rolex 24 race, and we are confident that Brumos has the best one out there."

Burtin Racing, a new team running the #17 GT3 Cup Porsche, shocked the field on Sunday by cranking out the event's second fastest time in GT with an impressive 1:49.950 at a brisk 116.562 mph.



2011 Roar Before the 24

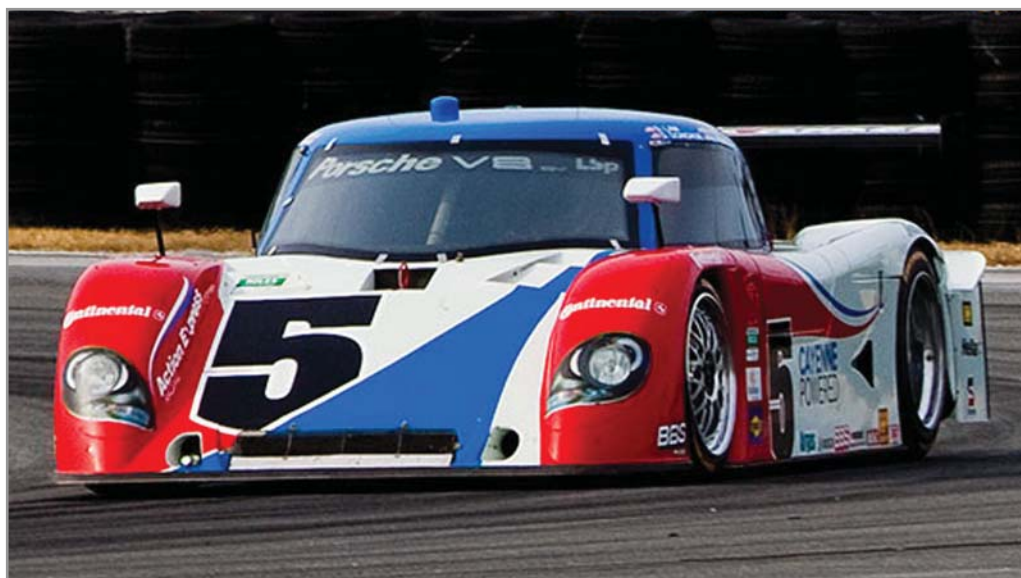
Claudio Burtin, owner of Burtin Racing, purchased his Porsche from Kevin Buckler and ran it under the TRG umbrella in the 2008 Rolex 24. Running with a five driver team, the group failed to finish. The car ran as the Autometrics #14 in 2009 and qualified third, but also failed to finish. For this year, he decided to operate his car under his own team.

Despite the top times achieved by Brumos Racing and Burtin Racing, it was TRG that displayed the most consistent performance in GT throughout the test sessions. TRG won four out of the eight sessions. The #67 TRG driven by Steve Bertheau, Brendan Gaughan, Spencer Pumpelly, Andy Lally and Wolf Henzler won the second (with a 1:50.170), third (1:50.303) and sixth (1:50.204) sessions.

"For the 67 team the worst thing that has happened all weekend is that Delta cancelled all of our flights," Gaughan said. "It has been a really successful test. These guys have so much data to draw from and that it's really fun. In NASCAR, we don't get to see data anymore. In Grand Am I can compare my lap data with Andy Lally's, Wolf's and Spencer's. You grab their fast lap with the same car, same tires and compare apples to apples and see where I can improve. For me it has been great. I view the weekend like a road course driving school. I roll into corner speeds the same as they do. I have my throttle in the same place as them. The last, and crucial part, is the big balls part - how far can you take this thing into the corner and match how deep they go into the braking zone. I don't think I need to match that! I was able to run high 52s, low 53s which I am told is going to be race pace. For me on this program, I'm happy with where I am."

The # 66 TRG Porsche driven by Dominik Farnbacher, Tim George Jr., Ben Keating, and Kevin Buckler won the fifth test session with a solid 1:50.598.

"I have always liked Daytona. I've had some of my most memorable racing moments at this track. Car set-up used to always be my thing, so I was hoping I could add some small value to the 66 squad in just helping us build a happy car. I have done this so many times that I know what we need for a race car to be good here," highlighted team owner Kevin Buckler, "My main goal was this, but I have to ad-





mit, I worked out a little harder this week and watched a little in-car video from last year because I really wanted to be competitive.”

The performance of the Porsche GT3 Cup car at the “Roar” appeared to be a forecast into the Grand Am season.

“With almost all our customer teams either using the new 2011 model, or updating their earlier Cup cars to 2011 rules and specifications including the use of the 3.8-liter engine, we were gratified to see the results this weekend. While we are under no illusions that the BMWs, Mazdas and Camaros won’t do better for the race, we were pleased that the Porsche teams made so much progress during the test weekend,” said Jens Walther of Porsche Motorsports North America.

In the DP class, Action Express Racing returned to the scene of their historic upset victory in last year’s Rolex 24 with the addition of another car. Joining the #9 LBP Porsche Riley of Joao Barbosa and Terry Borcheller will be David Donahue and Darren Law in their own #5 LBP Porsche

Riley. The two car Action Express line-up will be competing together for the duration of the 2011 season. At the “Roar” we were introduced to the team’s new bold color scheme that visually clarifies the team’s official separation from Brumos Racing affiliation. For the Rolex 24, the Action Express team will be joined by Max Papis, Christian Fittipaldi, Buddy Rice, Burt Frisselle and JC France.

During most of the event the Action Express cars were clicking off lap times in the 1:41 and 1:42ish range. The times placed them in the DP class’s mid-field. The team persevered and on the last session the #5 Action Express LBP Porsche Riley achieved the best lap time of any Porsche powered DP entrant with a 1:40.671 at 127.306 mph.

“We came here with a test plan and we were able to get all of it done. Right at the end we took all of the good elements from the plan and put it on the one car (the No. 5) and the car responded to it,” said team manager Gary Nelson following the test. “We’re excited and really expecting to

come down here and work to defend our title from the past two seasons.”

Flying Lizard will be replacing Brumos as Porsche Motorsport’s official engine representative in the Rolex 24 Hours of Daytona. The #45 Flying Lizard Porsche Riley was piloted by Joerg Bergmeister, Patrick Long, Seth Neiman, and Johannes van Overbeek at the test sessions. The Lizards are only competing in the Rolex 24 and then directing their energy toward the American LeMans season.

For most of the weekend the Flying Lizard DP team’s performance scattered the times chart. Early sessions languished toward the class bottom, while in the middle sessions the team showed promise. In the fourth session, the Lizards impressed with an eighth place lap at 1:41.554. Fortunes improved in the sixth session as the Lizards started to show what AMLS experience can bring to the table as they placed fourth with a 1:41.062. Lastly, the Lizards scored a fifth place in class at the final session with a 1:40.697 at 127.273 mph. The team’s final session best was good enough

2011 Roar Before the 24

to be the second fastest Porsche powered DP car of the event.

"I'm pleased with the progress that we made over the weekend in tuning the car. It's been a steep learning curve to come right into it with a brand new car, but we definitely met our test objectives, added Patrick Long, "We still have more on our list to try during race week; we're leaving today feeling optimistic that we'll have a solid racecar for the 24."

While Porsche power exhibited a sound performance in DP, it was teams with other engines that yielded the best times. Starworks Motorsport's #8 Ford Riley scorched the track with a best of event lap time of 1:39.973 at 128.195 mph in the last session. BMW power earned the Chip Ganassi team the "Roar's" second best time with a 1:40.329 at 127.740 mph.

Based on the exciting performances during the "Roar" event in both the DP and GT classes, the 2011 Rolex 24 at Daytona should be as exciting as ever. **AA**







2011 Rolex 24 at Daytona Update

Qualify Results: *Flying Lizard Takes Pole*

By: Kevin Sims
Photos By: Randy Stevens



#45 Flying Lizard's Jorg Bergmeister takes the Pole by breaking the lap record in old #58 Brumos frame.. In GT, #66 TRG wins pole after teammate #67 TRG is disqualified.

Top 4 Class Qualifying Results

DP

1st - #45 Flying Lizard Motorsports / Porsche Riley - Time: 1:40.099, Speed: 128.033

2nd - #10 SunTrust Racing / Chevrolet Dallara - Time: 1:40.133, Speed: 127.989

3rd - #01 Chip Ganassi Racing with Felix Sabates / BMW Riley - Time: 1:40.245, Speed: 127.846

4th - #8 Starworks Motorsport / Ford Riley - Time: 1:40.250, Speed: 127.840

GT

1st - #66 TRG / Porsche GT3 - Time: 1:48.781, Speed: 117.814

2nd - #88 Autohaus Motorsports / Camaro GT.R - Time: 1:48.821, Speed: 117.771

3rd - #44 Magnus Racing / Porsche GT3 - Time: 1:49.011, Speed: 117.566

4th - #17 Burtin Racing / Porsche GT3 - Time: 1:49.134, Speed: 117.433

2011 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.





Porsche 911 GT2 RS 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.

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**



2011 997 GT3 Cup



Detroit Auto Show 2011

The Return of Porsche

Photos By: Ken Michazuki
and Porsche Press



Above | After a 3 year absence, Porsche is back at the '11 Detroit Auto Show.

Right | The Porsche 997 Speedster. Only 356 will be made worldwide. It has a 2.36" lower roof with a more raked windshield & a manual top. It sports wider fender flares from the C-4S4, a 408hp 3.8L flat-6 with DFI, a PDK trans, a limited-slip diff, & ceramic brakes. 0-60 in 4.2 secs.





Above | A 997 Turbo S, the mid-level 911 Turbo. Its 3.8L flat-6 with DFI produces a lofty 500hp @ 6,000 RPM & 480 lb-ft of torque. When overboost is engaged the little gem cranks out an additional 36 lb-ft.

Bottom | A Cayman R, the club-sport version of the coupe 987. With its aluminum doors, the little 'croc' weighs 121 lbs less than an S and produces 10 more hp. As a result it has a power-to-weight ratio of 8.58 lbs/hp. Its been lowered 20mm & has a standard limited-slip. The R has a top speed of 175mph.





Top | The Turbo S has 2 VTG Turbos with 2 intercooler expansion intake manifolds & comes with an integrated dry sump. Choose from a PDK or Manual trans.

Below, Left | The R has a larger front air splitter & black PORSCHE side-strips.

Below, Right | The rear of the R is graced with a stationary rear spoiler.





Top | A BMW 650i Convertible with a DFI 4.8L V8. With 360hp to the rear wheels it does 0-60 in 5.5 secs.

Left | Only 333 Audi R8 GTs will be made. Its 5.2L V10 has 560hp, 35 more than standard, & does 0-60 in 3.6 secs.

Below | A Ferrari 458 Italia. Its 4.5L DFI V8 produces 562hp & launches the 3450 lb car to 60 in 3.3 secs. Top speed is 202!





Above | Mercedes announced at Detroit it plans to produce the SLS AMG E-Cell in the 2015 model year. It's 4 electric motors produce 526hp and 649 ft-lbs of torque. That's enough to motivate it to 0-60 in 4 secs on its way to a top speed of 155 mph. You better have your fun fast because its driving range is only 90 miles. A targeted recuperation charging system using the energy from braking does extend the mile range, but M-B does say by how much.

Left | The original M-B 300SL Gullwing was the first car with DFI in 1954. 1,400 were made





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Top | The launching of the Porsche 918 RSR hybrid racing lab at the 2011 Detroit Auto Show.

Below | A rendering of the 918 RSR on the race track.

