



June 27, 2014



MÉGANE R.S. 275 TROPHY

A DAILY DOSE OF EXCITEMENT!

Mégane R.S. 275 Trophy is an all-round performance car. A limited edition that combines everyday driveability with even sharper track performance. The Cup chassis fully taps the potential of the Renault Sport 2.0T engine, now boosted to 275 hp. Renault Sport has allied exceptional dynamic qualities with advanced versatility to create, what without doubt, the most accomplished sports hatch currently on the market.

“Pushing back our limits all the time... This is the shared aim and inspiration of all the “expert enthusiasts” at Renault Sport Technologies. When we decided to develop an upgrade to Mégane R.S., the objective was not only to improve the technical specification. We needed a more distinctive model, a car that would be even better on the track while still being suitable for everyday driving. Reflecting our approach to motorsports, we sought to make progress in every area in order to develop innovative solutions that would make our car the market reference. It’s a car that addresses today’s concerns, with its moderate fuel consumption and CO₂ emissions, and it is also a strong performer on the track, with the input from technical partners who worked in close cooperation with our staff.”

Patrice Ratti (CEO of Renault Sport Technologies)



01

**MÉGANE R.S. 275 TROPHY:
THE BEST OF RENAULT SPORT**

02

**THE MAGICIANS AT RENAULT SPORT:
A FULLY OPTIMIZED ENGINE**

03

**R.S. MONITOR 2.0 AND R.S. REPLAY:
ONBOARD TELEMETRY AND DATA SHARING**

01

MÉGANE R.S. 275 TROPHY: THE BEST OF RENAULT SPORT

The limited edition Renault Mégane R.S. 275 Trophy carries on a tradition of exclusive sports cars. Expressing the best of Renault Sport technology, it gains advanced sports features, designed in cooperation with prestigious partners, including: an Akrapovič exhaust system, Öhlins dampers and Michelin tyres.

A GLOBAL LAUNCH

Mégane R.S. 275 Trophy is available in some twenty countries around the world (Australia, UK, Malaysia, Germany, South Africa, New Zealand, etc.).

This limited series will be available until March 2015.



THE CUP CHASSIS FOR ADDITIONAL THRILLS

Mégane R.S. 275 Trophy features a Cup chassis specially tuned for enthusiasts of sporting performance. Equipped with a limited slip differential, the Cup chassis delivers dependable efficiency at all times, regardless of grip conditions or driving style. A set-up designed for unflinching performance. The limited slip differential is combined with an independent steering-axis layout, allowing drivers to reap the full benefits of the extra traction for a more reassuring handling. It also increases stability on braking. Further, steering potential is enhanced for earlier, and stronger, acceleration.

AN AKRAPOVIČ SOUND SIGNATURE

For Mégane R.S. 275 Trophy, Renault Sport brought together partners who set the standard in their respective fields. This limited series delivers new acoustic sensations with the support of Akrapovič. Renowned for its work with motorcycles and performance cars, the Slovenian firm designed a special titanium exhaust system. This material cuts vehicle weight by 4 kg.

The carbon tailpipe trim is also by Akrapovič. Fitted as standard, this assembly gives Mégane R.S. 275 Trophy-R a deeper, more raucous sound signature that is sure to thrill engine aficionados!



EXCLUSIVE STYLING, OUTSIDE AND INSIDE

Mégane R.S. 275 Trophy is recognizable at a glance, with its Platine grey bodywork and F1-style splitter with Trophy lettering. The side panels feature stripes and chequered flag graphics, also in Platine grey.

Reflecting Renault Sport's rallying activities, the new Speedline Turini wheels feature the design used in competition. They are mounted with Bridgestone RE050A tyres (Michelin tyres optional). Their diameter has been increased to 19 inches for Mégane R.S. 275 Trophy.

The numbered door sill guards underline the exclusive qualities of this limited edition. Passengers are invited to slip into the Recaro seats, finished in leather and alcantara. The interior design is a nod to the world of motorsports, with many elegant touches, such as the Renault Sport signature on the head restraints, the alcantara steering wheel, the Zamac gear lever knob, the handbrake gaiter and the red top-stitching on the upholstery.



OPTIONAL EQUIPMENT TO PUSH BACK THE LIMITS OF EFFICIENCY

Extending its partnership with Sweden's Öhlins, supplier to Mégane R.S. N4 rally cars, Renault Sport Technologies asked the firm to equip the 275 Trophy limited series. Customers can acquire Öhlins Road & Track adjustable dampers, as an option.

A wide range of settings lets drivers adapt the ride to their personal driving style and to road conditions (slow or fast track, mountain road, everyday use, etc.). To support customers, an online tutorial with the basic settings will soon be available on the www.renaultsport.com website.

Michelin also partners Renault Sport in its competition activities. For this car, it has developed a special version of its advanced performance MICHELIN Pilot Sport Cup 2 tyre. Innovations include a tread featuring different compounds on the outside and inside for exceptional grip. These compounds work perfectly with the Öhlins dampers to deliver a ride similar to that of a real competition car.

Two further qualities can also be added: endurance, in lapping and with respect to the service life of the casing, and versatility, for safe driving in all weather conditions.

THE LATEST IN A GLORIOUS LINE

For more than ten years, Mégane has set the pace for sports cars. Whether premiering high-tech upgrades or celebrating brand success in motorsports, the models developed by Renault Sport have written a sporting history.

- 2004: Launch of Mégane Renault Sport.
- 2005: Carrying on from Mégane Trophy in the new World Series by Renault, the Mégane Renault Sport Trophy limited series presents the Cup chassis, featuring major upgrades to the running gear.
- 2006: Celebrating the brand's Formula 1 World Championship titles, Mégane Renault Sport F1 R26 gains an upgraded engine developing 230 hp.
- 2008: Based on radical efforts to cut vehicle weight, Mégane Renault Sport R26.R sets a new lap record at the Nordschleife (front-wheel drive production vehicle category). It goes on to pick up an array of awards.
- 2009: Third-generation Mégane gains a sports model. This first version of Mégane R.S. delivers 250 hp.
- 2011: Mégane R.S. Trophy gains new technical upgrades, including a 265 hp engine. With this model, Renault Sport improves its Nordschleife record.
- 2011/2012: Renault engines enable Sebastian Vettel to clinch two more Formula 1 titles. The limited series Red Bull Racing RB7 and RB8 celebrate these successes.
- 2014: The name Trophy takes center stage once more with the limited series Mégane R.S. 275 Trophy. The radical version, Mégane R.S. 275 Trophy-R, sets another new record at the Nordschleife, breaking the 8-minute barrier.

02

THE MAGICIANS AT RENAULT SPORT: A FULLY OPTIMIZED ENGINE

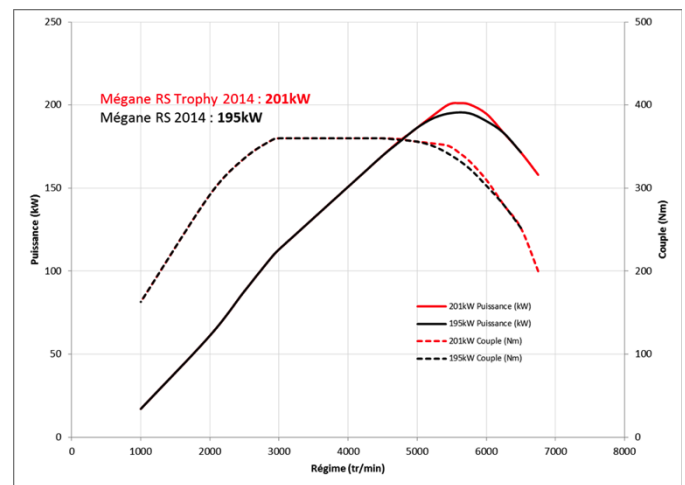
The exceptionally versatile Renault Sport 2.0T engine has been further optimized to deliver maximum power of 275 hp. To achieve this, the experts at Renault Sport fine-tuned the engine characteristics.

THE RENAULT SPORT 2.0T DELIVERS MORE POWER OVER A LONGER PERIOD

Renault Mégane R.S. 275 Trophy premieres a new upgrade of the 2.0 four-cylinder turbocharged petrol engine.

Engineers sought to increase torque at peak power of 5,500 rpm by working on the electronic control parameters. By raising torque to 349 Nm (+10 Nm), they boosted engine power to 275 hp (201 kW). Available between 3,000 and 5,000 rpm, maximum torque of 360 Nm remains unchanged. These results can be obtained by selecting Sport or Race modes in the R.S. Drive dynamic management.

This new engine definition has no impact on fuel consumption or emissions, which remain contained at 7.5l/100 km and 174g/km of CO₂.



MORE THRILLS

The experts at Renault sport worked on an engine bench in order to optimize operation. The progress made is perceptible not only in the torque and power curves, but also from the driving dynamics of Mégane R.S. 275 Trophy.



At the wheel, the vehicle delivers a better response at intermediate speeds without the need to downshift. The sense of acceleration has been increased almost to the rev limit, which has been pushed up to 6,800 rpm in the first two gears.

DAVID POMONTI

(Manager of the powertrain engineering office at Renault Sport Technologies):

“OPTIMIZED OPERATION”

How do you go about gaining precious additional horsepower on an engine that is already such a strong performer?

“We aimed to further optimize all the settings in order to take full advantage of this engine without changing the technical specs. More specifically, we worked on the camshaft angle variator and on spark advance. The objective was to achieve maximum power.”

Do these changes modify engine behaviour?

“Everything we did on the engine bench translates into new sensations at the wheel. Acceleration has been extended almost to the rev limit. We have boosted power over a rev band of between 5,200 and 6,500 rpm. This effect is perceptible up to 6,800 rpm on the first two gear speeds, for a more ample increase in engine speed that can be put to practical use in each gear.”

Is there any impact on engine reliability or service life?

“We applied our usual quality criteria during the optimization process. Our objective was to make full use of any scope for improvement. Increasing the maximum power and engine speed involved adapting the peripheral components. For this reason, we upgraded the engine flywheel and redesigned the clutch lining to improve temperature stability in intensive use.”

Off the track, is this optimization perceptible in day-to-day driving?

“Our efforts to boost power did not impact the intrinsic qualities of the Renault Sport 2.0T engine. The improvement is perceptible even when the car is not being driven on a track or closed road. The engine response time has been further improved for equivalent torque. Similarly, although we boosted power, we have maintained the same standardized consumption (7.5 l/100 km¹) and CO₂ emissions (174 g/km).”

EXPLANATION

CAMSHAFT ANGLE VARIATOR

By adjusting the opening and closing of valves according to engine speed and load, the camshaft angle variator optimizes the operation of the engine giving it more torque at low revs and more power at high revs, while reducing pollutant emissions.

SPARK ADVANCE

Spark advance can be varied by correcting the offset of the ignition point, defined by the degrees of crank angle between the spark point and top dead centre. This raises ignition pressure and increases spark duration for optimized performance.

¹ Homologated fuel consumption and emissions based on applicable regulations.

03

R.S. MONITOR 2.0 AND R.S. REPLAY ONBOARD TELEMETRY AND DATA SHARING

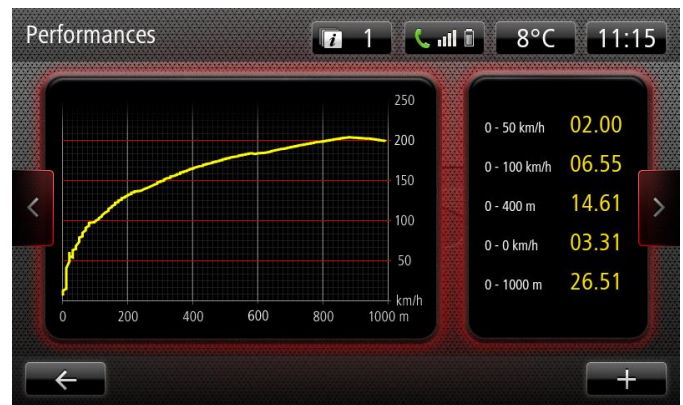
Renault R-LINK, the connected onboard multimedia system features R.S. Monitor 2.0. The most complete data acquisition system available on a production vehicle is now gaining a further upgrade with a new version of R.S. Replay on Mégane R.S. 275 Trophy.



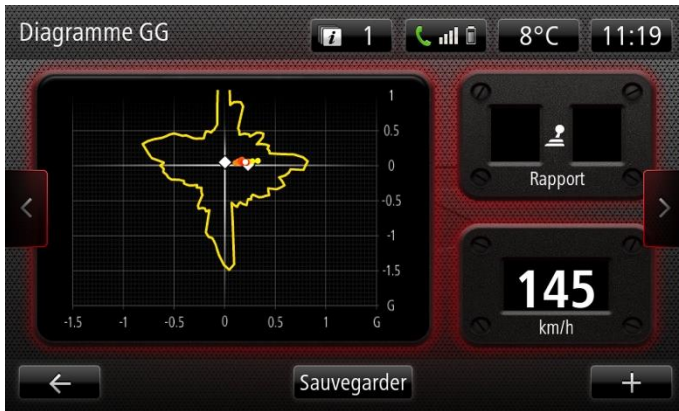
BECOME A DRIVER-ENGINEER

A system unique on the market, R.S. Monitor 2.0 opens an infinite range of possibilities for users. With features to acquire, save and share data, using a USB key, drivers can give free rein to their passion every time they hit the track.

Controlled using the large 7-inch (18 cm) touch screen on the Renault R-LINK integrated multimedia tablet, R.S. Monitor 2.0 provides drivers with an array of driving information relating to hundreds of parameters. Data on power, torque, air, oil and water temperatures, turbo pressure, throttle opening, brake pressure and steering-wheel angle can be displayed in real time on customizable screens.



R.S. Monitor 2.0 also lets drivers measure their performance: acceleration from 0 to 50 kph, from 0 to 100 kph, 400 meters from a standing start, 1,000 meters from a standing start and braking time from 100 to 0 kph.



For even more fun, users can display a G-force diagram to measure longitudinal and lateral acceleration and save the highest values. The wheel spin of driven wheels is also available.

R.S. Monitor 2.0 is a driving aid that also provides valuable driving advice. Users can adjust the timing of the gear change warning signal and monitor mileage of the tyres, dampers, brake pads and discs on a screen dedicated to maintenance.

R.S. REPLAY TO RELIVE AND SHARE DRIVER EXPLOITS

The system is completed by R.S. Replay, an analysis tool with new functions. Combined with GPS positions, data collected by the sensors of Mégane R.S. 275 Trophy can be transferred to a USB key (one hour of driving = 3 Mb) and imported to the website www.renaultsport.com/rsreplay.

Users can then relive their track driving experience on a computer screen, tracking their car on a satellite map, with all driving parameters displayed dynamically.

Renault Sport already has many pre-recorded tracks and a steadily growing user community. All owners of a Renault Sport vehicle fitted with R.S. Monitor 2.0 and R.S. Replay can edit their own tracks and contribute to improving the database.

