

RENAULT 5

A MODERN HISTORY

1972-2022, RENAULT 5 AT THE CORE OF RENAULT'S INNOVATION



RENAULT 5
50

RENAULT 5 **A MODERN HISTORY**

1972-2022 : RENAULT 5 AT THE CORE OF RENAULT'S INNOVATION



LUCA DE MEO
CEO of Renault Group



Renault is going back to basics to face full-on the challenges of tomorrow, as the fiftieth anniversary of its legendary R5 approaches! By reading these pages, you will appreciate the extraordinary challenge of the R5. It took a stroke of genius to create such a car - at first incongruous, soon to become iconic. The history of the R5 is that of a manufacturer capable of embracing an era and its aspirations: autonomy, individual fulfilment, mischievous irreverence, and economic solutions following the oil crises.

50 years later, the pioneering character of this epochal car remains striking. Rediscovering it means rediscovering the passion and power of innovation that have enabled Renault to reach the top without hesitating to head off the beaten path. Faced with unprecedented challenges, and at a time when the Renault Group is resolutely choosing zero-emission vehicles, this spirit that enabled us to invent a new automotive modernity is a source of inspiration. That is why we are launching the new Renault 5: mischievous, innovative and popular, to embody our desire to generalise zero-emission cars. In one word, faithful to Renault's style to better invent the car of today and tomorrow. The following pages invite you to experience this philosophy first hand.



CONTENT

RENAULT 5 A RENALUTIONARY CONCEPT

A successful design right from the drawing stage! 10-13

Reduced design and manufacturing times 14-15

The small urban car capable of doing it all 16-17

The Renault 5 gives the grille a fresh look 18-19

Innovative composite bumpers 20-21

New side protections 22-23

Two doors only... and no handles! 24-25

The Renault 5 invented the user-friendly dashboard . . . 26-29

The Renault 5 has a daring tailgate for more versatility. 30-31

Bright colours in tune with the times. 32-33

RENAULT 5 A STAR IS BORN

The Renault 5 became a "Supercar" in advertising. 36-37

Record-breaking consumption. 38-39

A chic little pioneer playing in the big leagues! 40-41

Three diamond logos for the Renault 5! 42-43

Conquering America 44-45

The turbo pioneer. 46-47

The first little French sports car. 48-51

It metamorphoses for racing. 52-53

RENAULT 5 GREEN AHEAD OF ITS TIME

A naturel fiber roof headliner 56-57

In 1986, the Renault 5 entered the circular economy. . . 58-59

Electric since the 70's! 60-61

RENAULT 5 PROTOTYPE THE WINK IS IN THE HEADLIGHTS

..... 62-69

1967-1985

Timeline of a legend in 25 acts 70-73





RENAULT 5

A RENALUTIONARY CONCEPT

1967, showcasing the genius Renault 5!



A SUCCESSFUL DESIGN RIGHT FROM THE DRAWING STAGE!

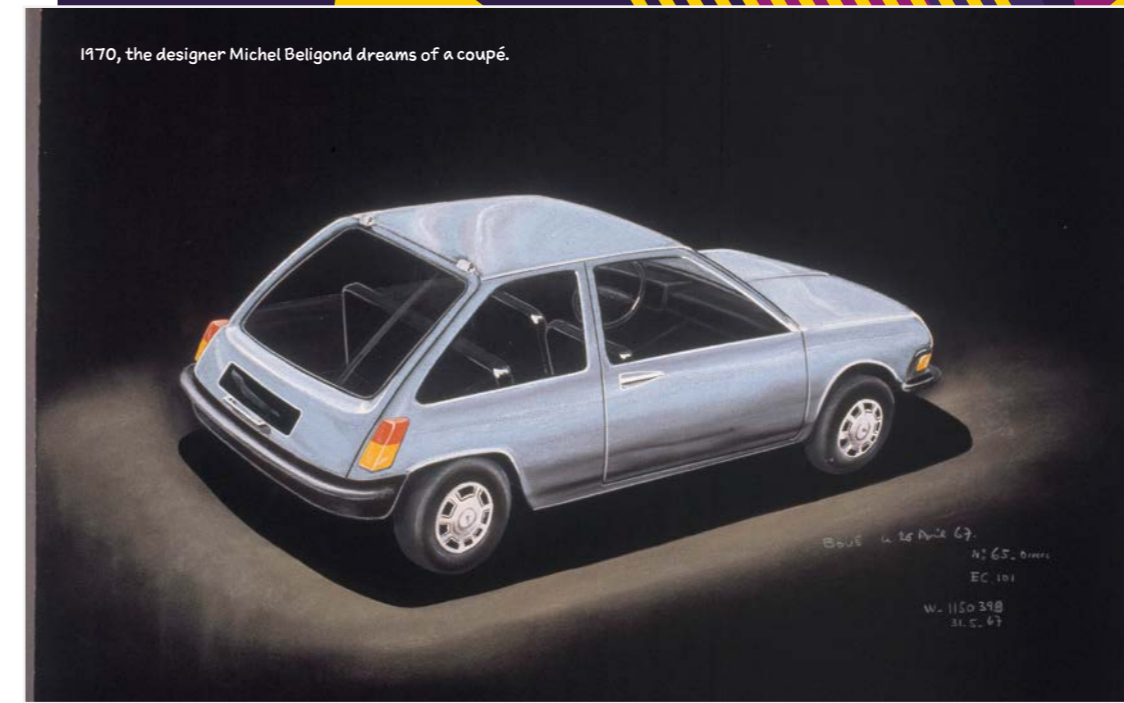
The Renault 5's design came from a proposal by a designer who had not yet produced much. Those in charge at the time remember this stroke of genius...

It took only two years to define the design theme of the Renault 5. And yet, at the time, the design offices of Renault were always busy. In 1967, at the start of Project 122, the designers - there were only ten of them - were also working on a large V8-powered hatchback, known as Project H.

In 1968, the Alpine A310 was quickly prepared, while the Renault 15 and 17 coupés got creative juices flowing. That same year, Project H was scaled down in size and became Project 120. In 1969, the year when the Renault 5's design was fixed, this project 120 still monopolised three full-time designers: Beligond, Mor-

« The Renault 5 project 122 remains the only Renault project with a design theme that was accepted from the first model! »

1970, the designer Michel Beligond dreams of a coupé.



nard and Juchet, Design Director, in person! They represented one third of the design team. The Renault 5, on the other hand, slipped through the cracks of all this pretty mess. We have to thank a discreet man for its design: Michel Boué. Boué joined Renault at the end of the 1950s and was a disciple of Raymond Loewy.

A secret weapon: the Renaultrama
His automotive culture was impressive and he had a sharp mind, even if at work his friend Robert Broyer (creator of the Renault 5 dashboard, see p.26) would later explain that "He

was rather nonchalant. You could say he was reserved. The way he sculpted his models was unusual. As for the Renault 5, he was lucky that the plastic bumpers had been invented, as they considerably enhanced the pebbled appearance of his model". Michel Boué designed the Renault 5, but he drove a Peugeot 404. Yves Georges, Director of the design office, said at the time that "Inside the small team, the youngest designer, Michel Boué, had not come up with anything remarkable. And in any case, none of his ideas had been chosen. From the design specifications of the future

therefore costs. And the design office had a weapon for this. A true innovation: the 'Renaultrama'. Yves Georges then said "We had a long look at the little model of Boué, and we ran it through what we call the 'Renaultrama'. It was a system that allowed the model to be visualised in driving conditions, with scenery flashing up behind it. This was an ingenious system that allowed you to better choose the shape you wanted to work on, on a full scale". This system was the predecessor of virtual reality headsets! The first full scale model of the Renault 5 was the right one. ...

Renault 5, he created a gouache based on a photo. He got the green light, but his paintwork had resulted in a small sports coupé rather than the ideal hatchback we had in mind. Undeterred, Michel Boué set about making a 1/5th scale model and it was a stroke of genius!"

The primary aim of project 122 was to reduce deadlines and



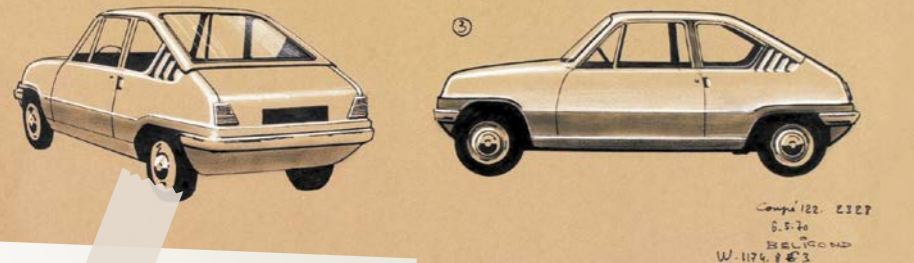
HOW IT IS VIEWED TODAY

Nicolas Jardin, Designer of the 2021 Renault 5 Prototype, comments on the drawings of Michel Boué:

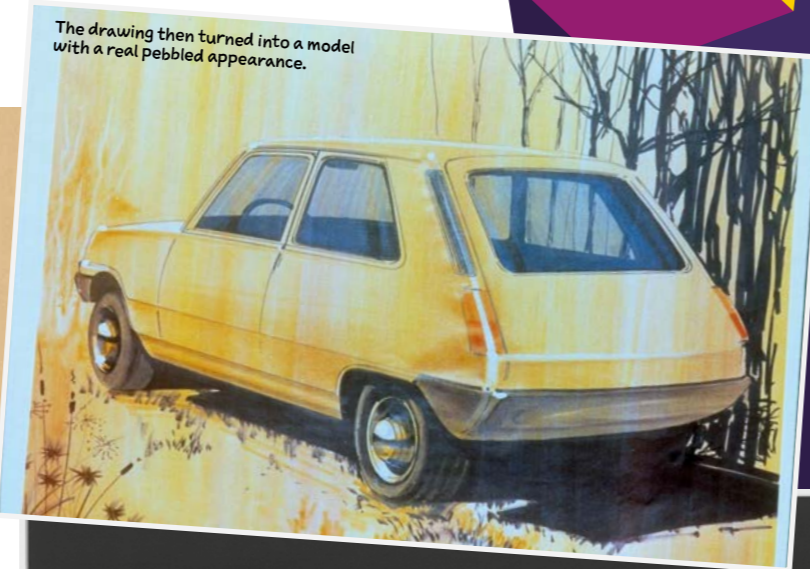
« I see a unique silhouette, with clean sides that are reminiscent of today's electric vehicles. In 1967, Michel Boué already imagined such an architecture. What is very beautiful is the attempt to integrate the technical functions in a natural corner of the car (grille, lights), so as not to disturb the form. He wanted to draw an essential object, devoid of aggression. The Renault 5 is benevolent and wants to be perceived as a friend. »



1970, the designer Michel Beligond dreams of a coupé.



The drawing then turned into a model with a real pebbled appearance.



Gaston Juchet, then Director of Renault's design department.

Estate and coupé models

While the design theme was quickly chosen, the design of the grille required numerous models (see p.18). Project 122 was not limited to its two-door tailgate model. A four-door car with a classic boot was designed for Spain and other estate and coupé variants were conceived. Different coupé projects were submitted, from Gaston Juchet and even Robert Opron for the restyling of the Renault 5, when he joined the Company's design office. In his notebooks, Gaston

Juchet perfectly summarised the extremely rapid stylistic genesis of the Renault 5: "A sketch inspired by the designer Michel Boué, executed according to specifications that were still vague at the time, suddenly struck a chord during the first presentation: a sort of pebble with no sharp edges, emerging from the classic treatise of the time, without a grille, and featuring lights and headlamps embedded in the body. Looking at the drawing, Bernard Hanon foresaw this car would transcend the norms linking social status to vehicle size: 'Women, doctors or workers must have felt at ease, side by side at a traffic light', he thought. The only real technical problem was the development and integration of the laminated bumpers, which played an essential part in the concept of this little



Sketch by Michel Beligond, dated 1969.

car, which was a huge success as we all know". Michel Boué, the father of the Renault 5 design, unfortunately did not know his child for long, as he died at the end of 1972 of bone cancer. A few months after his death, his friend Robert Broyer was one of the two people who brought Madame Boué a Renault 5, as a tribute to this brilliant designer that forms part of automotive history.

AUTOMOTIVE DESIGN TODAY...

DIGITALLY-ACCELERATED CREATION

At the origin of the first Renault 5, new technologies were introduced, such as parts designed with digital assistance, or the Renaultrama system. Renault wanted to use them to shorten the preparation period. The UNISURF system of the mid-1970s was a step towards this goal. It was developed by a Renault engineer, Pierre Bézier. He created the transfer machines after the war to accelerate the production of the 4CV engine. The engineer thus participated in the development of computer-aided design (CAD).

3D HEADSETS

Today, digital calculations or design allow the number of physical models to be reduced, exchanges between design and engineering to be controlled, and production times to be shortened. Designers and engineers wear 3D headsets that immerse them in a virtual world where they can communicate remotely, even if they are not in the same room. Nor in the same country. They can see

their colleagues with whom they can interact via an avatar in their 3D helmet. However, 'fully-digital' is not the future, as the artistic contribution of traditional modelling remains a very strong aspect of automotive culture. Even though they are limited in number, full scale models are still sacred, as they act as JP when it comes to lead presentations before the top management.



DIGITAL TRANSFORMATION

It is based on a digitised points statement capable of being read by a milling machine, a copy of which was quickly set up close to the design office, in order to materialise the studio's creations as quickly as possible. Since then, digital technology has become a solid link between design and engineering, and has made it possible to increase efficiency and quality. All the software used in design and engineering today come from these 1960/1970s innovations. At Renault, 3D made a giant leap forward in the early 1990s, thanks to the work of a team led by Bruno Simon, who began the digital transformation and introduced new tools. Jobs are changing: the designer/modeller duo is becoming a designer/3D designer duo. Throughout the 1990s, Renault became the leader in this sector.



3D VISION AND VIRTUAL REALITY REDUCE THE NUMBER OF PHYSICAL PROTOTYPES.



REDUCED DESIGN AND MANUFACTURING TIMES

At the Rueil design office, IT was in its infancy. At the Flins plant, robotisation was just beginning...

The notes of Gaston Juchet, Renault's head of design, revealed that the drawings for project 122 - the future Renault 5 - began in April 1967. Two years later, when the Renault 12 was unveiled,



The design was decided quickly, but not the figurehead!

Gaston Juchet noted that the design of the Renault 5 was already fixed. Only two years to create a design and three more to develop and market this unprecedented project in 1972 were simply unthinkable deadlines at the time. The Renault 5 benefitted from new digital design methods: the era of computer-assisted design led to exponential change, right up to the current virtual reality headsets worn by desi-

gners and engineers. Yves Georges, Director of Studies at the time of the Renault 5, recounts that "in the design office and the milling workshop, the beginnings of digital technology meant that simple milling of bodywork elements or reduced-scale models could be carried out from computer files in just three days". A new material was making its way to the centre of design alongside plaster and clay:

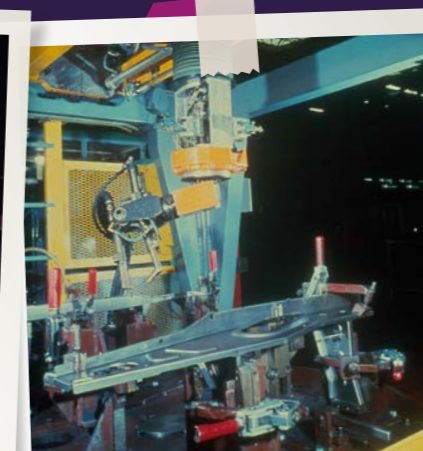
« To produce the Renault 5, the Flins plant received its first welding robot. »



First step into the digital age with UNISURF.



The wind tunnel is a necessary part of the design process.



The first welding robot at the Flins plant.



The design boss suggests a coupé variant.

polystyrene. This material allowed the bulk of the car to be quickly determined. As Yves Georges confided, "we were very far ahead and many people laughed at us... but they quickly followed our lead!" Lead times were also reduced through industrialisation.

25 hours to build a Renault 5

The in-house "Renault Magazine" of January 1972 announced the appearance of the first industrial robot of the Unimate type in the Flins factory, established in 1952, and a pilot site for the production of the Renault 5. The welding robot was being implemented on an experimental basis at station no. 11. It would immediately prove to be consistent in its work, cost effective and maintaining dead-

lines. It was one of the mere 500 robots used in industry all over the world at the time! In 1976, with the arrival of the Renault 14, the older sibling of the Renault 5, the Douai factory became the most robotised industrial site (arc welding, gluing) and introduced a major innovation: the development of paint robots. A new era had begun. At Flins, the assembly time for a Renault 5 was 25 hours. It would be reduced to 20 hours to produce its 1984 Supercinq replacement with the help of 134 robots.

THE RENAULT 5 OF TOMORROW...

NEW PLATFORM AND « MADE IN FRANCE »

When work began on the Douai plant, it was to be inaugurated in 1975 by manufacturing the Renault 5 before it became a pilot site for the Renault 14 from 1976. Almost half a century later, the new Renault 5 EV will be manufactured at this emblematic site, which has joined with the Maubeuge and Ruitz sites to form the ElectriCity EV industrial facility. The Renault 5 will join the zero-emission C-segment range: the Megane E-TECH hatchback and a second vehicle which is already being planned. A perfect command of flexibility. The new zero-emission CMF/B EV platform for the Re-

nault 5 will be introduced in 2023. The ElectriCity ecosystem, with 400,000 vehicles produced per year, aims to become the largest manufacturing centre for zero-emission vehicles in Europe.

RENAULT 5 AND RENAULT 4 WILL MEET AGAIN

The Renault 5 EV will therefore be manufactured in France and will dramatically reduce production costs - as it will be 33% cheaper than the current ZOE. And if the 1972 Renault 5 shared its technical architecture with the Renault 4, the Renault 5 EV will do the same with the future «4ever» project.



DOUAI PRODUCED THE FIRST RENAULT 5 AND WILL PRODUCE ITS DESCENDANT IN 2023.

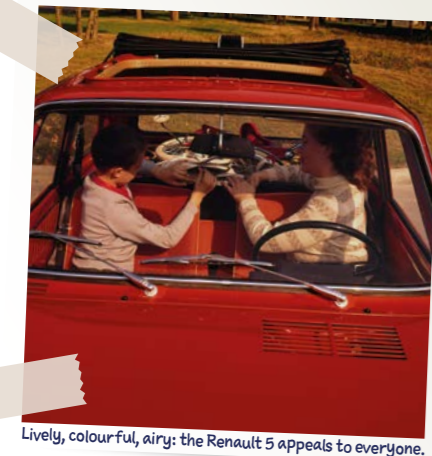


THE SMALL URBAN CAR CAPABLE OF DOING IT ALL

With the Renault 5, Renault offered a versatile urban and road mobility solution. Compact but comfortable and practical, it is immediately appealing.



The Renault 5 was emancipated thanks to Bernard Hanon.



Lively, colourful, airy: the Renault 5 appeals to everyone.

Automotive success is often the result of simple encounters. Stories of women and men whose decisions led a project on the right track. The Renault 5 has benefited from these benefactors at the head of its conception. Though Michel Boué's magic pencil stroke had been convincing enough, Bernard Hanon needed more time to impose ideas that

challenged what was already in place: a two-door hatchback, a coupé-like silhouette, with both urban and road mobility... Bernard Hanon was hired in 1967 as an advisor to the CEO Pierre Dreyfus, a few weeks before the 122 project began. He was the first to believe in the viability of a car that was not just a commercial vehicle like the Renault 4. A car that appealed to women, and in which a whole range of

« The Renault 5 is a nonconformist product. It is not just a car, but a friendly everyday companion. »

engines could be installed. Bernard Hanon, in the IT and Planning Department, influenced the design brief. Yves Georges, Director of Studies, summarised it as "the desire to create a car capable of covering the distance from Paris to Marseille in a comfort worthy of a mid-range hatchback car".

Playing in the big leagues

Hanon was a product-centric man, but he did not neglect the science of market research, which was a novelty in the late 1960s. He then integrated the famous customer tests into the product development schedule. Together with his teams, he used it to define an outlook of the evolution of customer demand and therefore to improve future design specifications. The 1960s saw households move towards greater freedom, sometimes with a second salary, and the 1968 protests materialised desires that were very different from those of the immediate post-war period. In May 1968, the development of the Renault 5 was put on hold for a few weeks, but without losing sight of the objective of offering its future customers a new way of life. For the first time, Renault incorporated some subjectivity into its surveys. The Renault 5 would not be a downsized Renault 6. It had a nice-looking front and became the first multi-purpose small car, while its tailgate makes it easy to load. What a cheerful car with its seventies colours and an original look! All of this with record-breaking interior space, despite its 3.50 m length. Long before the Clio, the Renault 5 had all the makings of a great car!



A boot to carry all your dreams of getting away.



Urban and road: the Renault 5's double personality.

CLIO, THE WORTHY HEIR

HYBRID AND DIGITAL, A CAR WELL IN TUNE WITH THE TIMES

Born in 1990, the Clio is the worthy descendant of the Renault 5 in its ability to offer the ideal compromise between urban and road use, including motorways. Just as the Renault 5 did in its time with variants as diverse as the GTL, the Automatic and the Alpine, the Clio has adapted, in many versions and five generations, to the societal trends that are causing profound upheaval today.

50 CM IN 50 YEARS

As our world becomes more digital, it now offers a large, high-resolution 9.3-inch vertical touch screen on board. In

response to the urgent need to protect the environment, the range has been extended to include the 140 hp E-TECH Hybrid version, which can be driven electrically by up to 80% in the city. And to blend in with growing urbanisation, it relies on its 4 m length, which is only 50 cm longer than the Renault 5 was in its original form... 50 years ago! It also accepts that it will soon be accompanied by a zero-emission Renault 5. The 2022 Clio is of its time and has triumphed, thanks to its successful concept, in becoming a societal product, like the Espace or the Twingo. Or like the Renault 5 in its day!



CLIO: INFLUENCED BY THE RENAULT 5!



THE RENAULT 5 GIVES THE GRILLE A FRESH LOOK

The grille had always been showy and distinctive, but then it became more discreet on the little Renault. It gave it more of a jovial look!



Minimalist grille for a strong personality.



Next to the Renault 12 with its massive 'old-fashioned' grille, the Renault 5 has a real modern touch.

In 1969, the Renault 12 hatchback had a large grille that included the headlamps. It also included indicators on the front apron, which itself was pierced by small air inlets. Two years later, the Renault 15 and 17 coupés were fitted with a vast black surface bumper, in which the main beam headlamps were once again visible. The indicators are now lo-

cated on the apron, revealing the difficulties of creating a smooth and crisp figurehead. In 1972 the Renault 5 changed radically! The headlamps were no longer embedded in the grille, but created a jovial look, while underneath, the bumper integrated the indicators and hid the sheet metal apron. The simplified figurehead improved the style, which resembled a pebble. This bumper had four air

inlets to cool the engine. The only thing missing from this delicate design was a tiny grille, which had more of an aesthetic function rather than a technical one. It highlighted the two large headlamps and joined the bonnet.

From style to design

Effective and brilliant because the Renault 5's features were only made

« The simplified grille, together with the headlamps and the limited parts, contributed to the purity of the figurehead. »



Design with double headlamps and convoluted grille.



Huge grille, the antithesis of what was retained.



Round headlamps and casing hanging over the grille.



Name, logo, large grille: the overload to avoid.

up of these simple elements! Rather innovative at the time, the slim grille was made of ABS and was uniformly black. It thus had the dual quality of being able to deform slightly without breaking, in the event of a soft impact, and of being protective in case a pedestrian is hit. The design of the front end was based on the rigidity of the body and consisted of only seven removable parts: the two front fenders, the bonnet, the two headlamps, the bumper and the grille. There was therefore no sheet metal support plate or anything to surround the grille. The grille had a chrome band underlining the entire width of the car, under the headlamps, and joined the distinctive embossing of the front

fenders on both sides. The TL version had a second chrome element, located at the base of the grille, just above the bumper. It's not about the style but the design, as the grille covered the front of the Renault 5 with sobriety. Until then, cars without large air intakes were rare, with the exception of the 1955 Citroën DS of course! Indirectly, due to its minimalism, the Renault 5's grille did not show the logo, which was moved onto the bonnet.

GRILLES TODAY...

REVOLUTIONISED BY THE SWITCH TO EV

The grille is a key element of a manufacturer's identity. It is usually designed to achieve this objective rather than to fulfil its primary function: to let air into the engine compartment. It is gradually disappearing on electric vehicles, or is only a used to make the logo stand out. It is no longer the engine that needs to be cooled, but rather the batteries which are located lower down, in order to ensure their efficiency and durability. Designers will still have to design thin air intakes into the shields to address this.

OFFICIALLY MISSING

For the future Renault 5 EV, the almost total absence of a grille is compensated for by two square vents, positioned at the two ends of the bumper. If the future Renault reminds us of its ancestor, it is not because of its grille, but because of its headlamps. The absence of coarse air inlets is beneficial for aerodynamics. Like the Renault 5 EV, the new Megane has no open grille, but instead has a bumper with two air vents designed to optimise the aerodynamic coefficient.



INNOVATIVE COMPOSITE BUMPERS

Engineers were thinking about replacing the metal bumper with a composite one. Renault made it a reality with its Renault 15 and Renault 17, before generalising it with the Renault 5.



A style study... with a traditional bumper!

The jovial style of the Renault 5 is due in part to its composite bumpers, which replaced the curved sheet metal parts that previously served as bumpers. Renault thus refined the concept which appeared four months earlier on the Renault 15 and Renault 17 coupés. This innovation can even be traced back to research for the 120 project for a large hatchback designed in 1968.

Yves Georges, Director of Studies, and Claude Prost-Dame, then in charge of the bodywork, imposed this solution on the 122 project. It wasn't easy to sell the idea when a plastic component cost more than a chrome-clad bumper! The advantage of this composite bumper, in addition to its shock absorption at speeds of up to 7 km/h, is that it provided more protection than a sheet metal bumper. To ensure that this new ele-



The factory in Dreux dedicated to the manufacture of bumpers.

« The plastic bumpers contributed to its sleek style and were capable of absorbing shocks at speeds of up to 7 km/h. »



ment served its purpose, the material chosen consisted of glass fibres steeped with polyester resin. The resulting product was then processed to create a material with the consistency of a thick filler. It was then wound onto 1.5 tonne reels and delivered to the Dreux factory, which is specially equipped to manufacture these bumpers.

Composite is fantastic!

Presses weighing 1,500 tonnes shaped them at a temperature of 150°C to allow for thermosetting, all under a pressing force of around 70 kg per cm². The plants made forty pieces per hour per press, of which there were four. This innovative material was a perfect fit for the 1970s, when synthetic materials were used in various areas such as furniture, clothing and household accessories. The result was fantastic, as these light grey parts fully contributed to the style of the Renault 5. However, these composite elements went far beyond mere design or protection. They could be used to reduce the number of parts that made up the structure, by removing some sheet metal elements in the lower front part of the vehicle. Clean, crisp and simple, the Renault 5's figurehead was both compact and non-aggressive. While the 4-door version of the Renault 5 produced in Spain (the Renault Siete) kept the classic sheet metal bumpers, the 1976 Renault 14 generalised the concept for generations to come.



The Alpine gets an enlarged bumper with integrated headlights.



The Spanish Renault Siete (1975), with a metal bumper!



Renault 5 Lauréate and its body-coloured bumper.

BUMPERS TODAY...

FROM PHYSICAL TO LASER PROTECTION

The 1972 bumper improved the functions of this car part. From the 1970s, it became "soft nose" by incorporating deformation zones for pedestrian impacts. It now integrates the air vents, joins with the engine cover, and facilitates the redesigning process. All of these functions have increased its thickness. As with the Renault 5 Prototype, it also adapts to the changes in assisted driving.

RECYCLED MATERIALS

It includes parking sensors and now radar and laser remote sensing (Lidar) systems on vehicles incorporated with level 2 advanced driving assistance systems. It is now produced with recycled materials. Since April 2010, Renault and its partners Rhodia, INDRA SAS/Re-source Industries, Steep and Mann&Hummel have set up a recycling network for plastic from used vehicles in order to re-use not only its own recycled parts but also those of its competitors in its future products. Today, bumpers have become highly technological and require an investment in manufacturing of several million euros.



NEW SIDE PROTECTIONS



« The side strips protect against minor impacts, "especially when stationary" according to the catalogue. »



VBG Project (1976), with broad protections.

The Renault 5 GTL protects against knocks and costs. Its new lateral protection makes you forget that the car was also designed to cope with the oil crisis.

In 1973, when the supply of black gold ran out and fuel prices exploded around the world, Renault realised that its Renault 5 was one of the answers to this crisis. Its technical department suggested to install the "big" 1,289 cc engine, lowering its power to 44 horsepower. Flexible,

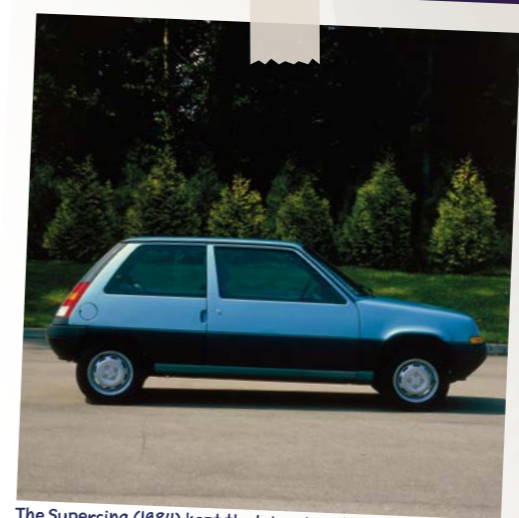
robust and economical, this four-cylinder engine enabled the new Renault 5 GTL to claim fuel consumption of 4.7 litres per 100 km at 90 km/h (see pages 40-41). However, when it made its appearance in February 1976 - the same year as the Renault 5 Alpine - the GTL did not stand out

for its new economical powertrain, but for the lateral protection that encircles the body. While the engineers gave this GTL a considerable "engine" advantage in these times of crisis, the designers adopted a mass production device from their research in the 1970s, extending the protection of the bumpers along the sides of the Renault 5.

Nothing is lost

These side strips, made of the same material as the front and rear bumpers - a reinforced plastic made from a mixture of synthetic resin and fibreglass - protect against minor impacts, "especially when stationary" according to the catalogue. They are screwed directly onto factory-fitted lugs and there are three per side, with one module covering the rear wheel arch. They are striped, like the bumpers.

In 1980, when the Renault 5 was restyled, these elements were adapted to the arrival of the 5-door model. The designers did not invent these protections only for the Renault 5. In the mid-1970s, they worked on a project for a small hatchback to replace the Renault 4, with a programme called Véhicule Bas de Gamme (lower-range vehicle) (left). Many models were made prior to the release of the Renault 5 GTL, and the vast majority of them were fitted with very large lateral protections, some of which went very high up the sides. Nothing is lost in research, the Renault 5 GTL was born to confirm it!



The Supercinq (1984) kept the lateral protection.

PROTECTIONS TODAY...

SUSTAINABLE DESIGN AND RECYCLED MATERIALS

Damaging a Renault 5 GTL protection, rather than a door, was a first approach to sustainable design! Today, it imagines and designs new concepts with recycled materials. For example, the upper part of the Megane E-TECH Electric's door trim is made of a new material consisting of laser-cut lime leaves bonded to a fabric with a low environmental impact adhesive. This is a world first.

CIRCULAR ECONOMY

The new way of designing 'sustainably' is not just about design. It also

concerns the production chain and even goes further, during the recycling stage. With its Re-Factory unveiled in 2020, Renault has created an ecosystem that aims to develop innovation to support the circular economy, and to achieve a negative carbon footprint by 2030. Manufacturing of electric cars will be directly impacted as almost 80% of the recycled materials will be reused in new batteries. Renault wants to become «the car manufacturer with the highest percentage of recycled materials in new vehicles worldwide» by 2030.



THE MEGANE E-TECH ELECTRIC USES A LOT OF RECYCLED MATERIALS.





1980, the lock moves away from the push button.

TWO DOORS ONLY... AND NO HANDLES!

For sales people, it was madness to launch a two-door car! It didn't even have handles. But, in fact, it was a stroke of genius.

The Renault 5 was the first mass-produced model with only two doors. The doors were a small feat of ingenuity, as they frame was made separately and then welded to the lower part consisting of an outer skin and an inner box. It should be noted that in 1972, only the TL version had hard point hinges at the end, which allowed the doors to stay open.

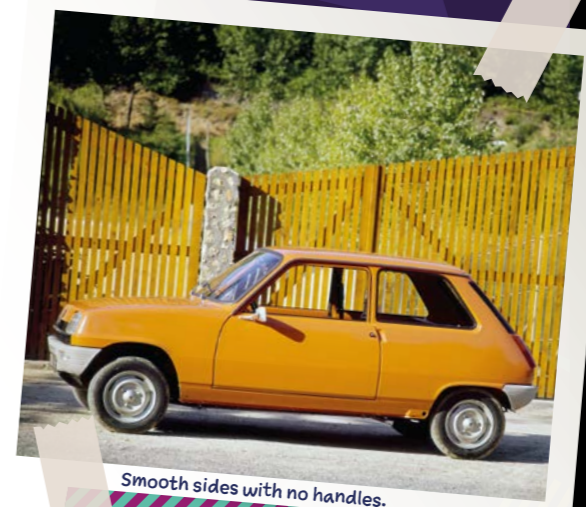
These doors are fitted with drop-down windows, not sliding windows as was discussed at the outset of the project. They have no deflectors, which provides a somewhat better protection against theft and improved side vision. But the issue at the beginning of the project was not really technical. Rather, it concerned the marketing department: "Would it be possible to sell a "coach" with

«Elegance, efficiency, ingenuity: the entire personality of the Renault 5 is reflected in the absence of classic handles.»

only two doors in France in 1972?" The answer from some analysts was clear: "no". However, Bernard Hanon, who was supervising the study of this little Renault, already perceived the societal evolution that awaits for such a product that didn't yet exist on the market.

A Renault 5 «2+1 doors»

To reassure the sceptics, the designers created a four-door variant in the late 1960s, with the same length as the two-door. But it would only appear with the 1980 restyling! Better still, the architects gave the Renault 5 a magic tailgate (see p.30) to facilitate loading, while the two very long doors and the reclining seats provide good access to the back seats. This two-door original architecture came from the Design department who refined their panels by piercing them with a small push button opening. To avoid the handles, a small notch was stamped into the side of the body. The Renault 5's entire personality was defined by this detail: purity, efficiency, ingenuity. However, the designers had to give up this idea when it came to manufacturing the four-door version in Spain (the Siete), and in Europe when the five-door Renault 5 appeared in 1980. The chief designer, Gaston Juchet, even imagined a Renault 5 having a 5-door opening version on the right and a 3-door opening version on the left in order to create a model with asymmetrical openings. An idea that never went further than the drawing stage.



Smooth sides with no handles.



Return of the handles on the 5-door in 1980.

DOOR HANDLES TODAY...

HIDDEN IN THE BODY, IT'S MORE "CHIC"

The new Megane E-TECH Electric, like the Renault 5 Prototype, features pop-out door handles. When the driver or front passenger approaches to open a door - or when the vehicle is unlocked - the handles, which are hidden in the bodywork, are automatically popped out of their slots through an electronic system. The doors can then be opened in the same way as a conventional handle. They return to their hidden slots two minutes after parking or when the car starts to move and the doors are locked.

... AND MORE AERODYNAMIC The system takes into account all factors related to safety, in particular passive safety. When an airbag opens, it automatically unlocks the doors and pushes out the handles. The system is equipped with a "manual" opening safety device in case of power failure. This so-called "emergency release" function is mandatory when retractable door handles are installed. In addition to their high-tech appearance, these handles improve aerodynamics thanks to their smooth sides, free of rough patches.



AERODYNAMIC AND ELEGANT WITH HIDDEN HANDLES.



THE RENAULT 5 INVENTED THE USER-FRIENDLY DASHBOARD

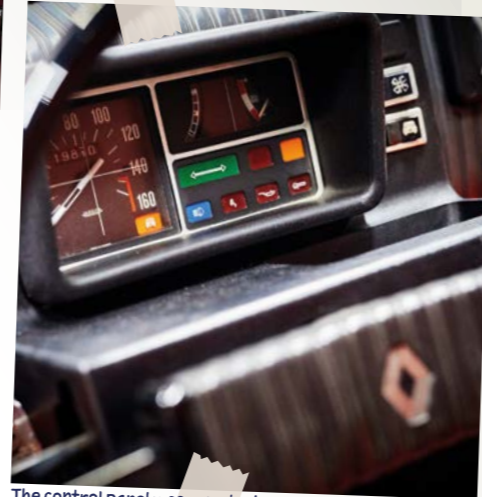


« The implementation of the controls within fingertip reach was revolutionary and would be adopted by all competitors. »

The most striking innovation on board the Renault 5 was the control panel, bringing together all the information and controls in a single, highly ergonomic component.

The Renault 5 would be modern and easy to drive. A logical approach led to the implementation of a simple, clever and compact dashboard. But keeping it simple was complicated! The designer Robert Broyer, whose project had been selected, explained that he based it on inno-

uating the structure of the shell: "The windscreen bay beam was designed to channel air, hence the big air vent in the centre. This sheet of metal was quite useful in terms of protection in the event of an accident. The intention was to cover it with a fabric-foam coating for greater efficiency. It was a



The control panel was very techno in 1972.



On board: simplicity, practicality, visibility.



Michel Boué introduced bright colours.



The 1974 Renault 5 LS with its rev counter.



HOW IT IS VIEWED TODAY

Stéphane Maiore, Head of Interior Design, talks about the 1972 icon:

« You can feel that the designers designed a passenger compartment that broke the rules, even with plastic materials, which seems strange today, but which was very new back then. The dashboard was faded to put the emphasis on the control panel. The idea was to free up space, which contributed to the impression of modernity. We can see that technology was needed to compact everything, and there was a hierarchy that resulted from this: we first discover this new part featuring the control panel-integrated wheel and then we find the dashboard banner below it that sets the scene. »

simple solution, which I applied even to the steering wheel hub, with its cushioning pad".

The dashboard thus adopted significant innovations in terms of passive safety, meaning safety following an impact. So, it could be deformed, had no aggressive sections and received a protective foam. The steering column was gimbaled and fixed to a deformable bracket to prevent intrusion. The shell that closed the column cover was made of soft polypropylene, limiting the consequences of an impact with the knees. The simplicity of the dashboard design by Robert Broyer had to be paired with an innovative control panel. "Instead of designing

a dashboard body that spanned the width of the car, I focused on innovating the small block in front of the driver, moving the controls there, which were previously scattered all over the place». This was completely new at the time, with the windscreen wiper control taking the form of a switch at fingertip level, and others on the right-hand side of the control panel. «I designed a set square shape for the dashboard, with the speedometer and its return at 90° to the steering wheel. In this area I added a pocket for coins or glasses".

The history of the knob

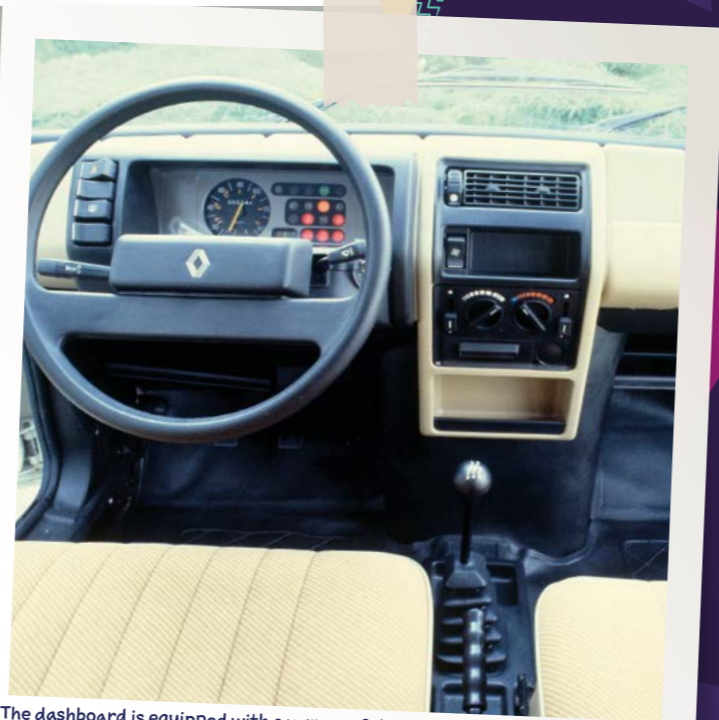
Implementing these controls at one's

fingertips was ground-breaking and would be adopted, in a different form, by competitors a decade later. This put an end to buttons scattered here and there. A logic that incorporated a so-called oscilloscope control panel, with the tachometer and lights in the centre, surrounded by the controls. A set-up similar to the one found for the 1976 Renault 14. The dashboard of the Renault 5 was innovative, but according to Robert Broyer, it could have been more so. "I had positioned a headlamp height adjustment knob on the side of the control panel. It was simple to use: turn forward to lower the optics, turn backward to raise them. It was intuitive, not like the front-mounted





The 1980 restyling, which was much more luxurious.



The dashboard is equipped with a very useful console.

controls where you never knew if you were raising or lowering the headlamps! Unfortunately, the architect was not interested by it. Yet, Pierre Dreyfus liked this innovation, so much so that he asked me why it was no longer present on the final dashboard. When I explained why, Yves Georges gave me an earful because 'I was not supposed to answer the president on engineering issues!'

Colourful seats

In order to be as compact as possible, the control panel was given a flexible printed circuit board (PCB) to bypass the speedometer bowl. Considered modern architecture for its time, it required a single multi-channel connector to the electrical network for greater reliability. The whole thing was clad in black plastic parts, while the on-board environment was very colourful. Robert Broyer explained that, at the time, it was difficult to match colours between the different plastic materials, "so the board was bathed in grey or black, because the colour combinations were very risky". Plastic was fantastic in the 1970s!

In terms of ergonomics, the heating controls were located in a no-contact zone. As for the window winder crank handles, they were deformable in the event of a side impact. What about the seats and their colourful covers? They were created in the colours and materials department, where a certain artist was working at the time: Michel Boué, designer of the Renault 5! Robert Broyer confirmed that "Boué found the idea of the leatherette upholstery brilliant but a little uncomfortable, let's face it! But in terms of visual impact, it was very effective!"

DASHBOARDS TODAY...

USER-FRIENDLY: TOUCH-SENSITIVE AND DIGITAL

At Renault, the arrival of the Megane E-TECH Electric marked a breakthrough in automotive architecture. With the CMF/EV platform, designers have more space to design the passenger compartment within a more compact exterior. Part of this extra space is in the front block. Architects use it to house the air-conditioning units. This overhang frees up the canopy, a highly technical architectural feature that separates the passenger compartment from the engine compartment. Designers have taken advantage of this extra space to streamline the dashboard. This is a far cry from the invasive "buffet", the famous engine cover under the Renault 5 dashboard!

OPENR

Refining continued under the console. The absence of a transmission tunnel, combined with the flat floor of this 100% electric architecture, benefited the interior space. The gear lever, which was slow to move from the dashboard-piercing stick to the floor in the Renault 5, was moved behind the steering wheel in the Megane E-TECH Electric. However, there is one thing in common between the first Renault 5 and the 2022 architecture: the desire to group information and controls as much as possible. It's all about the new OpenR concept of putting screens all in one place. It is the centrepiece of the Megane E-TECH Electric's passenger compartment. It virtually re-

places the dashboard body and becomes the embodiment of integrated technology. The OpenR screen is shaped like an upside-down "L" and integrates digital display and a multimedia touch screen.

100% DIGITAL

This equipment, unique on the market, integrates the central air vents, just as the dashboard of the Renault 5 integrated the large air vent in its day. But if Robert Broyer, at the end of the 1960s, was obliged to design a visor to protect his small control unit from reflections, half a century later the light reflection rate of the Megane E-TECH Electric's screens has been optimised for better visibility in the sun thanks to anti-reflection technology. This makes it possible to do without the classic visor. The OpenR Link infotainment system is based on Android OS, which powers over 75% of the world's smartphones. In 1972, a car radio was not even an option on the Renault 5!



INTUITIVENESS, QUALITY AND SIMPLICITY ON BOARD THE MEGANE E-TECH.



THE RENAULT 5 HAS A DARING TAILGATE FOR MORE VERSATILITY

The tailgate was successfully introduced on the Renault 16, and was generalised by Renault on the Renault 5, which then became a very practical car, despite its two doors.



The Renault 16 introduced the tailgate in 1965.



In 1965, the Renault 16 invented an unprecedented architecture with its tailgate giving access to the boot. Something never before seen on a family hatchback. Until then, the hatchback had been tainted with a "utilitarian" image, but now it was a real jewel, full of intelligence. This fifth door was generalised by Renault and became the standard for multi-purpose hatchbacks. In 1972, however, the Re-

nault 5 was the first to impose it in its segment. Its competitor, the Fiat 127, which was launched nine months earlier, had to make do with a boot lid and had to wait until 1973 to offer the magical tailgate. The same was true for the Renault 5's French rival: the Peugeot 104, from the end of 1972, neglected the tailgate until it was restyled in 1976. Renault took advantage of this late reaction from competitors to impose its "3-door" ar-



Folding seat and tailgate: brand new on a small car.

« Renault took all its competitors by surprise. The Renault 5 was the first model in its class to have a real tailgate. »

Renault 5 Soci t  marketed since 1975, without a bench seat.



With its opening roof and large tailgate, the 5 has it all!



Renault 16: magical opening into a large space.

chitecture. This was made possible with the design of a new body shell featuring a large cut-out at the back. Renault used its experience with the Renault 16 to work on the rigidity of a more compact model.

A tailgate and a folding rear seat

The rigidity of the body also allowed the Renault 5 to offer a canvas type sunroof over the entire length of its roofline. The tailgate integrated the license plate lights and extended over the entire width of the vehicle, the lights being now located on the sides. The air extracts in the passenger compartment, which are usually hidden, were instead highlighted here and gave the little Renault a strong personality. In addition, the designers covered the hinges, so they were not visible. The advantage of the tailgate is that it sat perfectly with the bumper, providing an extremely low sill height. A metal compensator on the

left side locked it once opened. Access to the loading area became easy, with a width of 1.06 m. Between the wheel arches, the Renault 5 still had 88 cm and, with the rear seat folded down, 1.17 m length for loading volumes varying from 270 to 900 dm³. The tailgate was combined with a practical folding seat. This was the Renault 5's strength, which wiped out the so-called handicap of having only two doors with a wave of its magic wand!

TAILGATES TODAY...

MOTORISED AND CONTROLLED BY HAND OR BY FOOT

EASY TO OPEN WITH LOADED ARMS

The fifth door has shed its utilitarian status and become part of the architecture of cars in all segments, including the upmarket range. It has evolved over the years by integrating part of the taillights, a windscreen wiper, the 3rd brake light, a rearview monitor and, today, an automation that offers several opening and closing possibilities. On the Renault Talisman Estate and Espace, for example, the remote control allows the car to be opened entirely remotely, by holding the button pressed for a while. It can also be opened or closed by pressing a button on the dashboard.



A SENSOR UNDER THE SHIELD CONTROLS THE TAILGATE.

BRIGHT COLOURS IN TUNE WITH THE TIMES

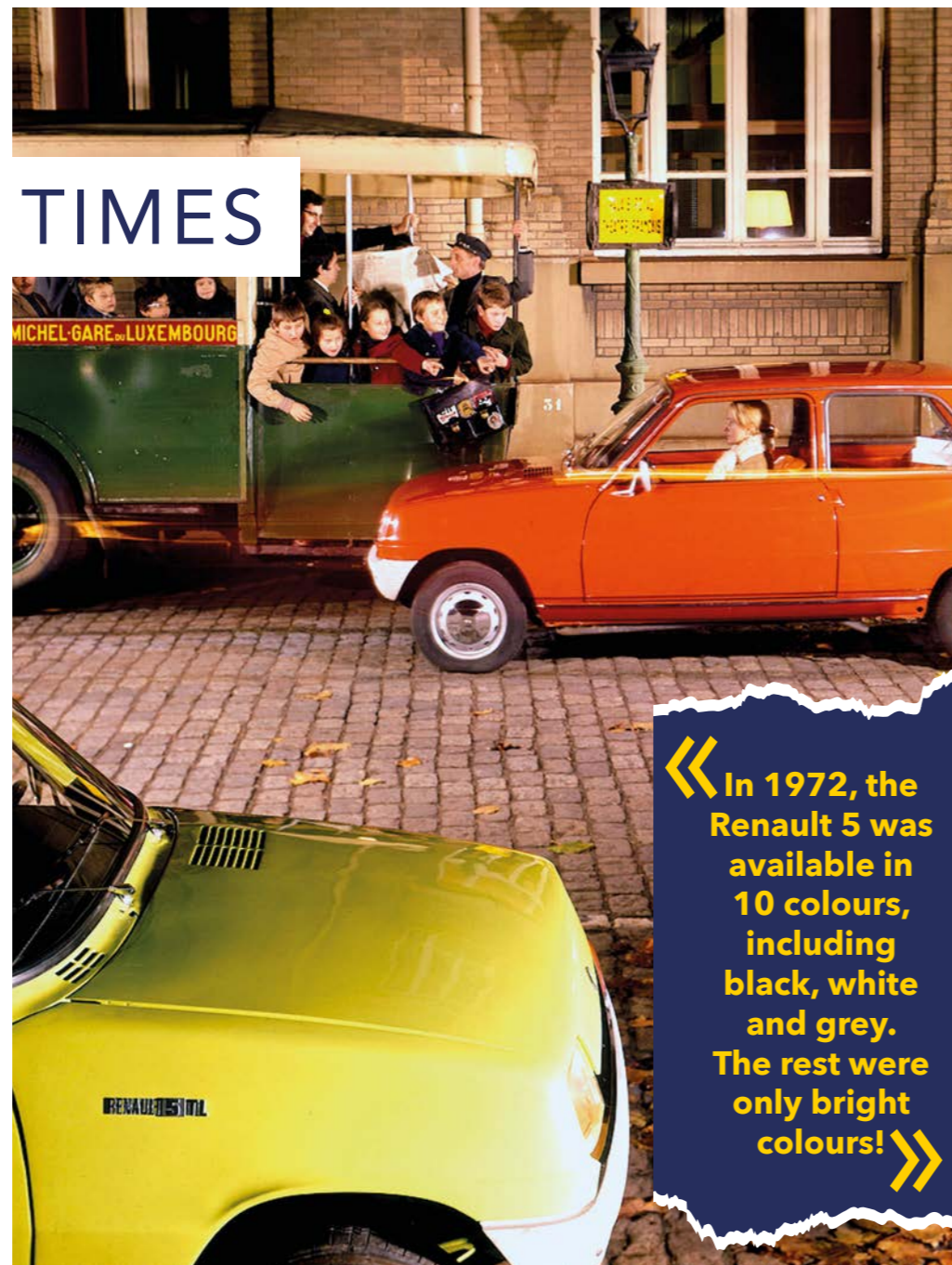
The last years of the Trente Glorieuses (1945-1975) were bright, cheerful and colourful! The Renault 5 was 100% in line with this happy trend.



Garden green "907", launch colour of the GTL.

The Renault 5 had 68 bodywork colours throughout its career, including fifteen shades of blue, nine shades of green, four of yellow, three of red, two of orange and only five shades of grey. The little Renault thus demonstrated its drive, its joie de vivre and its roots in the 1970s. In orange, it sparkled and fitted

perfectly with the fashion, architecture and furniture of the beginning of the decade. It was a crazy idea. And they liked it! Everything was orange back then. Parisians and suburbanites discovered the orange card for public transportation in 1976, a colour also adopted by Tefal pans, Corail trains, slot-in record players and teenagers for their bedrooms'



« In 1972, the Renault 5 was available in 10 colours, including black, white and grey. The rest were only bright colours! »

wallpaper during the beatnik years. The colour is unabashedly assertive.

On board, the seats of the Renault 5 were this colour, with a rather slippery material: the famous "smooth grain" imitation that was available as an option. It was also found on the car interior door panel. Later, the wicked Turbo of 1980 would choose bold colours (bright blue and red) in its sports car interior, taken to the extreme.

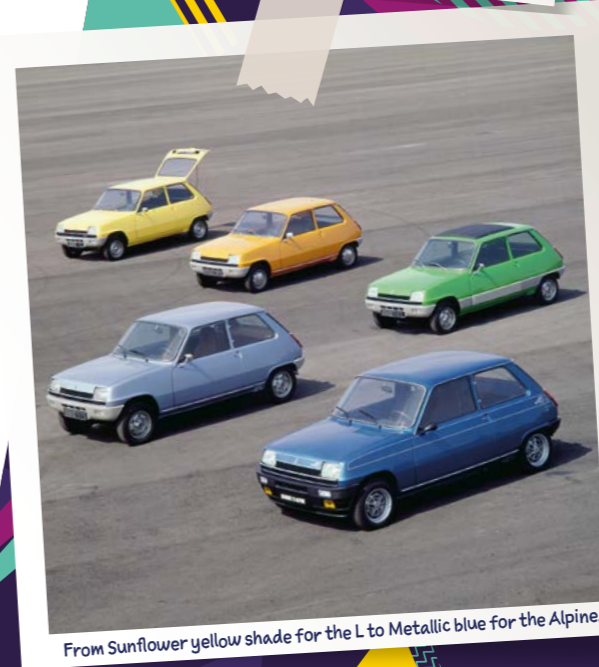
Renault dares everything

In 1972, it had only been three years since man walked on the grey moon, but in the street, cars were colourful, even the German ones! In 1972, there was no internet, no electronics, and it would be another four years before the very first Apple computers were built. And only 8% of households had colour television! To see life in colour, you had to look out of the window at the increasingly busy traffic.

Renault was certainly the most daring manufacturer with its orange, green or yellow Renault 5. In 1976, the Renault 14 was also orange, the Renault 20 TS was red, the Renault 5 GTL was green and the redesigned Renault 15 was blue. The Renaultution had begun. Even the shade chart for the Renault 5 Alpine, although marginal in terms of volume, offered 15 different colours between 1976 and 1978! At the end of its life, the 1983 Renault 5 Campus even tried a burgundy colour usually reserved for cars in higher segments. There's no doubt about it: the Supercar's shade chart played a big part in its success.



The 1972 orange with the "smooth grain" option.



From Sunflower yellow shade for the L to Metallic blue for the Alpine.

COLOURS TODAY...

RENAULT MAKES LIFE COLOURFUL

The Renault 5 electric concept car is swathed in a vibrant yellow. This signals a future that is keen to revive colours, as 81% of the cars on the road today are white, black or grey. Orange, yellow and green each account for barely 1%! In this dullness, Renault is the most assiduous in reviving bright colours. François Farion, Renault's Design Director responsible for colours and materials, says that "Renault has a more colourful offer than the average manufacturer. We sell about 10% more coloured shades than our competitors!" The ZOE introduced the Celadon Blue shade, while the Atacama Orange shade was imposed by the Captur and

the Flame Red shade is ablaze on the Clio.

IT'S IN THE BRAND'S DNA

In 1953, Paule Marrot created a department specialised in colours and materials. A very fashionable designer in Paris, she set up her workshop in the heart of the technical department in Rueil-Malmaison. Her first accomplishment was the Dauphine. Until 1965, Paule Marrot marked Renault's DNA design with her audacity. In addition to its seventies period, Renault shook up the design world in 1993 with its Twingo marketed in four new colours: Ultramarine blue, Coral red, Coriander green and Indian yellow.



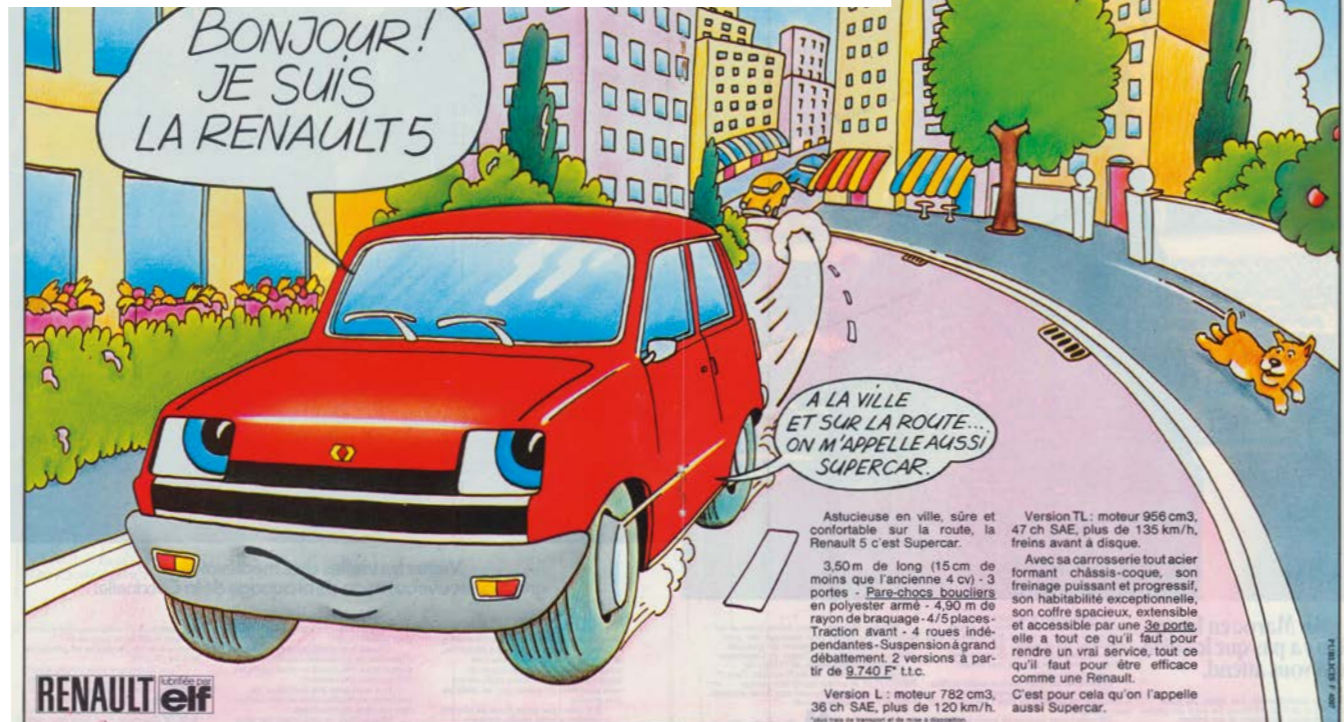
THE RENAULT 5 EV WITH ITS YELLOW AND BLACK COLOUR.





RENAULT 5
A STAR IS BORN

THE RENAULT 5 BECAME A «SUPERCAR» IN ADVERTISING



In order to be convincing, advertisers innovated in every respect and transformed the Renault 5 into a resourceful and friendly comic book character: «Supercar»!

When it was launched in January 1972, the Renault 5 was showcased as a character called Supercar. The Publicis agency, a long-standing partner of the Company, had the brilliant idea of personifying the car. They needed a quick and strong impact. The objective was ambitious: in two weeks, the whole country had to know the Renault 5 and want to buy it!

The Renault 5: a movie star

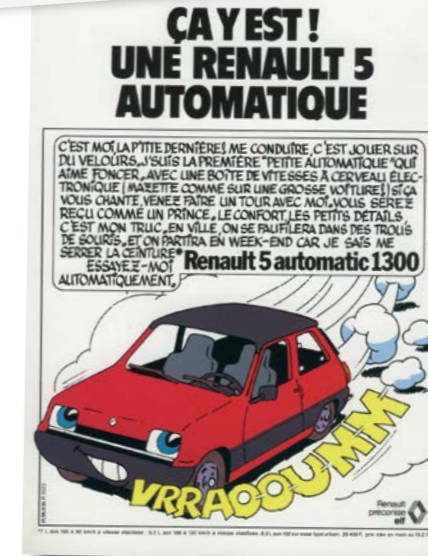
The headlamps became eyes and its famous plastic bumpers a mouth, thus allowing it to speak. The stage was set for "Les Aventures de Supercar" (or "The Adventures of Supercar"). The new little Renault was invested as a film star in 1,500 cinemas in France (at the time, car advertising was banned from television in this country). Two cartoons called "Les Aventures de Supercar en ville" ("The Adventures of Supercar in the city") and "Les Aventures de Supercar sur la route" ("The Adventures of Supercar on the road") began and ended the pre-film advertising sequences. The first episode compiled the urban quali-

« At a time when black and white was still the norm, the Renault 5 stood out with colour. »

ties of the Renault 5 in forty-five seconds. Scripted like a cartoon, the film spewed at full speed the car's assets instead of gags, although the tone was not lacking in humour. Its new bumpers were the ultimate weapon in the event of a collision. Designed like the bangers of yesteryear, its competitors with their fitted metal bumpers were really dated. It even gave them an aggressive look, the opposite of the smooth Renault 5, which reassured and protected its passengers and other road users. Thanks to its compactness, the "Supercar" easily weaved in and out between the cars in traffic and brilliantly defied the challenge of parallel parking. Finally, it capitalised on its third door, the famous tailgate. And to keep a potential client only half convinced on the edge of their seat in suspense, the end of the advert announced a sequel. It took place in a complementary dimension: the road. The strength of the Renault 5 was precisely that it was "the first city car designed for the road". In this sequel to "The Adventures of Supercar", the focus was on dynamism, suspension comfort and the car's frugality. The test vehicles, made available by the Renault network, were also "humanised": they too had eyes instead of headlamps.

Goodbye, cruel world

The graphics of the cartoons were reproduced in the form of comic strips in the press, on billboards and on bus shelters. Supercar was also advertised on the sides of buses in Paris and its suburbs. In the national daily newspapers, Renault was going big, with real posters spread over two pages or in a broadsheet format that was already turning the heads of readers with the Renault 5. At a time when black and white was still the norm, the Renault stood out with colour. It innovated with a printing process called Pulc, which superimposed a plastic film on the paper. The brilliance of bright colours was thus amplified. The Renault 5 would remain true to the cartoon until the end. The poignant commercial "Adieu monde cruel" ("Goodbye cruel world") in 1985 is a good example.



HOW IT IS VIEWED TODAY

«IT'S SUPERCAR NICKNAME CAME AS A SURPRISE... BRILLIANT!»

ARNAUD BELLONI, GLOBAL MARKETING DIRECTOR FOR THE RENAULT BRAND, LOOKS BACK AT THE ADVERTISING APPROACH USED TO LAUNCH THE RENAULT 5:

« I'll tell you a secret... in 1972, I was five years old, so I don't remember the launch of the Renault 5 very well. What I do remember, however, is that it represented a break from what was available, technologically, aesthetically and even conceptually speaking, and 'publicising' it in a singular and offbeat way through comics was smart. It was cheeky, irreverent, and its 'Supercar' nickname, almost an oxymoron for the R5, came as a surprise... brilliant!

probably why the comic disappeared so quickly and why the 'Supercar' nickname stuck.

That being said, the car had a cult following - so did its advertising - it's all part of pop culture. At the time we were trying things out. It was the era of the all-powerful creatives and it was cool. »

In hindsight, however, all car marketing professionals know that the cartoon treatment doesn't work ideally; purchasing a car is a thoughtful process because of the financial stakes for the buyer. The risk of the car not being taken seriously is too great. This is





The Renault 5 GTL '76 with its lateral protection.



RECORD-BREAKING CONSUMPTION

No more cheap petrol. Oil price shocks gave a wake-up call, leading the world to wage war on waste. A challenge that the Renault 5 will take on valiantly.

A 90 km/h vitesse stabilisée, la Renault 5 GTL 5 vitesses ne consomme que 4,5 L aux cent. C'est incroyable! Comment fait-elle, se demandent les curieux? La Renault 5 est une sorcière qui ne dévoile

pas facilement ses secrets. On est pourtant sûr que son moteur 1108 cm³, son spoiler aérodynamique y sont pour quelque chose et sa nouvelle boîte 5 vitesses aussi, bien sûr. Pour le reste... on se perd en conjectures.

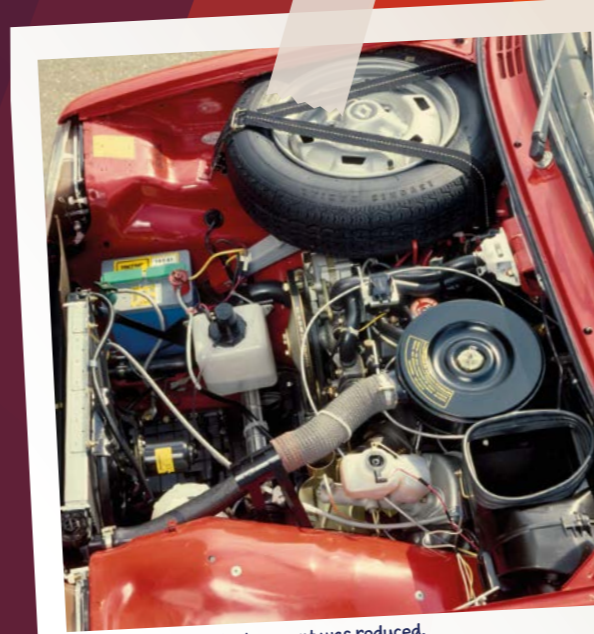
RENAULT 5 GTL 5 VITESSES.

Consommations aux 100 km, à vitesse stabilisée: 4,5 L à 90 km/h; 6,1 L à 100 km/h; 6,3 L en cycle urbain. RENAULT présente GIP

The Renault 5, launched in January 1972 in the care-free atmosphere of France's Trente Glorieuses period (the 30-year post-war boom), was soon confronted with the first oil crisis. This barely allowed a year and a half's respite before putting pressure on the Renault 5 to reduce its petrol consumption. Even though the first advertisements emphasised its frugality, this was not enough. Further steps needed to be taken. In early 1976, the engineers of the Renault company showed off their Renault 5

GTL. A mid-range version powered by a "big" 1289 cc engine (the original Renault 5 had only 782 cc and 34 hp). This engine, known as the "Sierra engine" or "Cléon-Fonte engine", named after the factory in Seine Maritime that produced it, was not a novelty. It proved its worth as early as 1962 under the rear bonnets of the Renault 8, Floride S and then Caravelle. The Renault 5 GTL's engine was extensively reworked, downsized from 54 to 44 hp and fitted with a single-barrel carburettor, with the sole aim of saving fuel.

« The Renault 5 was the first car to fall below the symbolic 5 L/100 km mark at 90 km/h. »



In 1981, the engine displacement was reduced.



Manufacturing of the Sierra engine in the Cléon factory.

The car, which weighed only 785 kg, was now below the symbolic 5 litres per 100 km mark. Renault reported a record value of 4.7 liters per 100 km, officially recognised at a cruising speed of 90 km/h. The second oil crisis in 1979 forced the company to go even further.

GTL's popularity took over

In 1981, the engine displacement was lowered to 1,108 cc, a 5-speed gearbox replaced the 4-speed gearbox and a spoiler was integrated into the bumper. The Renault 5 GTL claimed 4.5 L/100 km. Advertisers, inspired by this magical fuel-efficient car, took advantage of this and came up with the slogan "my Renault 5 is a witch". The car was shown as flying through the sky on a broom. It also used its roof antenna like a magic wand with a laser beam to knock down a petrol station sign. And it also filled the tank right up with a tiny drop of petrol; it couldn't be clearer, Renault was straight to the point and right on target. The 41-litre fuel tank allowed it to cover more than 850 km, which meant that you didn't have to visit the petrol station so often. An initiative that came just at the right time during a period when a "no-waste attitude" was the order of the day. Renault made no mistake, the Renault 5 GTL would be the most popular version of the range.

HYBRID CARS TODAY ARE REDUCING CONSUMPTION

THE CLIO E-TECH HAS THREE ENGINES UNDER THE BONNET!

More than ever, car manufacturers need to reduce their models' fuel consumption and limit their carbon footprint. In the 21st century, optimizing an internal combustion engine is no longer enough; an electric engine is now essential. In the Renault range, it was the Clio, the legitimate heir to the Renault 5, that introduced hybrid technology. Its 'watted' version, called E-Tech, appeared in 2020. It combined a 91 hp 1.6 L petrol engine with two electric engines powered by a small lithium-ion battery pack.

ONLY 4.3 L/100 KM FOR 140 HP

The Renault Clio E-Tech has a combined power output of 140 hp but consumes only 4.3 litres per 100 km according to the WLTP combined cycle. A good score for a 1,3-ton car. To achieve this amazing feat, the engineers used a clutchless dog-type gearbox, an F1 technology that considerably limits internal friction and consequently reduces consumption. The other good news for the clients' money is that the service interval has been extended to 30,000 km or two years. This Clio hybrid is as virtuous as it gets.



A CHIC LITTLE PIONEER PLAYING IN THE BIG LEAGUES!

Ten years after its launch, the Renault 5 went upmarket. With its TX version, it was the first to prove that a chic car did not have to be a big car.



For Christmas 1982, the Renault 5 TX was the ideal gift.



In 1972, the Renault 5 began its career quietly with a 782 cc engine delivering 34 hp. This basic version really caught the eye with its bright colours on the outside as well as on the inside, especially with its orange vinyl upholstery. It embodied the modern-day city car. But over the course of a decade, the expectations of its broad customer base had changed. The brand's upper-class clients - always

in a hurry - wanted a more stylish, more powerful and above all, a better equipped Renault 5. A Renault 5 that really distanced itself from the rustic "4L" from which it was derived.

The range was progressively extended with the TL, LS and TS versions, and finally the Renault 5 TX. Presented in October 1981, it marked the peak of the car's career during the 1982 to 1984 model years. Under the bonnet, the Renault 5



The Renault 5 TX showcased a leather steering wheel.

« The Renault 5 TX was the first in a long line of small city cars that were both chic and powerful. »

TX had doubled in engine size and power. With a displacement of 1,400 cc and 63 hp, its dynamic engine was equipped with an electronic ignition system for better reliability and durability. It was paired to a 5-speed manual gearbox that limited both fuel consumption and noise levels when the Renault 5 TX was on the motorway, where its top speed of 155 km/h allowed it to run into the left-hand lane confidently. But the city car was not afraid to take on traffic jams, where its optional three-speed automatic transmission ensured a smooth ride.

High range equipment

The standard equipment was extensive. Everything was included in the TX (except the automatic gearbox). Electric front windows, power steering, a leather steering wheel and a digital clock completed the rear seats whose backrests, which could be folded in half, could hold its own against today's modularity. The comfortable petal seats were upholstered in sand-coloured corduroy and enhanced by a lacquered coat of metallic colours that were both chic and discreet. Even the black roof antenna was in tune. The sportiness of the model was modestly hinted by a front bumper - made of plastic, of course - that was placed closer to the asphalt than that of the lower ranking Renault 5. The TX took it from the Renault 5 Alpine and Renault 5 Alpine Turbo - minus the fog lamps - and was distinguished by its exclusive Amil light alloy wheels, making it a confident car.



The velvet petal seats are an ode to comfort.



The carpeted boot was also stylish.



In 1987, the Renault Supercinq Baccara took over.

TODAY, THE CAPTUR INITIALE PARIS...

THE ECO-CHIC URBAN SUV

Nowadays, urban SUVs are often more popular than small city hatchbacks. In the city, people like to get a good view of traffic. Renault adapted, making the Captur Initiale Paris a proud descendant of the Renault 5 TX. In between came the Supercinq and the Clio Baccara models, and then the Clio Initiale Paris, building on 40 years of expertise. There are many similarities. Nothing has been left to chance, the Captur Initiale Paris is dressed in a Amethyst Black colour, contrasted by an Alabaster White roof. The chrome grille and 18-inch wheels, each with a stylised Eiffel Tower

on each of the five spokes, add to the car's exclusivity. On board, the white quilted leather upholstery and the fully digital dashboard hit their mark.

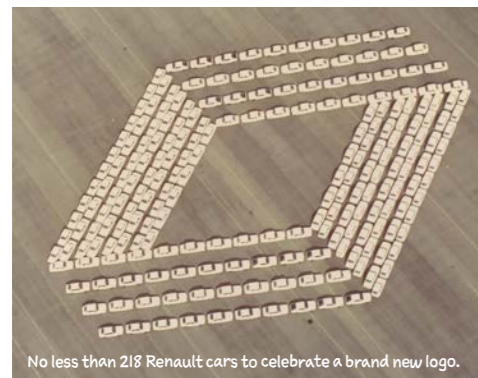
HYBRIDISATION IN ALL ITS FORMS

Under the bonnet, the engines chosen are the best in the range which span from 140 or 160 hp petrol engines, hybrid technology offered in 145 hp and finally, the 160 hp plug-in hybrid. The latter allows the car to be driven for 50 km in zero emission mode, perfect for urban journeys without consuming or polluting.



THREE DIAMOND LOGOS FOR THE RENAULT 5!

A mini diamond adorned the pre-series, then was replaced by a new logo. However, due to plagiarism, it was soon replaced by the diamond designed by Jean-Pierre Vasarely.



No less than 218 Renault cars to celebrate a brand new logo.

On the right, the tiny 1971 logo (pilot). Below, the forbidden logo and the Vasarely logo.



The Renault 5 is one of few cars to have received three logos before even celebrating its first birthday! To understand the full story, let's rewind to the mid-1960s. With the Renault 16 and Renault 12, the manufacturer switched to front-wheel drive in an innovative style. The Renault 15 and 17 coupés revived the brand's image. The Renault 5 would drive the company into the 1970s, the

last years of the Trente Glorieuses. The brand's identity was then changed to a tiny logo, inherited from the diamond-shaped logo created in 1925. In 1967, when the 122 project - the future Renault 5 - was launched, the logo that was available in the range was a remake of the diamond shape dating from 1959. The ongoing 'modernisation' projects have seen an evolution of this emblem, which is so-



The steering wheel proudly displays the new logo.

«The Renault 5 was the first Renault to bear the famous diamond designed by Victor Vasarely's son.»»

metimes smaller, sometimes longer, as on the first Renault 15 and 17. This logo appeared on the Renault 5 pre-series, but was very quickly replaced by a sleek, graphic diamond-shaped emblem.

The "Kent" diamond, the forbidden logo!

The new logo was soon affixed to the bonnets of the first Renault 5s marketed in 1972. Pierre Dreyfus, the head of the company, posed proudly next to the small hatchback with this logo. The story could have ended there. But it turns out that the newcomer's design plagiarised a subcontractor's one: Kent, a company specialising in chemicals for the automotive and maritime sectors. Before a possible lawsuit could loom, Renault decided to rework it by calling on Victor Vasarely's son, Jean-Pierre, better known as Yvaral. He is the founding artist of the French visual art research group, GRAV. His work immediately appealed to Renault and his new logo was quickly installed on the facades of dealerships and, from the end of 1972, on the models in the range. It remained as the manufacturer's identity for 20 years, before the Renault Safrane removed it in 1992.

The famous forbidden logo - known as the "Kent logo" - had been replaced by the new one on the Renault 5 cars already on the road, at the request of the manufacturer. As the recall campaigns were not as effective as they are today, not all Renault 5s with the "Kent" logo were changed and these models are now a collector's item!



A NEW LOGO IN 2021...

THE RENAULTION OF THE DIAMOND

To support the change sought by the Renaultion plan, what could be more natural than to adapt the brand's emblem to its new values? The new Renault logo is still a diamond, the chosen shape since 1925. To create it, we had to take into account its new means of expression, such as digital media which required a sober design: the famous "flat-design". Renault had to come up with a design in a tiny format that would be legible both on the dealerships and on a smartphone.

LEGACY AND CHANGE

Work on the new logo began

at the Renault design centre in 2019, in collaboration with the Landor&Fitch agency. The brand's Design Director, Gilles Vidal, explained that the logo is "a balance between recognising the brand's heritage and beginning a new era. It must be in line with the changes that are currently taking place." It was quite naturally on the Renault 5 Prototype that it would make its appearance in January 2021, and it will gradually be applied to all Renault vehicles - starting with the Megane E-TECH Electric - as well as in the dealers' network. By 2024, the entire Renault range will bear this new emblem.



CONQUERING AMERICA



Only one of the world's four biggest car companies specializes in small cars.

According to *Forbes* magazine's latest report, the world's four biggest automobile companies, ranked by sales, were General Motors, Ford, Chrysler, and Renault.

That's right, Renault. Renault is the largest non-American car company. And we got there the hard way - by concentrating on smaller cars with smaller prices.

Back in 1980, the very first Renault was a cute little French "small car". Four years later, we were building smaller cars with twice the weight and five times the horsepower, all over the world - and road races - in Europe.

In 1995, a compact Renault was the best car capable of doing more than 100 miles an hour for 24 hours. (It averaged 100.53, a world record.) And in 2002, Renault built and

vented a small (972 pounds), four-door car with fully independent suspension, seven air bag factors in total, and a four-cylinder engine in the rear. After the war, we mass-produced that car as the 4CV. And exported more than 3,200 of them to the United States in 1948, the year before the arrival of the first two VW Beetles.

Today, the world car market is a small-car market. So it's hardly surprising that Renault is the only company in the world to turn out two of the world's six best-selling models. It's even less surprising that Le Car is one of them.

Everything we've learned about building small cars is usually 80 years old and about building the kind of small cars people want to buy - we built into Le Car. We gave it the kind of necessary people expect from a small car - plus the kind of excitement, excitement, performance, and ride they don't

As a result, more than 2 million people all over the world have made Le Car their car since we introduced it in 1972. In Europe, the home of small cars, Le Car has outlasted Rabbit and Fiesta combined.

Since last year, Le Car has more than doubled its sales in the United States alone. And in a recent independent survey, owner satisfaction with Le Car was at an incredible 95%.

If you own to show that when you build the kind of cars that make you big, the word of all this is very simple - it's offering a few select dealers the opportunity to sell more cars and make more money.

If you think you can be one of those dealers, call 1-800-424-4242. Or write: Jim Fuller, V.P., Sales Manager, Dept. LC-1, Renault, 124,100 Edison Ave., Englewood Cliffs, N.J. 07632.

Renault Le Car Company

The Renault 5 benefited from comparative advertising.

Uncle Sam's land of milk and honey was, for a long time, the Holy Grail for European manufacturers. The Renault 5 dreamt of making a fortune there. But not everyone is a Rockefeller.

In the spring of 1976, the Renault 5 sang along "America, I want to have it and I will"! It followed in the footsteps of the 4CV and the Dauphine that had been exported there earlier. In order to be successful in the USA, Renault approached and then took over the management of AMC (American Motors Corporation), the fourth largest American manufac-

urer. Its network of 1,300 dealers was the ideal bridgehead for the Renault Le Car, the name given to the Renault 5 in the United States. In the northern part of the American continent, where it starred from 1976 to 1986, Canadians simply called it La Cinq. Across the Atlantic, the little Renault complied with stringent safety legislation. Its headlamps were no longer

« Thanks to the Renault 5 Le Car, Renault nevertheless multiplied its sales by 6 in North America. »

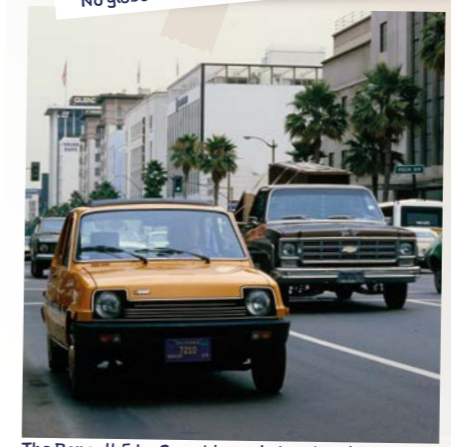
protected by a fragile glass globe, the sunken eye sockets taking away its joviality. On the other hand, the bumpers were beefed up to absorb impacts, while side reflectors adorned the four corners. The pretty, flat face was no more, the Renault 5 was disfigured by this jagged bumper. From some angles it even looked like the Pacer from the AMC range. Renault was hoping for a success story worthy of the Rabbit, the American Volkswagen Golf. But in the land of ketchup, French mayonnaise was not appreciated as well as hoped. The Detroit giants did not look kindly on this intrusion of the "Frenchie". The Chevrolet Chevette (a clone of the Opel Kadett), Ford Fiesta and Chrysler-Simca Horizon, three small front-wheelers also equipped with a tailgate, were all in the way.

TV extra

The Renault Le Car did not make it to the big screen in a Hollywood production, but it did appear in the television series "The A-Team". Extremely light and cranky, it was the ideal hunting vehicle, according to Hannibal Smith, who ordered his team to transform it into a tank! It was a totally off-the-wall role that it took on valiantly. Heroically, the little Renault is charred at the end of the episode. In reality, it had a good rep. From a low of 5,780 units in 1975 before it arrived, Renault's sales on the American market rose to 37,702 in 1982 thanks to the Le Car. The Renault 5 therefore left the American scene with its head held high in March 1983.



No globe headlamps for the Renault 5 Le Car.



The Renault 5 Le Car at home in Los Angeles.



The French special series Le Car Van on display in Paris.

RENAULT TAKING ON THE WORLD TODAY...

A GROUP OF 5 BRANDS PRESENT ON ALL CONTINENTS

Renault can now definitively tick North America off its list. The group, which has five car brands (Renault, Dacia, Samsung Motors in Korea, Alpine and Lada), now has many other locations at its disposal. Present on every continent, the Renault Group registered more than 2.9 million vehicles worldwide in 2020. And while Europe is still by a small margin the main market, almost half of manufacturing is carried out outside the old continent. Over the years, Renault has set up 38 plants around the world, manufac-

turing as close as possible to local customers in order to perfectly target their needs.

38 FACTORIES

The Africa, Middle East and India area has 6 manufacturing sites, i.e. as many as in Europe (excluding France). Both Eurasia and South America (Argentina, Brazil, Colombia, Chile and Mexico) have a total of 5 plants each. Finally, there are 2 sites that supply the Asia-Pacific region. France still holds the top spot, with 14 plants. You can't deny your roots.



ENVIGADO SOFASA PLANT IN MEDELLIN, COLOMBIA

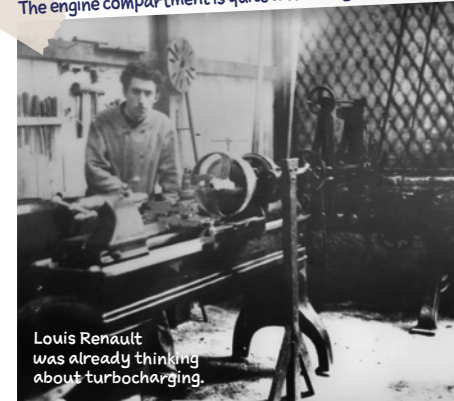


THE TURBO PIONEER

In his hut at the bottom of his garden, Louis Renault had begun pondering about turbocharging. But it would take some time before the turbocharger became a part of the Renault 5.



The engine compartment is quite welcoming for the turbo.



Louis Renault was already thinking about turbocharging.



Turbocharging is in Renault's blood. At the beginning of the twentieth century, Louis Renault, the brand's founder, was thinking of solutions to boost Renault's engines. In 1902, he filed a patent based on a fan or compressor supercharger. A technology that was not yet called turbocharging, as the turbine under the bonnet didn't exist. But his idea was used for competition

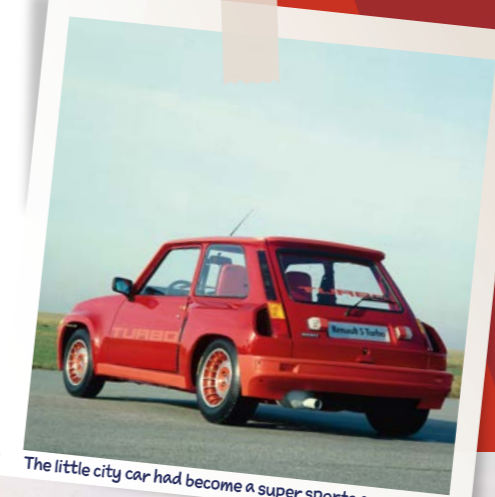
anyway. It was still early days for production cars. Almost 80 years later, in July 1979, on the Dijon Prenois circuit, the idea clicked when Jean-Pierre Jabouille won the French Formula 1 Grand Prix in his Renault RS 10 turbo. It was the Renault team's first ever victory in the sport's flagship event, and it was also a landmark moment in the history of F1... but not only that. Turbocharged

« The Renault 5 was the first production Renault equipped with a turbocharger, a technological feat that would become a speciality of the brand. »

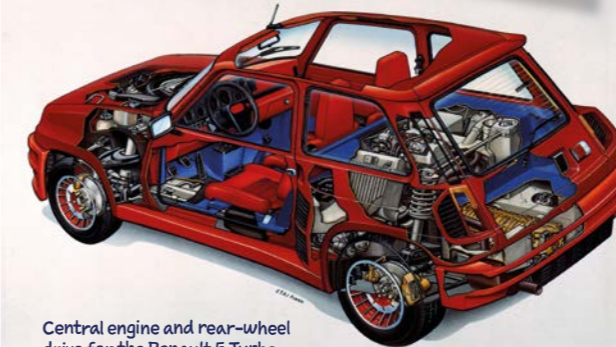
engine technology had just become established among engineers. For the next decade, the French manufacturer used motorsport as a laboratory to refine the recipe of its magic potion, which it very quickly gives to its entire range. The Renault 5 was no exception, on the contrary, it got the ball rolling. It began with its surprising 160 hp central engine Turbo version, which appeared in 1980, then with the Renault 5 Alpine Turbo in September 1981.

Renault 5 Alpine Turbo: 110 hp under the bonnet!

The installation of a Garrett turbocharger transformed the Renault 5 Alpine launched in 1976. After 3,000 rpm, the 1.4 litre engine hit maximum performance. This gave it wings and catapulted the driver into a whole new world. The little sports car got a new lease on life with a power output of 110 hp and a torque value of 15.2 mkg. It could reach 187 km/h, complete the 1,000 m standing start in just over 30 seconds and accelerate from 0 to 100 km/h in 9.7 seconds. Renault's bombulet of a car had now reached the same level as the new star of the segment, the Volkswagen Golf GTI. Mission accomplished for the turbocharger, which was to become a milestone, and later to be repeated for its successor, the Renault Supercinq GT Turbo. The latter managed to keep the fun going until the early 1990s. A fine example of longevity.



The little city car had become a super sports car.



Central engine and rear-wheel drive for the Renault 5 Turbo.



1st Formula 1 victory for a turbo engine with the RS10.

TURBOCHARGING TODAY...

TURBO HAS BECOME WIDESPREAD, THE HYBRID TAKES OVER

Today, turbo technology is used under many bonnets. More than just offering pure performance, the turbine also supports the combustion engine. The engine then limits its displacement and reduces fuel consumption. This process, known as downsizing, does not only reduce the displacement of the cylinders, but it also reduces their number. Three-cylinder engines are now the norm for city cars to family hatchbacks and urban or compact SUVs.

GOAL: REDUCING CO₂ EMISSIONS

The next steps for Renault's cars: simple hybridisation then rechargeable hybridisation - also known as plug-in, in reference to the power plug to which the car is connected. In 2020, the Renault Clio E-Tech was the first milestone, followed by the Captur and Arkana SUVs. At the same time, the Megane hatchback and estate models, as well as the Captur, were starting to use plug-in hybrid technology. This technology significantly increased the vehicle's zero emission range, during which both fuel consumption and CO₂ emissions fell to zero.



THE FIRST LITTLE FRENCH SPORTS CAR

The Renault 5 Alpine, followed by its turbocharged version, introduced a new genre in French car manufacturing: turbulent little sports cars.

The Renault 5 Alpine sports this very modern logo.



From the economical entry-level model to the chic TX with its comprehensive standard equipment, the Renault 5 offered something for every taste and every budget. Until then, no city car had ever covered so much ground. It also had a way of seducing sports-persons. In March 1976, the Renault

5 Alpine made an entrance, a first for such a small car. The Renault 5, powered by the Alpine, was now blocking the path of the very young Volkswagen Golf GTI. In an economic context where the effects of the oil crisis were still looming, Renault pulled off a stroke of genius. It appealed to sporty driving enthusiasts who cared about

their car's appetite. Smaller engines were therefore naturally booming. This was in contrast to the big cars, which were no longer praised as much.

The Alpine advantage

Renault entrusted the design of its sharp city car to the Alpine brand, with which it had been closely associated

« To keep the 93 hp in check, the front brake discs were borrowed from the Renault 12. »



On board the Renault 5 Alpine, red is in.



The Alpine Turbo version says it all.



The Moto-Lita steering wheel adds a sporty style.

for two decades. The advantage was two-fold. Firstly, it benefited from the fame acquired in competition, on the circuit as well as in rallies, by the blue cars of the Dieppe firm. Secondly, it drew extensively on Renault's organ bank in order to control costs. Under the bonnet was the Cleon engine, which powered the Renault 8 in 1962. Its displacement was increased to 1,397 cc and it was topped by a hemispherical cylinder head which significantly improved its performance. In its entrails, pistons and intake and distribution manifolds were specific. It was

coupled to the 5-speed gearbox of its big sister, the Renault 16 TX. The front brake discs were borrowed from the Renault 12 to keep the 93 hp in check. In order not to add to the cost, there were still drum brakes at the back. The torsion bars, anti-roll bars and shock absorbers were also new, and the chassis was tuned to handle the increased power with ease. From the very first tests, the specialized press was won over by the homogeneity of the vehicle. Especially since, without making too much of a fuss, the plumage matched this new tune.

The large front bumper of the Renault 5 Alpine would bite the tarmac. Painted in matt black and equipped with a pair of fog lamps, it made a sporty statement. But not only that, its aerodynamic contributions were very tangible. The reduction in drag (sCx) significantly reduced fuel consumption and allowed for a higher top speed. This innovative bumper optimised the downforce (sCz), ensuring good stability at high speed. This was necessary when the Renault 5 Alpine



The Renault 5 Turbo had 160 horsepower!



It's hard to imagine a more original interior.



In 1985, the Renault Supercinq GT Turbo took over.

was travelling at 175 km/h. Subtle war paint adorned the bodywork. On each side of the car, red lines on the black and grey bodies, or white lines on the blue bodies, framed an A5 logo. The light and modern design immediately set the tone. Just like the 14-inch diameter wheel inherited from the Renault 17 Gordini, which cleverly and inexpensively completed the package.

Storm warning: the turbo effect

This was just a first step. In 1981, in order to compete with better rivals, Renault speeds things up with the Renault 5 Alpine Turbo. It was based on the technology of the Renault 5

Turbo, its 160 hp central-engine cousin which appeared in 1980. However, the Alpine "turbine-powered city car" reused the naturally aspirated engine of the Renault 5 Alpine due to its size and, above all, to limit development costs. The additional turbocharger was based on upstream supercharging. This technical solution, known as aspirated assembly, was the most economical because a conventional carburettor could be used, instead of a downstream installation, which required a "blown" carburettor that had to be completely sealed. A solution from the competition considered too expensive at this level of the range. By way of comparison, in the early 1980s,

the Renault 5 Turbo was priced at 115,000 francs, more than double the price of a Renault 5 Alpine Turbo, which was priced at 55,000 francs. The economic equation remained under control for performances which, compared to the Renault Alpine without the turbocharger, were a step ahead. Power was up 17 hp to 110 hp and the top speed was up 12 km/h to 187 km/h. The first French city car to be equipped with a turbocharger opened up a new path, one that the Renault Supercinq GT Turbo followed in 1985!



RENAULT GROUP'S SPORTS CARS TODAY...

ALPINE'S COMEBACK

The Alpine brand had had a first life. Founded in 1955 by Jean Rédélé, who was then the youngest Renault dealer in France, it was almost a single-model company up until 1995. The Alpine A110, A310 and A610 coupés were all in the catalogue. Then it was over. In 2017, like the phoenix, Alpine rose from the ashes thanks to Renault with the much-anticipated launch of a new Alpine A110 "berlinette". A model that immediately rallied enthusiasts to its cause thanks to its ideal combination of lightness, agility and performance. A car that could be enjoyed by anyone without the need for professional driving skills. Alpine had not denied its roots. This new A110 was the first step in the modern era in which the Dieppe-based brand would take on the role of the Renault Group's top-of-the-range sports label.

SPORTY AND ELECTRIC

Its catalogue, which, as a sign of the times, will abandon combustion engines to become entirely electric, will be

expanded. At least three models have been planned. They were sketched as early as 14 January 2021, when the group announced its 'Renaulution': a B-segment hatchback, a C-segment crossover and the future replacement for the current A110 "berlinette". Three models that combine sportiness with zero emissions. As it was at the origin of the brand, this ambitious strategy was logically based on competition...

COMPETITION: A VEHICLE FOR IMAGE

Alpine is also a technological showcase for Renault Group, which has entrusted it with its racing activities, in Formula 1 with the Alpine F1 Team founded in 2021 and in endurance with Signatech. Still in endurance, in 2024 Alpine will officially enter the new premier Hypercar category (LMDh) alongside Toyota, Peugeot, Porsche, Audi and Ferrari. Alpine has never been afraid to take on the big boys.



IN 2017, ALPINE LAUNCHED A NEW A110 "BERLINETTE".



THE ALPINE A521 WAS THE BRAND'S FORMULA 1 CAR IN 2021!



THE ALPINE A480 FOR THE 2021 ENDURANCE CHAMPIONSHIP.

IT METAMORPHOSES FOR RACING

Before the Renault 5 Turbo, no city car had ever undergone such a metamorphosis. For competition she becomes an athlete. With an impressive architecture and musculature.



Competition debut: the Renault 5 LS Cup.

Like the incredible Hulk, the Renault 5 Turbo was impressive with its muscularity and untameable character. The difference was that it was not green but Olympus blue or Pomegranate red. A two-tone palette rationalised manufacturing, which had to reach the 400 units required to be officially

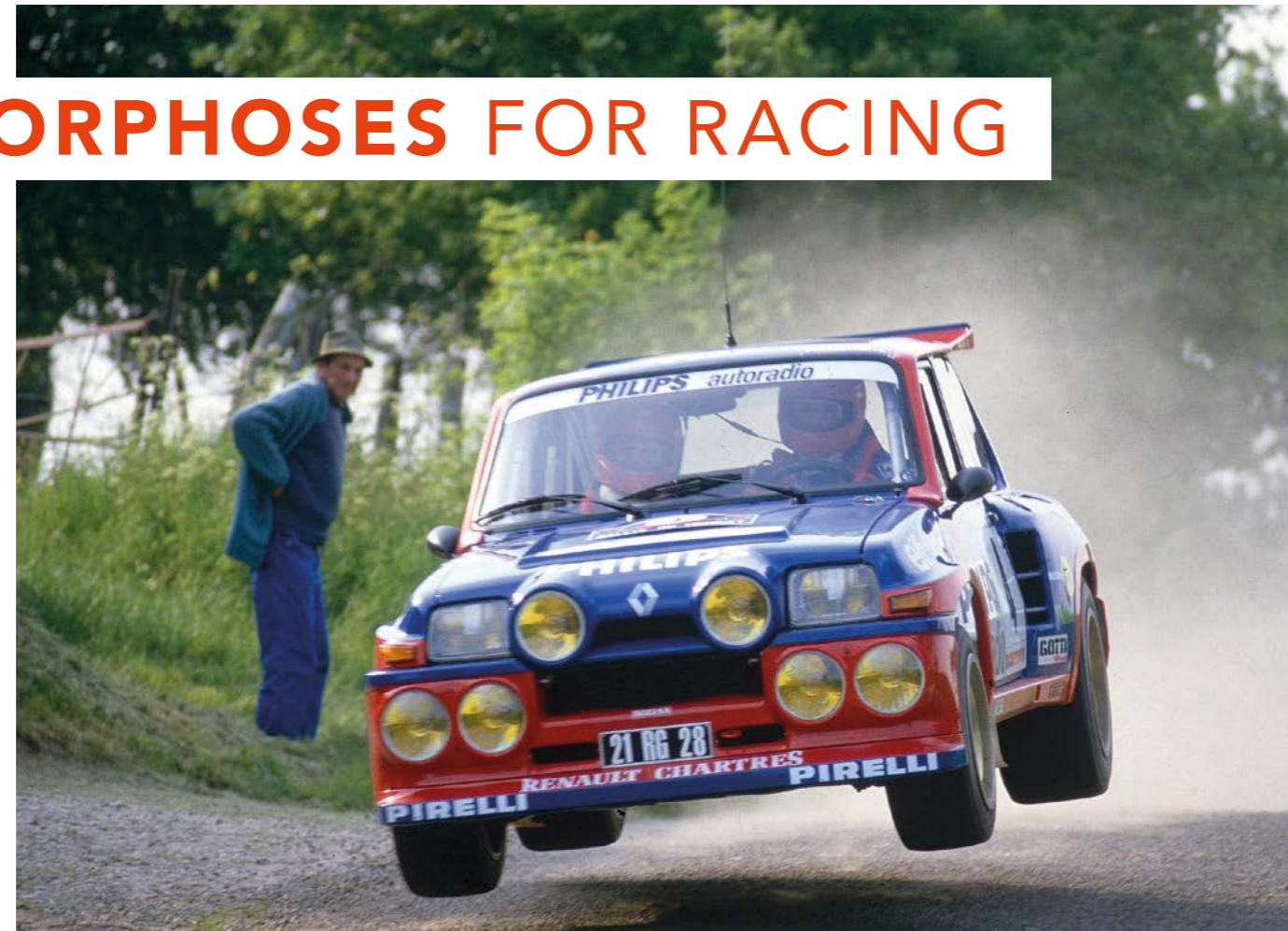
approved for competition as soon as possible. Her raison d'être for which she had sacrificed everything. The engine was no longer under the bonnet but in the passenger compartment with no consideration for the rear seat, which was of no use to the driver or the passenger. On paper, the front end was only steerable, but the

'bends experts' use the throttle rather than the steering wheel to wiggle the rear end.

First victory at Monte Carlo 1981

The Renault 5 Turbo had a chaotic start in 1980, as it was only trying its hand, and then won the 1981 Monte

« Born with 160 hp as a production car, the Renault 5 Turbo had up to 370 hp for competition! »



Carlo Rally with the victory of Ragnotti and Andrié. The Renault 5 Turbo's career had taken off! It remained at the top of its game until 1985. Its secret: adaptability and constantly questioning the market in order to keep competition at a safe distance. Turbo, Turbo 2, Group 4, Group B and then Maxi Turbo, as regulations were modified, power and performance evolved in stages: 185, 240, then 285 hp. On the other hand, the weight decreased. The 160 hp, 970 kg and 1,397 cc of the production version, which appeared in 1980, were transformed into 350 hp, 905 kg and 1,526 cc respectively on the Renault Maxi 5 Turbo in 1985. This new car was designed for the road, with improved suspension, aerodynamics and larger diameter wheels and brakes. The Renault 5 Turbo was an accomplished athlete. In addition to rallies, it also competed brilliantly on asphalt tracks. In the Renault 5 Turbo Elf European Cup, it was as comfortable on the Formula 1 track in Hockenheim as it was on a track dedicated to endurance racing, as a curtain raiser to the 1981 Le Mans 24 Hours. The final stage of development was the Renault 5 Turbo 2 Production, whose small 1,419 cc engine delivered a whopping 370 hp for a weight of 1,060 kg! Unwilling to push it into retirement, its designers came up with an all-wheel drive system to keep it in the race. It would retire when the Group B dissolved. Competing was its life!



Expert in controlled skids...



The Renault 5 Turbo was also very comfortable on the track.



Ragnotti and Andrié win the 1981 Monte-Carlo.

TRIBUTE TO JEAN RAGNOTTI

THE PILOT WHO TAMED THE RENAULT 5 TURBO

The name of Jean Ragnotti is inseparable from the Renault 5 Turbo career. Skilled tightrope walker, acrobat on asphalt, there is no shortage of qualifiers for the pilot from Vaucluse, who has no equal to achieve a "360 degrees" at the wheel of a Renault Maxi 5 Turbo. The latter is not, however, his first toy marked with a diamond. He had already had many opportunities in the 1960s to use the rubber of Renault 8 Gordini tires. machine. Monte Carlo 1981, Tour de Corse 1982, Rallye du Mont-Blanc and Tour de France Automobile 1984 bear witness to this. The last stand of the Renault 5 Turbo in Group B, before the dissolution of this famous rally category, was a large victory for Ragnotti in the Tour de Corse 1985, ahead of the four-wheel drive Peugeot 205 Turbo 16. After a busy career, "Jeannot" retired as a pilot in 2019.

VICTORY YES, BUT WITH PANACHE!

The Renault 5 Turbo is the car that gives him the most pleasure. Beyond the spectacle that he always provides with a smile and a lot of generosity, this ace of the slide, who officially presents himself as a "corner trader", has forged quite a record at the wheel of this formidable





RENAULT 5

GREEN AHEAD OF ITS TIME

A NATUREL FIBER ROOF HEADLINER

This innovative roof headliner alone made it possible to improve soundproofing, space, design and even the fuel consumption of the Renault 5!



The Renault 5 offers a comfortable headroom.



Gluing the panel at the Flins factory in 1973.

The polyester bumpers, like the large tailgate, were two highly visible innovations of the Renault 5. The latter also introduced another new technology on board, but you had to look out for it. It was not in front of the driver, nor behind, nor to the side, but on the ceiling: the

headliner. Something that anyone rarely pays attention to. However, the one in the Renault 5 immediately and constantly made life easier for the user. The Renault 5 broke away from the traditional percale (cotton fabric) lining attached to the inside of the roof with metal hoops. A process that was still used by the Renault 4 in its early days, which caused it some noisy issues. The vibrations of the hoops on the body reinforcements gave

« This slimmer panel allowed the roof to be lowered, thus improving aerodynamics and fuel consumption. »

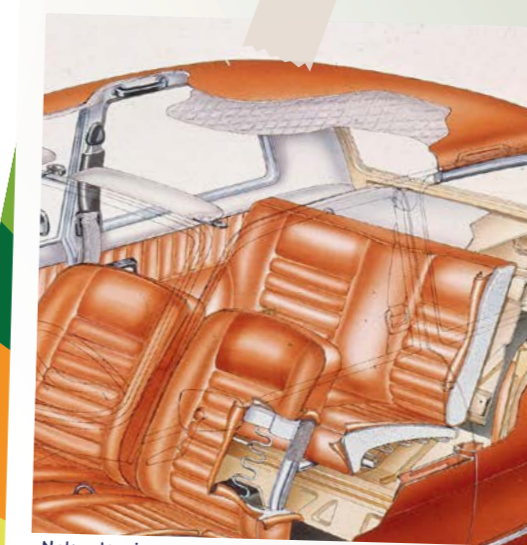
a poor image of the quality of the car and really degraded the acoustic comfort of the passengers. For the Renault 5, the engineers devised a clever process. Natural fibers suffused with resin were moulded and glued to the inside of the panel. This technology, with no vibrating metal, immediately solved noise pollution, while also allowing for a much thinner finish

Easier to install

As a result, the headroom, in other words, the space between the top of the passengers' heads and the roof, was bigger. Alternatively, the roofline could be lowered to maintain the same space. This was the approach chosen by the Renault 5 designers. They lowered the panel by 15 millimeters. In addition to a more dynamic and modern style, this aesthetic solution actually limited wind resistance, a virtuous cycle that consequently reduced fuel consumption. Another advantage, and a good one at that, is that it significantly improved the ergonomics of the workstations on the assembly lines at the Flins factory (west of Paris) where the Renault 5 was manufactured. Until then, with percale, the manual preparation of the panel lining was time-consuming and arduous for the workers assigned to this task. Indeed, they had to work with their arms up in the air throughout the process. With the pre-moulded headliner of the Renault 5, the installation was carried out semi-automatically and with greater speed. In short, everyone wins!



The thin headliner allows the roof to be lowered.



Natural resin-covered fibers line the roof panel.

ON THE ZOE TODAY...

RECYCLED NATURAL FIBERS, GUARANTEED LIGHTNESS

The Renault 5's moulded natural fiber roof was a hit. In the Renault range, the use of 'bio-composite' materials, also called 'bio-based', has been optimised over time. They are produced by thermo-compressing a material that is not woven and contains vegetable fibres and polypropylene. This process is called the NFPP panel, which stands for Natural Fibre Polypropylene. In more concrete terms, since 2012, they have been spread over a surface area of more than 8 square metres on board the Renault ZOE electric city car. It is used

for the fabric that covers its seats and the trim of its dashboard, its doors, as well as the console around the gearbox.

LINEN'S GREAT QUALITIES

Plant fibers, such as linen, are now used to reinforce plastic materials. They have undeniable advantages for the automotive sector, beginning with their light weight and very good mechanical functions. Impact resistance and soundproofing are of the highest quality. Not to mention, they have a reduced carbon footprint and can be recycled.



IN 1986, THE RENAULT 5 ENTERED THE CIRCULAR ECONOMY

To appeal to younger or budget-conscious customers, Renault began reconditioning used Renault 5s. Stickers, a sunroof and that's it!



The main target of the Renault Coach is clear: youngsters!

The Renault 5's career came to a quiet end in April 1985 with the unique Lauréate finish. The car that had been the best-selling model in France for ten years, from 1974 to 1983, captured up to 16% of the new car market. Since then, no one has done better, and

today the best-seller barely totals 5.6%. Successful and with nothing left to prove, the Renault 5 did not go out of business immediately. On the contrary, forward-thinking to the end, it ventured into a final challenge in 1986, by entering the circular eco-

nomy, well before it became topical. The Renault 5 was the first-ever car to be recycled. The Renault network recovered two- (company version) and four-seater models, often in the basic specification, which it cleverly transformed into a special series

called Coach. Making something new out of something old was unheard of in car marketing!

A special second-hand series

The Renault 5 Coach was recognisable from the lateral decoration, which consisted of an adhesive strip with a gradation from fuchsia pink, to purple and ending in mauve. This enhanced the generally white bodywork colour. A Coach logo - an English name sounded younger - was placed on the doors, while a transparent sunroof that could be half-open illuminated the passenger compartment. This modern accessory had it all: it remained streamlined when open and you could enjoy the light even when it was closed. In the Renault 5 reconditioning workshops, you could hear the sound of jigsaws cutting off the roof panels non-stop! The finishing touch was a set of grey plastic hubcaps that gave the sheet metal rims a new look, and a lockable fuel cap to prevent the tank from being siphoned off. The Renault 5 Coach definitely never lost sight of the practical aspects.

And the manufacturer, pragmatically, mastered the economic equation. Priced from 21,000 francs, a 1983 Renault 5 Coach Société 850 was almost half the price of a new entry-level Renault 5. A master stroke at little cost for the Renault 5, which was given a new lease of life.



The network is at the forefront of the "Coach" operation.

« The network recovered used Renault 5s, reconditioned and resold them as a special "Coach" series. »

THE REFACTORY AT THE FLINS PLANT TODAY...

RENAULT INVESTS IN THE CIRCULAR ECONOMY

The Flins plant has had several lives, among them manufacturing the Renault 5 from 1972 to 1984 and, since 2012, manufacturing the Renault ZOE zero-emission city car. It has now become the Refactory dedicated to the circular economy. It was inaugurated by Luca de Meo, CEO of the Renault Group, a sign of the importance of the project.

RECYCLED MATERIALS

The programme includes reconditioning second-hand vehicles, battery recycling and re-using recycled materials in the manufacture of new vehicles. This strategy is based on four services: RE-TROFIT, RE-ENERGY, RE-CYCLE and

RE-START. The first is already reconditioning used vehicles for resale. This activity is set to keep growing and will be supported by the conversion of used commercial vehicles to electric power. The second collects and stores batteries in order to build up a reserve of electricity from solar or wind energy of 15.5 MWh, a capacity that will reach 200 MWh annually by 2030. The third will deconstruct and decontaminate 10,000 end-of-life vehicles (ELVs) each year. Today, Renault reuses up to 30% of recycled materials in its new cars. Finally, RE-START encompasses the project for an innovation and training centre for Industry 4.0.





90 electric Renault 5s were produced.



ELECTRIC SINCE THE 70'S!

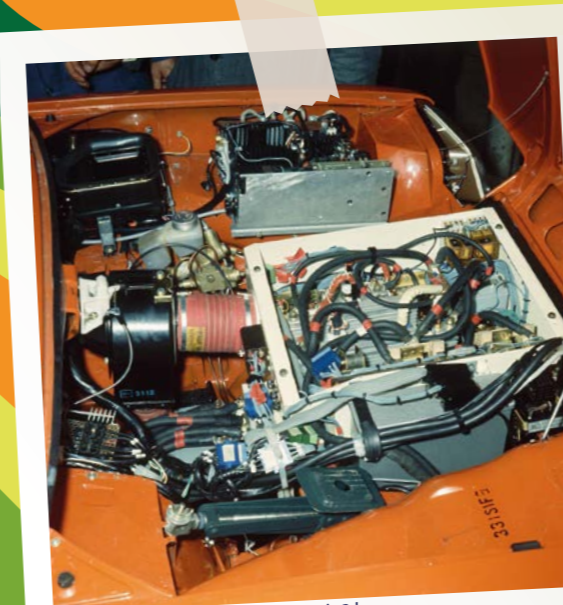
In 1970, EDF (the French state-owned electric company) was working on a zero-emission solution for the car of the future. The electric Renault 5 was born in 1972, almost at the same time as the petrol version!

When you hear the name Fontainebleau, you think of the Renaissance castle. A few kilometres from the castle, magnificent villages surround the meandering Seine. Samois-sur-Seine, the cradle of gypsy jazz with Django Reinhardt, or Moret-sur-Loing, with its medieval roots reflected in the architecture of the old town. Fifty years ago, on the nearby Renardières site, EDF created the world's largest research and testing

centre dedicated to high voltage electrical systems.

It was here that the idea of a zero-emission car was born, in the spring of 1972, when the first oil crisis had not yet hit the world economy and motorists' wallets. EDF chose the Renault 5 as the "car of the future". At the time, the issue of the type of battery did not arise, as there was only one technology available: lead acid batteries! This was thus the basis for improvement for the researchers at the Renardières site.

« Surprise on June 28, 1974: André Jarrot, Minister for Quality of Life, arrives at the Council of Ministers in a light blue electric Renault 5. »



The electric motor at the front had 10 hp.



Beneath the rear seat there are 34 batteries.

From 120 to 180 km autonomy

They also worked on an electric motor of about ten horsepower which was connected directly to the front wheels. The Renault 5 EV was still a front-wheel drive, with only two pedals, including an accelerator that modulated the electrical voltage to give the engine more or less power. The 34-battery pack was placed behind the two front passengers, and added almost an extra 300 kg to the Renault 5 TL (originally 785 kg).

The little Renault could be recognised from the outside thanks to its particular tailgate; as for the rest, apart from the specific onboard controls, nothing distinguished it from a petrol-engine Renault 5. Its top speed was limited to 80 km/h, compared to just over 135 km/h for the petrol version, according to Renault's technical data sheet. The autonomy was not bad, with a range of 120 to 180 km depending on use. On the other hand, recharging could only be done with a 220-volt domestic plug - a voltage that appeared in the mid-1950s in France - and required no less than 10 hours. While a Renault 5 TL sold for 11,300 francs in 1972, its electric sibling (manufactured in 90 units for state services) cost over 18,000 francs.

THE RENAULT 5 OF TOMORROW...

ZERO EMISSION, OF COURSE!

The arrival of the future Renault 5 EV is not just a product event. It is part of Renault's goal to move towards zero-emission vehicles. The model unveiled in January 2021 as a prototype, inaugurated a new dedicated platform derived from the Clio and Captur. The Captur's and Clio's CMF/B platform will become the zero-emission CMF/B EV platform. Half of the parts will be identical on both underbodies as the non-electric components from the CMF-B platform will be recovered. This will enable the company to offer affordable electric vehicles by reducing costs by 33% compared to the current ZOE.

The Renault 5 will obviously not be the only one to benefit from this derivative of the CMF/B platform dedicated to electric vehicles, as the outline of the 4ever project will also be used. A total of 3 million vehicles per year are expected to use it by 2025.

INNOVATIVE BATTERIES

To drive the future Renault 5, the electric motor will be placed at the front and this model will remain a front-wheel drive. The engine will deliver 100 kW (136 hp) and autonomy will be around 400 km thanks to the new Envision-AESC batteries that will supply the gigafactory in Douai in 2024.



THE NEW CMF/B EV PLATFORM AND THE RENAULT 5 EV.

RENAULT 5 PROTOTYPE, THE WINK IS IN THE HEADLIGHTS



NEARLY HALF A CENTURY FROM THE BIRTH OF THE RENAULT 5, THE RENAULT 5 PROTOTYPE PROMISES TO BE A MISCHIEVOUS MODEL WHICH DOES NOT FAIL TO ALLUDE TO ITS ANCESTOR. A GUIDED TOUR WITH GILLES VIDAL, RENAULT'S DESIGN DIRECTOR, AND SOME MEMBERS OF HIS TEAM...

«THE PROPORTIONS WORKED OUT INTEGRATE ALL THE CURRENT CONSTRAINTS, WHILE RESPECTING THE HISTORICAL MODEL.»

Gilles VIDAL,
Renault Design Director

«IN THE END, THE HEADLAMPS TURNED OUT DIFFERENTLY FROM THOSE OF THE RENAULT 5, BOTH IN THEIR PROPORTIONS AND IN THEIR DESIGN.»

Nicolas JARDIN,
exterior Designer

they needed to limit the number of parts on the front that

At the end of the 1960s, when it came to defining the look of the 122 project for the future Renault 5, the designers did not necessarily imagine that it would have such a mischievous and almost human-like personality. Firstly,

led them to sketch headlights which joined the fenders, the bonnet, the grille and the bumper, without artifice. All this to 'close' a figurehead that would become, through advertising, a young, smiling and mischievous face! Nearly fifty years later, this look was vital to the design of the Renault 5 Prototype unveiled in January 2021, as Nicolas Jardin, the concept's exterior designer, tells us: *«The Renault 5 had a very particular look. We put a lot of energy into focusing on this theme, and to make it a prominent and even a living element in our design. The promotional cartoon of the Renault 5 in the 1970s really gave us the desire to recreate this lively aspect. We analysed the geometry of the headlamps, its proportions, contours and even the radius values to redesign it.»*

...



«THE RENAULT 5 PROTOTYPE EMBODIES MODERNITY. THIS URBAN, ELECTRIC, CHARMING CAR MOVES WITH THE TIMES.»

Gilles VIDAL,
Renault Design Director



LOVE AT FIRST SIGHT

This concept car project took on a new dimension with the arrival of Luca de Meo as CEO of the Renault Group in July 2020, and with the arrival of Gilles Vidal as Design Director for Renault in November 2020. Gilles Vidal tells: «When I arrived on November 2, I obviously discovered the many models of the plan in progress. The Renault 5 Prototype project was among them, of course. It was Luca de Meo who, in July 2020 during a major presentation, was swept under its spell. Luca, who has a keen sense of the product, took this proposal and brought it out of the shadows and into the product plan. Now that I know him better, I imagine that he had instantly thought of what value it would have and what marketing would go with it! He triggered a real enthusiasm for this project within the

brand team!» A project that uses many references to the 1972 icon, and not only in its look.

BLUE-WHITE-RED

Gilles Vidal highlighted the red border running along the windscreen pillar and the roof, in tribute to the famous Renault 5 Turbo, which also inspired the rear fenders and the small fake air extractions along the lights. These same lights are a very modern reinterpretation of the original Renault 5. They are split into two components, one of which acts as an aerodynamic deflector. It is entirely chiselled like a jewel and features very "product design" lighting wires. The design elements inspired by the original Renault 5 also conceal modern functions: the bonnet air intake now serves as a charging hatch. The fabric-covered roof builds on a

...

«THIS CONCEPT IS BASED ON CODES THAT BELONG MORE TO THE RENAULT 5 THAN TO RENAULT'S FUTURE DESIGN LANGUAGE.»

Gilles Vidal,
Renault Design Director



« EVERYTHING IS STILL TO BE DONE ON BOARD AND WE WANT TO DESIGN AN INTERIOR FITTING PERFECTLY WITH THE EXTERIOR. »

Gilles VIDAL,
Renault Design Director



"furniture design" concept and gives the vehicle a touch of French charm, but also plays on nostalgia, as it evokes that of the 1978 Automatic version. The rear doors handles are concealed, reminding us that the Renault 5 was a two-door car from 1972 to 1980, while the front door handles are hidden, again evoking the simplicity of the original push buttons, while adding the 2020's technology. Finally, the French flag on the wing mirrors put the country where it was designed and where it is produced in the spotlight.

AND NOW, TO PUT IT INTO PRACTICE

But for Gilles Vidal, the hardest part is undoubtedly still to come: to put the idea into practice and to not disappoint. «When I joined the Renault design team in 2020, I discussed details of the concept, the design language in basic terms and adjusted the balance between its retro and futuristic natures. The Renault 5 Prototype had to be modern, not vintage. There were so many things that could be worked on! But the concept did not reveal much of the interior. Everything was still to be done and we wanted to go even further with its design language to create an inte-

rior that would fit perfectly with the exterior. Now we are in the phase where we have to make this project viable and that is what we are working on with the team.»

Finally, don't get us wrong: the future Renault 5 zero-emission will not represent tomorrow's design for Renault cars. On this point, Gilles Vidal is very clear: «Between this retro-futuristic object, which has the right to enjoy its own use of form, and the future cars in the range which will be sold more or less at the same time, there will be a purposeful difference in the design language, of course». In 2021, with the simultaneous arrival of the Renault 5 Prototype and the future zero-emission Alpine in the B segment - as part of the Renault plan - can we foresee an alliance of the two labels and create a descendant of the 1976 Renault 5 Alpine in the medium term? «There are connections with Antony Villain, head of design for the Alpine brand. The idea is to design an Alpine line, the same way there was the Renault Sport line. With Anthony, we are discussing which codes could be activated to define these versions, but not necessarily on all Renault models». To the future!



1967-1985 TIMELINE OF A LEGEND IN 25 ACTS

1967

FIRST SKETCHES



On April, 26, 1967, Michel Boué - one of ten designers at the Renault studio - sketched two gouaches of a small two-door hatchback coupé for the 122 project. His design was selected for a transition to 1:5 scale and then to full scale. The design theme was quickly fixed, but other full-scale models would be used to validate the figurehead with its small grille.

1972

LAUNCH OF THE RENAULT 5 L AND TL

On January 28, 1972, the press introduced

the new "little" Renault to the general public. The entry version, which was called the "L" (type R1220), used an engine derived from the Renault 4, with 782 cc and 30 hp. The upper version is the "TL" (type R1222) with its 956 cc engine, derived from the Renault 6's 1,108 cc, with 45 hp.

SPANISH "950" RENAULT 5

At the end of 1972, the Renault 5 was produced in Spain by the FASA subsidiary. It is not yet the notchback version (Siete then Renault 7) but the bodywork of the French Renault 5. Only one trim level - the TL - was called 950, a number in line with its displacement. It already had a floor-mounted gear lever.

1974

RENAULT 5 LS

The first major evolution of the range: the creation of a third version, the LS. After the L and TL, the Renault 5 arrived with the 1,289 cc 64 hp engine derived from the Renault 12 TS. Distinctive features: floor-mounted gearbox lever, rev counter, 'LS' logos on the bonnet and sides. And, above all, it was highly appreciated as a small road car!



RENAULT SIETE

In October 1974, two years after the manufacturing of the Renault 5 began in Spain, FASA presented the Siete. It was not a four-door Renault 5 before its time, because the Siete had a wheelbase that was ten centimetres longer, a boot that matched the expectations of local customers and a specific dashboard. The rear doors were adopted by the Renault 5 in 1980.

1975

RENAULT 5 LS « KITÉE »

The LS's career was short, but this version served as the basis for a sporting evolution (the LS

Kitée) to compete in an official Cup, replacing the Gordini Cup. Its engine kit boosted power to almost 90 hp and its top speed was close to 175 km/h. Its front spoiler at the base of the bumper made the LS Kitée easily identifiable.



RENAULT 5 TS

In March 1975, the LS was replaced by the TS. The latter was recognisable for its reverse lights attached to the number plate lights and its perforated integral seats. The TS name played a greater role inside the range (Renault 12 TS, Renault 16 TS) while the equipment was enriched: centre console, front seat belt retractor, etc. The top speed was 151 km/h.

RENAULT 5 SOCIÉTÉ

To support its Renault 4 vans, Renault transformed its Renault 5 into a small delivery car: the Société, capable of carrying 350 kg. It was equipped in the same way as the TL, the rear seats were removed and it had two rear-view mirrors. Its sides were made of sheet metal, but in the spring of 1977 the Société was also available with rear windows.

1976

RENAULT 5 GTL



Barely three years after the first oil crisis, Renault launched the "no-waste" GTL in February. Its engine was the same as the TS, but its power was limited to 44 hp. The engine speed was low, the

torque generous and the combination offered good performance while keeping fuel consumption under control: 4.7 L at 90 km/h, which is one and a half litres less than the TL per 100 km!

RENAULT 5 ALPINE



Only one month after the presentation of the GTL, it was the Renault 5 Alpine's turn! The latter enriched the range from the top with its arrowed A crest. Its engine was derived from the 12 TS and was coupled to a gearbox based on the R16 TX. 93 hp and 11.7 mkg of torque: the Renault 5 Alpine would rival the first Golf GTI!

RENAULT 5 LE CAR USA

The Renault 5 took on the VW Rabbit in the

1967-1985 : TIMELINE OF A LEGEND IN 25 ACTS

North American market. But it didn't begin well, as the Renault, heavily modified to comply with US standards, had a poor start. In 1977, it adopted the name "Le Car" and its success was confirmed by Renault's figures: 120,000 cars were registered until 1983!

1978

RENAULT 5 AUTOMATIC

Bernard Hanon's idea of designing the Renault 5 with the possibility of installing all kinds of mechanical parts received an original finish in February 1978, with the Renault 5 Automatic. The 1300 engine of the GTL was increased to 55 hp and the three-speed automatic gearbox (+ reverse gear) was derived from the Renault 12 and Renault 16.

RENAULT 5 MONTE-CARLO

In 1978, Renault participated in the F1 and prepared for its third (and victorious) appearance in the 24 Hours of Le Mans. In January, two small Renault 5s finished 2nd and 3rd in the Monte Carlo Rally. A limited edition "Monte Carlo" series, in Sunflower yellow and a black roof with red rocker panels, was marketed straight afterwards in 2,400 units, based on the TS.

RENAULT 5 TURBO

At the Paris Motor Show, four months after its victory in the 24 Hours of Le Mans, Renault unveiled the model of the Renault 5 Turbo, which was destined for a sporting career. The



Renault 5 Turbo went on sale in 1980, with its 1.4 litre rear central 4-cylinder engine developing 160 hp, a few months after Jean-Pierre Jabouille led the turbocharger to a F1 victory.

RENAULT 5 LE CAR

One year after the Renault 5 USA adopted the name "Le Car", Renault offered a limited series with the same name in Europe. The "Le Car" was based on the TS and produced in 6,000 units for the French market (14,000 units for Europe). It had lock protectors and turn signals like the US version, as well as alloy wheels.

1979

RENAULT 7

Marketed for five years in Spain, the Renault Siete - a Renault 5 with a longer wheelbase and a classic boot - adopted the name Renault 7 in 1979. Renault benefited from this and modernised the dashboard (different to that of the Renault 5) and adopted the 1,108 cc engine in

1980 on the only version available, the GTL.

5 DOORS AND A NEW DASHBOARD

The arrival of the Citroën Visa and a Peugeot 104 hatchback prompted Renault to bring out its five-door Renault 5. The quality was enhanced: a new, highly statutory dashboard and 'petal' seats were featured. The transformation was accompanied by an engine change in the TL and GTL. They adopted the 1,108 cc engine of the Renault 4 GTL.



1982

RENAULT 5 ALPINE TURBO

For Renault, the turbocharger was a sign of victory: at Le Mans (1978), in F1 (1979), not to mention a rich range then comprising 18 Turbo, 5 Turbo and later Fuego Turbo. The time had come for the 5 Alpine Turbo, with its additional turbocharging on the 1.4-litre engine and its 110 hp and 15 mkg of torque. Four-disc brakes and Renault 5 Turbo style wheels differentiated it from the 5 Alpine it had replaced.



RENAULT 5 TX

Marketed for model-year 1982, the Renault 5 TX and TX Automatic brought the little Renault into a more chic world: varnished paint, alloy wheels, power steering, Renault 18 Turbo steering wheel. On board, elegance was in the spotlight with thick carpeting and velvet for the upholstery. The luxurious Baccara finishing will take over on the Supercinq.

1983

RENAULT 5 TURBO 2

At the 1982 Paris Motor Show (1983 model-year), Renault made substantial changes to its 5 Turbo, which became the Turbo 2. The specific features of the first generation interior design disappeared in favour of the Renault 5 Alpine Turbo dashboard. The price then fell

below 100,000 francs, boosting sales. The Renault 5 Turbo 2 lived until 1986.

RENAULT 5 CAMPUS

We had not seen the last of the Renault 5 just a year before the presentation of its replacement - the Supercinq. In September, the Campus limited series appeared, with 8,000 units produced for Europe. It was an opportunity to draw on the 845 cc engine's stock and add a wealth of equipment: sunroof, Renault 5 Alpine wheels, rear spoiler but only one colour: burgundy.

1984

RENAULT 5 SUPER CAMPUS

As for the engineering part, after the Campus' 856 cc engine, the Super Campus took the 956 cc powertrain with 44 hp. It kept the same goal as the Campus it replaced: to offer a very competitive price in the face of constant competition. The rear window wiper completed the equipment of the previous Campus.

RENAULT 5 LAURÉATE TURBO

It was (almost) the most promising deal: the Lauréate Turbo replaced the Renault 5 Alpine Turbo with a more classic upholstery and a limited offer in equipment and colours. The aim was to bring the price down to 6,000 francs less than the Renault 5 Alpine Turbo. It was true that the Peugeot 205 GTI had just joined the exclusive club of fashionable hot hatches!

LAUNCH OF THE RENAULT SUPERCINQ

The 140 project had a much more complicated beginning than that of the Renault 5 it replaced. In the end, the proposal of Marcello Gandini, designer of the Lamborghini Countach and a consultant for Renault, was chosen. Same design theme, a platform derived from the Renault 9 with a transverse engine and more room on board, at last!



1985

RENAULT 5 LAURÉATE

The name Lauréate, until then reserved for the replacement for the 5 Alpine Turbo, was used a year later for the entire Renault 5 range - or what remained of it after the appearance of the much more modern Supercinq. In its versions L, TL, GTL and Turbo, the Lauréate marked the end of the Renault 5's career, alongside the Turbo 2 which was sold until 1986.

**This book is published by
Renault Communication Department**

Design, production:

Les Communicants/Acommauto

Editors:

Christophe Bonnaud, Pierre Rizzi

Photos and illustrations:

Renault Communication, Renault Marketing 3D-Commerce,
Groupe Renault - Direction du Design, archives Yann Le Lay,
BAM, Thierry Bovy, Yannick Brossard, Benoit Chimenes, Phil
Davis, DPPI Media, E.T.A.I., Alain Goulard, Patrik Johall, Greg
Jongerlynck, Serge Labrunie, Jean-Brice Lemal, Olivier Martin-
Gambier, Gilbert Mas, Jean-Christophe Mounoury, James
Moy Photography XPB, Nakyma, OHM Frithjof, Planimonteur,
Publicis, Christian Witt Fotografie, Pagecran, Prodigious
Production, Yvaral et Vasarely 1972.

All rights reserved. No part of this publication may be
reproduced, used or transmitted in any form or by any means
(wether electronic, photocopying or otherwise) without prior
consent of the authors and the publisher.

Thanks:

To Christian Stein, for his confidence. To Vincent Frappeau, for
his support. To Dominique-William Jacson, for his benevolent
rigor. To Stéphanie Lévêque and the Renault photo library team
for their invaluable help. To Yann Le Lay for his rich archives.

This book was printed on PEFC certified paper.



RENAULT 5

