

Motorsports Jul 14, 2017

Porsche 919 Hybrid tops the time sheets in practice

The Porsche LMP Team concentrated on testing its new aerodynamics package in the first free practice sessions at the Nürburgring.



LMP1 practice

For the six-hour race on Sunday, 1pm to 7pm, the Porsche 919 Hybrid has been equipped with a lot more downforce for the first time this year. For the beginning of the season, the priority was on low drag set-up for the high-speed Le Mans circuit. After Porsche achieved the overall 19th win for the brand at the 24-Hour classic in June, the focus has now fully switched to the target of defending the titles in the FIA World Endurance Championship (WEC). The race on Sunday is round 4 out of 9.

Timo Bernhard (DE) was overall fastest in the first of today's two 90-minute practice sessions with a lap in 1:41.612 minutes. He shares the car number 2 Porsche 919 Hybrid with Earl Bamber (NZ) and Brendon Hartley (NZ). This year's Le Mans winning trio currently leads the championship with a 17 points advantage to the best placed Toyota crew. The number 2 sister Porsche, driven by reigning world champion Neel Jani (CH) plus André Lotterer (DE) and Nick Tandy (GB), was third in the first practice session (1:41.896 minutes).

In still dry conditions with ambient temperatures of up to 20 degrees Celsius, the team went for a qualifying simulation at the beginning of the second session. Hartley achieved a 1:38.663 minutes which was ultimately the overall best lap time of the day. This lap time is six tenths of a second faster than last year's fastest single lap in qualifying. Lotterer was second fastest in FP2 with a lap time of 1:39.629 minutes on the 5.148 kilometre long Grand Prix circuit. After a brief rain shower with half an hour remaining, skies cleared quickly. However, the weather forecast for the weekend provides some uncertainties. The qualifying session for the Le Mans Prototypes will be held from 3.25pm to 3.45pm on Saturday.

Comments on the first day of practice

Andreas Seidl, Team Principal: "Given that we are entering our new high downforce aero package for the very first time at a race weekend, having such a smooth day was especially valuable. The car number 1 drivers drove the new aero for the first time today, the car number 2 crew having tested it in Barcelona. For the first practice session we were focussing on race set-up. In FP2 we did a

qualifying simulation before testing tyres on long runs. The entire team once again did a great job and this enabled us to enjoy a very productive day."

Drivers Porsche 919 Hybrid car number 1:

Neel Jani (33, Switzerland): "It's been a good day learning about the new aero that Porsche has brought to this race. It appears to be a good step forward but the race will be close for certain. André had a good quality sim run so hopefully we can show well in qualifying tomorrow."

André Lotterer (35, Germany): "My quality sim went smoothly. I actually hadn't expected that much performance straightaway so I'm certain there is more to come. Our lap times also look good compared to the Toyotas. Hopefully we can be at the top after qualifying tomorrow afternoon. In general, I enjoyed driving the 919 with more downforce."

Nick Tandy (32, Great Britain): "It has been a good, productive and positive day with no problems. We worked through a programme that we needed to do regarding the new aero. I did two long runs to compare tyres which resulted in good information for Sunday."

Drivers Porsche 919 Hybrid car number 2

Earl Bamber (27, New Zealand): "We are constantly learning. The new aero is definitely a good step but there is still more to extract from it. The long run was good with the tyres really working well in these conditions. Let's see if it is enough for the race. We will fight for the top spot, that's clear."

Timo Bernhard (36, Germany): "Today is the first time we've been up against the competition with our new aero kit and our prospects look promising. It of course still remains close with Toyota. Our qualifying simulation runs were good this afternoon and we made positive progress for the race before the rain interrupted things briefly."

Brendon Hartley (27, New Zealand): "I went for a bit of a quality run at the beginning of FP2 on low fuel and the car felt really good. It looked like Toyota did the same with similar kind of runs and we ended up topping the times which is all very positive for tomorrow."

LMP team

"The situation could hardly be any nicer", Fritz Enzinger, Vice President LMP1, happily confirms. "The Le Mans 24-Hours was endurance racing full of highs and lows. In the Eifel mountains we target a clean six-hour race and we certainly would love to win there for a third consecutive time as well. Our new aerodynamics package for higher downforce worked well at a recent test. Now our mission of defending both the World Championship titles, for manufacturers and drivers, is in full swing."

Following three of nine rounds in the FIA World Endurance Championship (WEC) and after collecting double points at Le Mans, Porsche now leads the manufacturers' standings on 111 points, 32.5 points ahead of Toyota (78.5 points). In the drivers' championship, Le Mans winners Earl Bamber (NZ), Timo Bernhard (DE) and Brendon Hartley (NZ) have scored 83 points giving them a 17 points lead over the best placed Toyota trio. Reigning World Champion Neel Jani (CH) and his partners André Lotterer (DE) and Nick Tandy (GB) retired at Le Mans having led the race for over 10 hours and currently rank in fifth position (28 points).

More downforce for the Porsche 919 Hybrid

Porsche took its time to introduce the second of the two aerodynamic packages that are allowed by the regulations for the 2017 season. Initially, the focus clearly was on minimizing drag for the Le Mans high-speed circuit. From the fourth round onwards, the Porsche 919 Hybrid now produces a lot more downforce. The new bodywork is ideally suited for higher cornering speeds.

The Porsche 919 Hybrid has been widely reworked for the 2017 championship. 60 to 70 per cent of the car's components are new developments while the power train in principle remains the same. The innovative hybrid race car develops a system power of around 900 HP (662 kW) that comes from a compact two-litre turbo charged V4-cylinder (nearly 500 PS/368 kW) and two different energy recovery systems – brake energy from the front axle combined with exhaust energy. The combustion engine drives the rear axle while the electro motor boosts the front axle with an output of more than 400 PS (294 kW). The electrical energy that comes from the front brakes and the exhaust system is temporarily stored in a liquid-cooled lithium ion battery.

The Porsche LMP Team before the Nürburgring race

Andreas Seidl, Team Principal: "For the 2017 WEC, we have once again extended the limits of what is technically possible and Toyota did the same. Despite comprehensive new restrictions from the regulations, lap times have improved. But also reliability issues of both manufacturers at Le Mans showed that we all went to the limits. After winning Le Mans, we went straight to a very positive three-day performance test in Barcelona. We feel well prepared for the six-hour race at the Nürburgring. The 919 Hybrid will appear with a new front and a changed rear section. Our new high downforce aero looks good. Now it has to prove its performance on the race track."

More quotes in the [press release](#) (downloads).

GT team

The six-hour race on the Nürburgring on 16 July is the last event on European soil for the 2017 Sports Car World Endurance Championship. After the Nürburgring round, five overseas races will be contested in Mexico, USA, Japan, China and Bahrain. On the storied racetrack in Germany's Eifel region, the Porsche GT Team fields two new 911 RSR in the GTE-Pro class, in which the fight for points and victories is the most cutthroat in the WEC. Thanks to the Balance of Performance, which was created to ensure that all vehicles of different concepts compete on the same performance level, fans will witness gripping fights for positions and thrilling races to the flag. The 510 hp 911 RSR racers were developed from scratch by Porsche Motorsport in Weissach and are based on the seventh generation of the iconic 911 sports car. The 911 RSR made a successful start to the season, clinching third at its maiden outing in Silverstone. At the 24 Hours of Le Mans recently, the new racer narrowly missed out on a podium spot, securing fourth after a strong performance and long stints in the lead.

The Porsche drivers

Four works drivers compete for the Porsche GT Team: Richard Lietz (Austria) and Frédéric Makowiecki (France) share the cockpit of the #91 Porsche 911 RSR in the GTE-Pro class. They started into the season with third place at Silverstone. Their team colleagues Michael Christensen (Denmark) and Kévin Estre (France) man the #92 car. In the GTE-Am class, the Porsche customer squad Dempsey Proton Racing fields a 911 RSR from the 2015 model year. It is driven by the Porsche Young Professional Matteo Cairoli (Italy) as well as Christian Ried and Marvin Dienst from Germany. So far this season, they have achieved third place at Silverstone and second in Spa-Francorchamps.

The Porsche 911 RSR

The 911 RSR, which celebrated its race debut at the Daytona 24-hour classic in January, is a completely new development: the suspension, body structure, aerodynamic concept, engine and transmission have all been designed in Weissach from scratch. Depending on the size of the restrictor, the motor, which is now positioned in front of the rear axle, puts out around 375 kW (510 hp). Thanks to the large rear diffuser combined with a top-mounted rear wing, the level of downforce and the aerodynamic efficiency were significantly improved.

Balance of Performance (BoP)

The "Balance of Performance" applies to the GTE-Pro class of the WEC Sports Car World Endurance Championship as well as the GTLM class of the IMSA SportsCar Championship. "BoP" was introduced by the FIA with the aim of achieving a level playing field for the different vehicle concepts, and thus ensuring balanced and fair races. The intention is that it should not make a fundamental difference if a vehicle is powered by a turbocharged or normally aspirated engine, or if the engine is mounted on the front axle or in front of the rear axle. The basic aerodynamic shape of the vehicles should also not play a decisive role.

After an initial grading by the FIA, the balance of performance is adjusted at the races by means of telemetry - not only using lap times, but also acceleration profiles and engine mappings. This data input is automatically analysed and incorporated into the "Balance of Performance". The most frequently used means of adjusting the performance level is through adding or subtracting weight. In keeping with the rule-makers' intention, the key to success on the racetrack is not about the individual potential of a vehicle, instead it's about the performance of the drivers, the race strategy, a perfect setup or the skill of the team with their pit stops.

Comments before the race

Dr. Frank-Steffen Walliser, Vice President Motorsport and GT Cars: "It's not only the fans who enjoy the race on the Nürburgring with its great tradition in long-distance events. The entire Porsche GT Team is very excited about our home race. When the WEC first raced here two years ago, Porsche celebrated an outstanding double victory. The Eifel circuit is the home track of our long-standing partner Manthey Racing, who will again run the WEC operations for us this season. We hope we can make the most of our home advantage and get a good start into the second half of the season at our races abroad."

Marco Ujhasi, Overall Project Leader GT Works Motorsport: "We face two main challenges at the Nürburgring. Firstly, we have to see how quickly the team can adjust to the race after the long break following Le Mans, and how can we best optimise our procedures. Secondly, will we manage to find the best possible setup for our new 911 RSR for this demanding racetrack? On top of this, we have to be prepared for absolutely everything in the Eifel and make sure that we have the right tyres for all eventualities."

More quotes in the [press release](#) (downloads).



The 911 RSR

Schedule (local time)

The 29-car WEC field is divided into four classes for prototypes and GT sports cars. The six-hour race gets underway on Sunday 13:00 hrs. It can be followed live on the internet and TV from all over the world.

Friday, July 14 2017

11:35-13:05 free practice

16:15-17:45 free practice

Saturday, July 15 2017

09:45-10:45 free practice

15:25-15:45 qualifying LMP1 & LMP2

Sunday, July 16 2017

13:00-19:00 race

TV and live streaming

The official WEC App can be downloaded free of charge with an extended (not free of charge) version available which includes full live streaming and full timing. The live stream is voiced by the FIA WEC TV team including live interviews from the pits.

The WEC races can be followed on various international TV channels in Europe, Asia, Australia and New Zealand, North and South America as well as in the Middle East and Africa.

Facts and figures

The WEC efficiency regulations limit the amount of energy that can be used per lap. On the 5.148 kilometres long lap of the Nürburgring, the Porsche 919 Hybrid can use 4.68 megajoule of electrical power from energy recovery systems and 1.313 kg/1.82 litres of petrol.

At normal race speed, the Porsche 919 Hybrid is due for refuelling after a maximum of 33 laps.

Refuelling and changing tyres may only be done sequentially, not at the same time. Only four mechanics may work simultaneously when changing tyres and also may use only one wheel gun at a time. That takes a lot longer than in F1, for example.

The drivers are normally only changed when new tyres are needed.

These different types of tyres can be used: three different compounds of slick tyres for dry conditions, a hybrid tyre (no profile either but softer cover) for mixed conditions and wet weather tyres. Four sets of dry weather tyres are available per car for qualifying and the race, this is two sets less than in 2016.

A lap on the Nürburgring Grand Prix circuit has 16 corners, seven left handers and nine right handers.

The Nürburgring is one of the most tradition-steeped racetracks in the world. Motorsport fans associate the Eifel circuit with the unforgotten 1,000-kilometre races on the legendary Nordschleife. The Sports Car World Endurance Championship WEC is contested on the 5.148-kilometre Grand Prix circuit with its 16 corners. When the Nürburgring first hosted the race series in 2015, Porsche celebrated a double victory.

Review

In 2016, the two 919 Hybrids shared the second row of the grid. Timo Bernhard and Mark Webber (AU) took third position with an average lap time of 1:39.861 minutes. Neel Jani and Marc Lieb (DE) qualified fourth with an average lap time of 1:39.893 minutes. In partly tricky conditions with some rain at the end of the 20-minute qualifying session, pole position went to Marcel Fässler (CH) and André Lotterer in their Audi (1:39.444 minutes).

Just as in 2015, Bernhard/Hartley/Webber won the race.

Romain Dumas (FR), Jani and Lieb finished fourth in what was an action packed race after they had a collision when lapping another car and received a drive-through penalty.

Sports Car World Endurance Championship

Sports prototypes and GT vehicles contest the Sports Car World Endurance Championship (WEC) in four classes: LMP1 (eg. Porsche 919 Hybrid), LMP2, LMGTE-Pro (eg. 911 RSR) and LMGTE-Am (eg. 911 RSR model year 2015). They all compete together in one race but are classified separately.

Results

All scores: <http://www.fiawec.com/en/season/result>

All results: <http://fiawec.alkamelsystems.com>

Link Collection

Link to this article

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Media Package

<https://newsroom.porsche.com/media-package/porsche-motorsports-fia-wec-2017-lmp1-gt-919-hybrid-nuerburgring-preview>

Downloads

Porsche 919 Hybrid with new aerodynamics tops the time sheets in practice, press release, 07/14/2017, Porsche AG

Le Mans winners head to Nürburgring for home race, press release, 07/10/2017, Porsche AG

Porsche GT Team aims for podium at home race, press release, 07/10/2017, Porsche AG

External Links

<http://www.porsche.com/usa/eventsandracing/motorsport/>