

New Laguna

Driving pleasure with complete peace of mind

New Laguna : born under the sign of quality

Since it was first launched in January 1994, more than 2.3 million of the first two generations of Laguna have been sold. New Laguna is manufactured in the Sandouville factory in France with a level of quality never seen before. Preparing for Renault's return to the luxury car segment, New Laguna has been manufactured to be both robust and reliable. The stated objective is to be in the top three of its segment for product and service quality.

Driving pleasure...

New Laguna was designed from the outset to give true driving pleasure. It has a dynamic, streamlined and elegant form, positioning it naturally in the realm of grand tourers, with an even more exclusive and distinctive profile for the Sport Tourer. Its class-leading dynamic performance is a benchmark. Its chassis is responsive and its steering is particularly precise. Whilst being bigger and more spacious than its predecessor, New Laguna is notably lighter by an average of 15 kg and is available with a wide range of powerful and economical engines from launch, all with six-speed manual and automatic gearboxes.

...complete peace of mind

New Laguna provides a real sense of peace of mind for all its occupants. In terms of protection, it benefits from Renault's acclaimed real-world accident knowledge and all of the latest technologies, in particular, side impact with an innovative thorax double airbag. The sophisticated air conditioning system offers class-leading thermal comfort. Equally, much attention has been focused on New Laguna's acoustics which are again top-of-the-class. With an economical and ecological 'Renault eco2' version, New Laguna dCi 110 hp only consumes 5.1 litres per 100 km on a combined cycle, or 136 g of CO2 emissions per km. New Laguna is respectful of the environment right from its production through to the end of its lifecycle.

New Laguna will be launched from 12 October 2007 as the future reference point for the family saloon segment in terms of usage, maintenance and repair costs.



Contents

Chapter 1 **Driving pleasure...**

A reactive chassis
Precise steering
A range of engines leading its segment in performance and efficiency
Even lighter and more aerodynamic

Chapter 2 **... with total peace of mind**

A leader in the field of active and passive safety
Optimum comfort
User-friendly

Chapter 3 **Quality inherent in its DNA**

Robust and reliable manufacturing
Manufactured and checked in a factory with ISO 14 001 certification
Quality at the service of the customer

Chapter 4 **The elegance of Grand Tourers**

Dynamic, streamlined design
A distinctive Sport Tourer
Harmony and perceived quality

Chapter 5 **Lower running costs**

An attractive economic option
New Laguna dCi 110 hp, first Renault eco2 vehicle in its category
The 2.0 dCi engine : optimum driving pleasure, reliable and economical
Respectful of the environment

Chapter 6 **New Laguna rises to the challenges**

Excelling in the field of quality
Win over a demanding clientele in a market that is constantly changing
Perfect the industrial system and its logistics chain
New Laguna: a demanding, high-performance and profitable project

Chapter 1 Driving pleasure...

New Laguna has been manufactured with the aim of offering real driving pleasure. Its benchmark performance on the road is first class. The car offers top driving comfort through its fine-tuned chassis and needle-sharp steering. It has an optimal weight distribution with a range of engines and gearboxes which offer high performance while being economical with fuel.

A reactive chassis

Developed to go beyond the dynamic qualities for which its predecessor was recognised, the New Laguna's chassis offers outstanding roadholding around bends. The steering is more sensitive to the touch, while maintaining its suspension quality through its vertical dampening. Renault's engineers have paid particular attention to the exact nature of the trajectory and the roadholding qualities of the car's body.



One characteristic of its turning capability is the specific roll which characterises the turning angle taken by the car vis-à-vis the road. With the New Laguna, it is 1.9° (the segment average is 2.2°) for a transversal acceleration of 5m/s^2 . This situation corresponds to driving conditions on a winding road or at a roundabout outside of the city with a diameter of 400 m, driven at a speed of 60 km per hour.

The front axle is the pseudo McPherson type. The diameter of its anti-roll bar has been increased from 19.5 to 24 mm. Light and compact, the supple rear axle is in the form of an H, with anti-roll bars varying in diameter from 28.8 to 30.5 mm. The springs are 20% stiffer at the front and 50% stiffer at the rear, resulting in better control during vertical movements – without the vehicle being too sporty. New Laguna is still astonishingly comfortable, thanks to greatly improved suspension: in association with helicoidal springs of varying flexibility, the dampeners are pressurised at the front and in the form of bi-tubes at the rear. The reinforcements are situated at the appropriate points in the body, strengthening the body mass and increasing the capacity to withstand impact: in short, impeccable reliability.

Three tyre sizes are available according to the engine size : 16 inches in three widths: (195 and 205/60, as well as 215/55), 17 inches in 215/50 and 18 inches in 225/45, for heightened performance.



Precise steering

The accuracy of the steering is based on a reduced steering ratio and a stiffened steering column, with an aim to offer the driver more driving pleasure through the steering. With a ratio of 1/16e (i.e. a 16° angle of the wheel for a 1° angle of the steering wheel), driving movements are rendered easier and the car becomes more agile. The increased stiffness and the systematic tracking and reduction of clearance give the driver more direct, accurate contact with the road, reducing response time between the steering wheel and the change of direction. The reduction of vibration arising from

imperfections on the road surface has improved driving pleasure as a consequence. All the powerful engines or those equipped with particulate filter offer variable hydraulic assistance. As a first for Renault in the segment, New

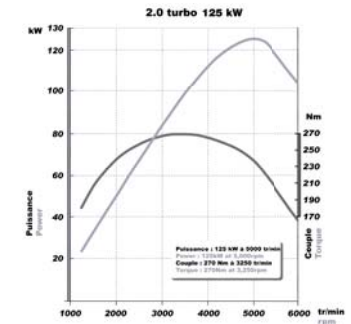
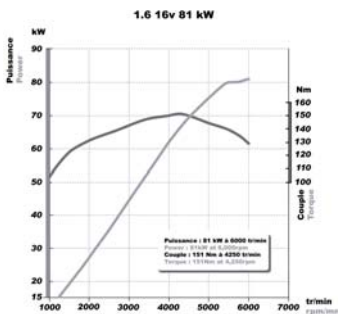
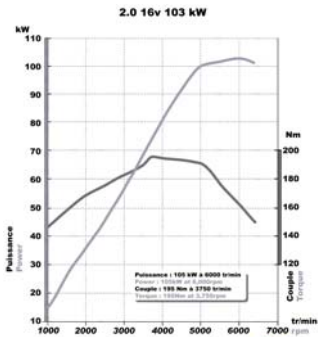
Laguna inaugurates a new generation of assistance, through the utilisation of a driven electric pump unit (PEG). Available with the main petrol and diesel engines with manual gearbox, it allows the driver to obtain assistance through the use of the electric pump output, in accordance with the driving conditions. This output depends on the speed and the level of assistance required (speed and angle of the steering wheel) which allows an optimal fuel consumption, by driving the pump electrically when necessary. For the 1.6 16v petrol version, there is constant hydraulic steering assistance.

A leading range of engines for performance and efficiency

New Laguna offers a wide range of engines, all coupled to manual and automatic six-speed gearboxes. Each is at the top of its category, offering renewed driving pleasure and reduced fuel consumption.

The petrol range will be launched on the market gradually, starting with the dynamic, smooth and quiet **2.0 litre 16 valve petrol engine 140 hp (103.4 kW) and 195 Nm (M4R)**. Lively, with good torque in low gears and a spirited drive in higher gears, with sound-dampening across the range of engine speeds, it is the product of a joint Renault-Nissan operation, offering enhanced driving pleasure and impressive acoustic performance. The fuel consumption of 7.9 litres per 100 km on a combined cycle (185 g of CO₂ per km), gives New Laguna an acceleration time from 0 to 100 km/h in 9.1 seconds. It offers the advantage of a maintenance-free distribution chain with a lifetime guarantee.

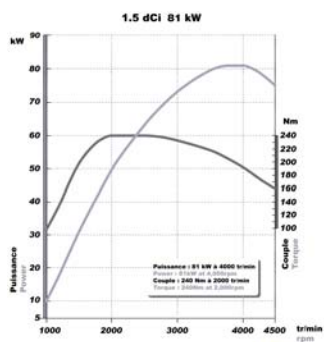
The Turbo, 2.0 litre 16 valve 170 hp (125 KW) and 270 Nm (F4Rt) petrol engine completes the petrol range. It has a proactive automatic gear box with six speeds (A10). With fuel consumption of 8.9 litres per 100 km on a combined cycle (210 g of CO₂ per km driven), New Laguna offers particular driving pleasure, reaching 1000 m from a standing start in barely 30 seconds.



New Laguna will be available at entry level with the **1.6 16v engine 110 hp (81 kW) and 151 Nm**, offering excellent fuel consumption and running costs.

Lastly, a new evolution of the current Alliance **V6 petrol engine (V4Y)** will be positioned at the top of this comprehensive and high-performance range.

The **diesel range** is based on the two market benchmarks, the **1.5 dCi** engine which has a maximum power of **110 hp (81 kW)** and maximum torque of **240 Nm** at 2000 rpm. It is yet another illustration of Renault's expertise in the domain of engine down-sizing, producing the same performance and thus replacing, the old 1.9 dCi engine, which was heavier and less economical. It offers the best balance of performance versus consumption in the segment (136g CO₂ per km). Equipped with a manual gearbox which has a specially configured range, it boasts fuel consumption of 5.1 litres per 100 km on a combined cycle, meaning that you should not have to refuel your New Laguna for around 1300 km. Within the framework of Renault Commitment 2009, New Laguna dCi 110 hp will make an important contribution to the Renault eco2 environmental programme.

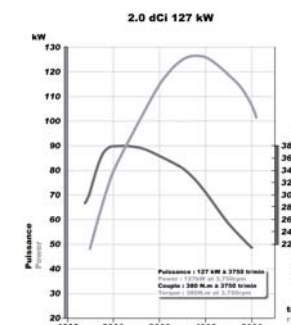
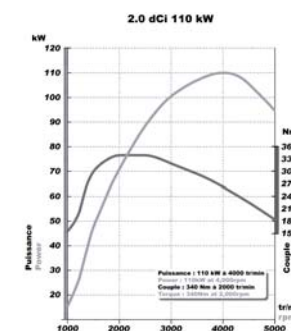
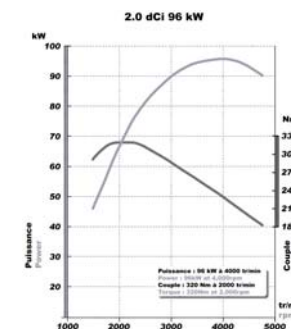


A leader in the field of performance, driving pleasure and reduced cabin noise, the **2.0 dCi** engine comes with three power outputs: **130, 150 and 175 hp (96, 110 and 127 kW)**, available with particulate filter. With maximum torque levels respectively of **320, 340 and 380 Nm**, it is capable of rapid and continuous acceleration up to 5200 rpm. The 150 hp (110 kW) version also has a proactive automatic gearbox.

With ultra-rapid preheating spark plugs, it bursts into life from the second the « Start » button is pressed, even in extremely cold conditions (-23°C). With a variable geometry turbo engine, it offers improvements at a low engine speed, while the engine reaches its peak in the 175 hp version of the New Laguna. With utilisation costs among the most competitive in the market, New Laguna 2.0 dCi 150 hp BVM6 has fuel consumption of only 6 litres / 100 km on full cycle (158 g of CO₂ per km covered). In the automatic version, the engine allows the driver to cover 400 metres from a standing start in less than 17 seconds, with a fuel consumption of just 7 litres / 100 km (185 g of CO₂ per km). Soon, the engine will be available with a range of technologies (particulate filters, new valve for the recycling of exhaust gas recirculation gases, development of the fuel injection system), which will enable it to meet the Euro5 emissions standard two years before the due date.



Other developments will soon be added to the all-encompassing and all-purpose engine range of the New Laguna, in each of the countries in which it will be marketed.



AJO

Developed within the framework of the Alliance, in conjunction with the Japanese partner Jatco, the AJO was offered on the New Scenic at the end of 2006 and, at the start of 2007, on the Espace. It is an auto-adaptive logical gearbox which identifies the type of driving and the gradient of the road. The first gear is shorter (18%) and the sixth longer



(7%) than the former BVA5. The gearbox offers a feature which goes from 5 to 6.1 (ratio between the reductions of the 1st and 6th speeds). In this way, it contributes to the dynamic improvement of starting up, while reducing the fuel consumption (8% on average) and the ambient noise, especially during motorway driving (2500 rpm at 130 km per hour). It is astonishingly smooth, due to the automatic transmission gear change, which gives improved fuel consumption and driving pleasure. With smooth intermediary changes, the gear speeds are lowered which limits the noise effect and offers greater driving and acoustic comfort. At the same time, this BVA6 offers a button command which contributes to driving pleasure (when driving faster or on a slippery road, when braking or changing down a gear for example). Renault has made great efforts to reduce braking distance and an optimised gear system and system of internal friction results in reduced fuel consumption on all engines equipped with it.

Even lighter and more aerodynamic

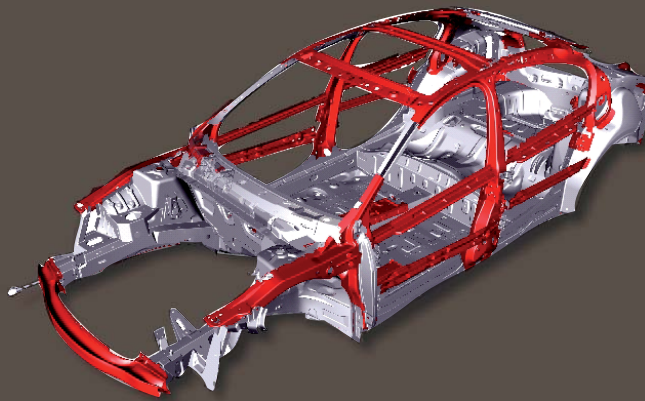
Lighter, on average by 15 kg (up to 65 kg on the 110 hp eco² diesel version), New Laguna benefits from an outstanding weight distribution. It is the first Renault vehicle to be lighter than its predecessor. A key ingredient in its driving pleasure, the weight distribution is a key factor on several different levels: dynamic performance (road holding, acceleration, roll during bends), fuel consumption and CO₂ emissions, active safety (shorter braking distance) and passive safety (resistance in the case of impact). More than 300 actions have been listed and carried out by engineers, qualified in their various fields, to attain this result.

New Laguna's performance, both dynamic and economic, is also linked to work carried out on mock-ups to optimise its aerodynamics. This was carried out in the wind tunnel and by digital simulation. These efforts have resulted in New Laguna's position at the top of the saloon market, with an

SCx of 0.645 m² and a Cx of 0.293. (The SCx is the product of the frontal S surface of the vehicle by the air penetration coefficient, Cx). This progress is especially impressive for vehicles with raised modularity (hatchback) compared with a "saloon" or "notchback". It is all the more significant for New Laguna Sport Tourer, with a SCx of 0.696 and a Cx of 0.316, bearing in mind that the average SCx of all saloon cars on the market is 0.70 and the Cx, 0.315. These achievements have been rendered possible by the quality of the changes made and the work on the design of the rear lateral line and the door mirrors, which are, however, bigger in order to comply with the new regulations. As a first for Renault, there is a discreet, integral fairing on the undercarriage which optimises the air flow while protecting the chassis.

Weight distribution of the vehicle

An in-depth, systematic study has been carried out right from the earliest stages of development (choice of technology and of materials, e.g. an engine cradle and add-on made of aluminium), resulting in architecturally innovative solutions (insulation, structure). For example, the utilisation of steel with an extremely high yield limit (TTTHLE) for the structure of the bodywork reconciles weight distribution, an increased stiffness of the body and an improved level of protection in the event of an impact. Whereas the increase in the dimensions of the vehicle entail an additional weight



of 15 kg, the choice of materials and the design of the parts result in a reduction of almost 20 kg of steel. Work carried out on the chassis mass has resulted in a weight reduction of 17 kg ; the hollow-headed wheel screws (five per wheel) offer an improvement of 700 grams per vehicle. Along with work carried out on the turning parts and the trains (hubs and arms are 450 grams lighter), this optimisation has had an important dynamic impact, since it concerns non-suspended mass. In the cabin interior, the improvements to the sound-proofing have resulted in a saving of three kilograms while improving the acoustic quality. To cite yet another example, the special design of the slim seat backs of the driver and front passenger seats is a perfect illustration of the efficiency of this approach, combining a weight benefit with additional space.

Chapter 2 Peace of mind

New Laguna offers peace of mind to all passengers, with an unrivalled level of comfort and safety in its category. In the domain of passenger safety, it provides the latest innovations and expertise, for which Renault is acclaimed, in accident tests. Complementing its first-class thermal comfort, New Laguna has a particularly advanced acoustic system, making it a benchmark in the segment, especially for diesels.

Leadership in active safety...

New Laguna has taken full advantage of Renault's acclaimed expertise in the field of safety, both active and passive. Complementing the impressive dynamic performance of its chassis, New Laguna can boast the best braking performance of its category, particularly in the endurance test while braking when hot (only 40 metres distance measured with 16 inch wheels performing 10 consecutive braking operations from 100 to 0 km/h). The brake discs and callipers are sized accordingly, with definitions $\varnothing 57\ 280/24$ to $296/26$, ventilated at the front, and $\varnothing 38\ 300/11$ at the rear. A new calculator / hydraulic block now integrates the electronic emergency brake assistance (EBA), which is more exact when operated since it does not react to mechanical variations. The chassis quality, combined with a numerical model more sensitive and auto-adaptive to the vehicle dynamics, enables the driver to react more



swiftly and appropriately to emergency situations. The ABS and ESP systems, fitted as standard on the car, are more efficient, reacting at just the right moment without the driver having to anticipate and thus avoiding violent jerking when braking. Available as an option from the second trim level, the bi-xenon headlights change direction according to the speed and the angle of the steering wheel. They add a useful technological extra, offering up to 90% more light on a bend, compared with halogen headlights. Complementing the system, the Tyre Pressure Monitoring System is available as an option.

... and passive

Laguna II was the first car in history to be awarded five stars in Euro NCAP crash tests. New Laguna owes it to itself to maintain this leadership and the bar, in the meantime, has been raised even higher. In the field of passive safety, Renault has developed solutions which take into account accident research and real-life driving behaviour,



within the framework of a more global, more effective approach to passenger safety. In order to guarantee optimum passenger protection, New Laguna's electronic architecture has evolved with the result that the most recent generation of protection equipment is activated at an earlier stage. A triple algorithm now operates all configurations in order to optimise their performance in response to all the different impact situations (complex situations of frontal, rear and side impact). A major cause of mortality in the event of a car accident (it is the weakest area with regards to protection), particular attention has been dedicated to side impact protection. The results are nothing less than spectacular. In



order to recognise and react to impact twice as fast, New Laguna boasts a unique system comprising two sensors, implanted in the front door and centre pillar. A specific

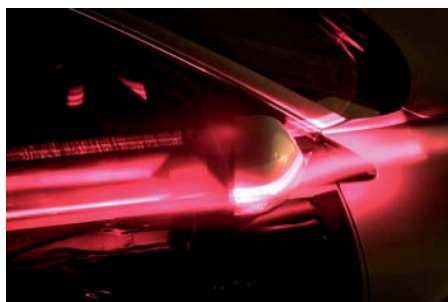
algorithm adapts the reaction time delay to the violence of the impact and sets off a new double-side airbag, with a double chamber and double pressure. The law imposes an efficacy of up to 50 km/h. The threshold set by Renault for the New Laguna protects up to 70 km/h. This efficient device is based on six to eight airbags (thorax AR as an option

from the second trim level) positioned for optimal passenger safety. On the front seat-belts, the double pre-tension now operates at each end of the belt (exterior pelvic part and the rolled-up section). In conjunction with an anti-submarining system in the seat, this solution not only means that the passenger's pelvis remains on the seat, but also provides improved restraint for the upper part of the body at thorax level in the event of a frontal impact. The central buckle is optimised to facilitate the attaching of the seatbelt. In the rear seats, pre-tensioners are available for the seats at each side, as are Isofix fixings and convertible child headrests (as an option). All three-point belts are integrated, and linked to stress limiters. New Laguna is now equipped with warning lights for all five seatbelts and a warning sound when the front seatbelts are not fixed. The framework of the seats has undergone a new design. The result is enhanced efficacy as well as increased comfort. The slimmer, finer seat back on the front seats does not interfere with the position of the driver and front passenger's back, and protection of the neck, in the event of rear impact, is improved, thanks to the latest generation of headrest with integral runners.

Maximum comfort : silence is golden...

New Laguna is the quietest five-door saloon in its sector. This is due to three elements: treatment in the level of engine noise, most notably at low speed, insulation from driving

noise and, above all, work carried out to reduce aerodynamic noise. The level of acoustic comfort in the diesel versions will be equivalent to that of the petrol, largely due to the intrinsic qualities of the actual engines. Work has been carried out on



the engine suspension with increased strokes with innovative solutions such as a fixing device between the gearbox and the battery, which enables the latter to be used as an acoustic mass (patented). Engine noise at high speed has been reduced by 40%. Special attention has been given to the dashboard and the section below the windscreen, with

the hollow parts uncoupled by structures similar to those used on the wings of an aeroplane (also patented). The aerodynamics of New Laguna were the object of study from an early stage, with integrated windscreen wipers under the bonnet and a unique design for the body shell of external wing mirrors and window pillars which limit turbulence and thus aerodynamic noise.

... driving pleasure...

The suspension provides a high degree of comfort thanks to the control of high amplitude vertical movements. The adoption of a rear bi-tube dampening system, added to pressurised technology at the front, lessens the shock when driving over obstacles at a moderate speed. When turning,

comfort is assured through better restraint of the passengers, thanks in part to a more solid chassis, but also due to more robust seats which ensure more dynamic comfort. Their side restraint enables the passenger to appreciate the car's road-holding qualities even more. For the first time in a Renault, the heating controls of the driver's seat have three levels of heating. This range of choice ensuring top level of comfort in the car is also found in all the seat commands : height adjustment increased from 13 mm to 63 mm, continual adjustment of the seat back and seat back angle regulator independent from that of the seat height with electric adjustment available as an option from Expression level upwards. The passenger seat is adjustable in height on some versions. Thanks to improvements made in the domain of in-car comfort, all passengers enjoy the benefits of the enhanced



cabin comfort : the headrests are increased by 11 mm on the rear seats and the knee room is increased by 20 mm at the back thanks to the slimmer front seat-back.

... and an improved interior space

With an innovative triple system, the air-conditioning commands « Soft-Auto-Fast » are intuitive and situated between the air vents. The automated system can be personalised to fit the taste and needs of the customer. The Auto function serves as a point of reference, inspired by the best systems to be found on the market (optimisation between thermal and acoustic comfort and speed of the operating system). The Soft programme prioritises a quiet flow of air, with a gentle action especially beneficial to the front passengers, with a reduction of noise of up to 15 dB compared to the best systems on the market. With a rapid, dynamic reaction which also benefits those in the back seats, the Fast mode swiftly creates an efficiently ventilated atmosphere. New Laguna is the first vehicle to benefit from customer surveys carried out in 2001 and 2002 on the subject of thermal comfort. This survey gave Renault a better understanding of customer

requirements. A second factor was the development of a new air-conditioning system, working in conjunction with Nissan, for the American market where it was evaluated. These two factors have enabled Renault to position itself at the top of the category. The use, moreover, of a compressor with large cylinders controlled externally, enable the customer to lower the temperature rapidly, while still managing use of the air conditioning system at a minimum, thus reducing consumption. In less than 10 minutes, the temperature in a cabin which has reached over 50°C (a vehicle left in 40°C heat for one hour in direct sunlight) can be reduced to 22°C. As far as the heating system is concerned, the increase in air temperature is faster thanks to the electric resistance of 1000 W of power in the diesel engine systems.



Air Quality System

New Laguna has the advantage of specific development in the field of thermal comfort and interior air quality. The athermal windscreen reduces sun rays in the interior by 30%. Now the solar sensor is « bi-zonal » and is fitted at the top of the windscreen, along with those for sensing rain and light. Its two cells measure solar intensity on each side, thus permitting an optimum interior thermal adjustment. An additional hygrometric sensor is situated at the foot of the interior rear-view mirror, in conjunction with a highly-developed method



to prevent steamed-up windows.

New Laguna's chief innovation can be found in its automatic system for protection from harmful gases. The toxicity sensor detects pollution (CO or NO), and automatically closes down the exterior air vents. The polluted air cannot enter the car, while the active filter recycles and purifies the air in the cabin (from pollen, gas, smells and particulates).

The average concentration of pollutants is reduced by at least 40% during this operation, when the detection threshold is 70%.

Enhanced ease of use

New Laguna offers enhanced on board comfort. The position and accessibility of all the controls have been studied and simplified, especially on the new dashboard. The instrument display has been set up with a view to making it easy to use and to personalise. The user preference menu offers seven functions : door-locking when the car is moving, locking the door of the driver only, automatic headlights during the daytime (to be activated in those countries where it is obligatory), rear-window wiping, parking assistance, sound adjustment, choice of language for the dashboard commands (nine options). The Power-Assisted Parking Brake is located on the centre console (standard from Privilège

telephony, 6 CD player with MP3 compatibility and ergonomic system controls, which can also be used by voice control. New Laguna debuts a new Carminat CD Bluetooth® system, which offers the basics of multimedia with a 2D screen with voice control and Bluetooth® telephony. These two systems have a triple tuner with dual antennae with offer a particularly high standard of reception. All radio versions offer the possibility of a hands-free Bluetooth® telephone kit. Available as an option in the glovebox away from prying eyes, the Audio Connection Box and audio jack/line-in plugs enable a portable multimedia player or similar to be plugged in.



upwards, with the mechanical version at entry level) along with the switch for the speed-limiter / cruise control (standard from Dynamique upwards) and the joystick for the Carminat Navigation and Communication system (as an option). A benchmark on the market, this system has won praise from customers and the press alike : GPS navigation with 3D bird-view function, panoramic seven-inch screen, Bluetooth®

New Laguna has masses of storage spaces, not only in the central armrest, but also in the form of a practical pocket for the driver near the steering wheel, and has one of the most capacious refrigerated glove boxes on the market (9.2 litres). There are drink holders on the dashboard fascia and in the rear central armrest (from Expression upwards) with a special shape that can be adapted to different containers.

These features which make life easier for the driver and the passengers are also visible on the exterior, with the front parking sensor (as an option from Expression or standard on the Initiale). The third-generation Renault hands-free system benefits from all the advantages of the two previous generations. The car has six antennae which provide optimal card detection. In addition to the remote-controlled locking system, New Laguna offers a locking system via a button on the driver door handle, providing additional reassurance for some customers. The car is unlocked via the door handles. In the same way, the car is started by a simple press of a button on the dashboard. The vehicle key card present on all models has been completely reworked, both in the domain of perceived quality and robustness, with improvements

to the seal and the reliability for all usage, integrating the accompanying light command (available as standard). New Laguna has a fuel tank lid in the form of an integral opening system, which simplifies the operation of filling up with fuel.

For greater ease of use, the legibility of information has been reworked and is clearer and graphic. The dashboard screen has two colours and its configuration depends on the type and the amount of information shown on it. With the manual gear box, a gearshift indicator advises the driver about the best time to change gear and optimise fuel consumption. There are graphics representing the automatic grid, including a button function. A new warning light shows the speed limit, when it is activated, in addition to the usual text messages.

Super Fold

New Laguna Sport Tourer boasts a special layout with ingenious space usage. Putting down the backs of the rear seats can be done, with equal ease, either from the rear of the car or from the back seat, in a single movement. Pressing a single button enables the customer to have a perfectly flat surface of 2.01 metres, thanks to a spring which folds down the seat backs automatically. This results in a load area of up to 1,593 litres. The closed side compartments improve safety of transport, as does the semi-rigid partition equipped with

straps which can be raised according to need. Under the floor mat there is storage space, with a receptacle specifically for storing the rear parcel shelf. The latter is folded gently thanks to a semi-automatic command (a vertical pressure is sufficient to wrap it up slowly). Fixed hooks also hold soft bags easily. As an option, the rear opening window provides even greater ease of loading.



Chapter 3 Quality in its DNA

Born under the sign of quality, New Laguna has, in its genes, robustness and reliability. Renault's aim, for Laguna, is that the car should feature in the top three of its segment for quality of product and service. New Laguna has to take up the baton and continue the progress made in the area of quality, already evident in recent car models, from its inception and testing, through the manufacturing process and including its servicing.

Born to be robust and reliable

New Laguna has been the object of special attention throughout its development. Its robustness, inherent in its design, takes into account maintenance and repair. The testing process, already carried out on Modus and Clio, has been reinforced for New Laguna. More than 150 specific supplementary tests have been carried out within the framework of the Laguna Top 3 Renault Excellence plan. Three electronic integration platforms, which reproduced the electric and electronic architecture of the vehicle, allowed engineers to simulate all possible combinations and to ensure impeccable functioning. Solutions to problems found in vehicles in the past, particularly in Laguna II, during the warranty period and during technical checks, have been the object of special attention, in the form of 650 points. All interior cables in the New Laguna sunroof now have integral protection and the optional connectors are systematically immobilised. With these tests, carried out on test beds in the factory, New Laguna has passed all tests and been validated



on every criteria relating to robustness, including noise. In tests, the vehicle has also been stretched to the limit, both in accordance with European usage, but also international, in extremes of temperature. Driven on a circuit and on the open road, more than 120 New Lagunas have already driven the equivalent total of more than six million kilometres in pre-launch tests. Discreetly, with the aim of evaluating its reaction to extreme conditions, New Laguna has already driven roads around the globe: in Argentina, Russia, Malaysia and Australia. During this specific validation programme, the car was put to the test in gruelling climatic and usage conditions: with extremes of heat, humidity, dust, mud, severe cold, high speeds, altitude, poor road surfaces etc. Every kilometre covered was three times more extreme than the usual conditions met by our customers. New Laguna is also the first vehicle to have benefited during its development from the EMC (Electro-Magnetic Compatibility) unit, launched in early 2006 at the Aubevoye Technical Centre.

Manufactured and checked in a factory with ISO 14 001 certification

During the industrial process, every effort has been made to achieve the desired result. The processes and best practice in Renault and Nissan factories have already been the object of an in-depth study. The result of this study has been the introduction of greater checks and efficiency in the assembly lines throughout the manufacturing process at the Sandouville plant in France. Restructuring of the operating posts and a reconfiguration of the work flow has resulted in improved reliability of tasks. For example, the « strike zones » optimise assembly chain operations. The operators concentrate exclusively on their « added value », as the different parts have already been prepared at an earlier stage, thus eliminating the risk of a faulty part. All functions in which there is a risk of error in the choice of a part by the

operator are covered by a computer-driven system (1000 are protected in this way). These devices, which offer a systematic check of parts (« Poka Yoke »), simultaneously validate the parts, both in terms of quality and quantity. Checks at every point on the assembly line have been made more rigorous. At all stages during assembly, cars benefit from strengthened protection (several rigid shells on the exterior, plastic films for components). Static and running tests as well as electronic checks are carried out on every product leaving the factory. The track at the end of the assembly line has been improved compared to the previous generation, with the aim of showing up more clearly any problems of noise (paving stones, series of tight bends etc.)

Quality at the service of the customer

New Laguna's quality drive does not stop when the car leaves the factory. Vehicle maintenance and repairs have been taken into consideration from the early design stages. More than 1,500 check points have been set up, over 124 operating ranges. They have been put to the test in « Super Garages », veritable prototype workshops, created in order to test diagnostic tools and operational methods. 800 symptoms and 6,000 types of fault have been drawn up, with the sole aim of better understanding customer issues. A new tool called the « Symptom Definition Module » enables the engineer to understand the customer's case, as a result of asking three or four simple questions. The system can involve, where appropriate, the use of a camera, linked to a computer. This permits the diagnosis of a fault from a distance, even in inaccessible parts of the car, where dismantling of parts would otherwise be necessary. 80% of breakdown faults can thus be identified in under an hour and 95% in less than two hours. With a training programme, which is nowadays followed by 11,000 electro-mechanics (three and a half times more than followed the previous system), apprenticeship for utilisation of the Alliance Clip Set has been spread across the Renault network the world over. Specific commercial and more technical training courses are available through e-learning, in order to allow independent distance learning. 23,000 people have already followed the "Renault Service Programme" training course in 2006

and 2007, of whom nearly half have been sales staff. The programme was developed by the Renault Academy, the sole entity in charge of developing training programmes for the Renault network. In order to ensure that Renault was on the right track, over a million customers were questioned in 2006 after they had taken delivery of their vehicle or following an after-sales service. In addition, mystery shopping among customers enabled Renault to test the effectiveness the 20 « essential service points » in the marketplace. These are the 20 key points in the relationship between the dealer and the customer. They pertain to the quality of welcome, response to questions, clarity of information and mobility. In 2006 for example, 2500 mystery shopping surveys were carried out in France. These surveys, by highlighting weak points, form the basis of a joint action plan with the dealer with the aim of helping the dealer to improve the standard of his quality of service. The said quality of service has already seen improvements in 2006, passing from a rate of customer satisfaction (customers declaring themselves "satisfied" or "very satisfied") of 71% to one of 75%. New Laguna will benefit from the establishment of the Renault Quality Excellence Plan PER4, with its aim of ensuring customer satisfaction in the field of sales and after-sales.



Chapter 4 The elegance of Grand Tourers

The exterior design of New Laguna is dynamic, streamlined and elegant. Its lines and dimensions show New Laguna to be robust and safe. The particular care which has been paid both to the quality of material and the car's finish bear witness to the quality of workmanship both on the car's exterior and in the cabin. The high quality of the interior finish and equipment is clear evidence of its luxurious elegance.



A dynamic, streamlined and elegant design

New Laguna's style is dynamic, offering true driving pleasure. With a long bonnet with controlled curves and extended line, chrome strip and generously-proportioned radiator, the front of the car suggests the presence of a powerful engine. In profile, the sealed beam units with triple lighting give New Laguna a viewpoint of power. New Laguna's proportions are balanced and dynamic: 4.69 metres long and 1.81 metres wide. From side on, the swooping line of its flank adds to the impression of class and elegance. The chrome lines around the side windows form a fluid arch and reinforce the presence of the vehicle. The lower part is in harmony, with 16 to 18 inch wheel rims. In the saloon version, the flowing line continues as far as the boot, just below the LED rear lights, which give the car a characteristic "signature" light at night. Situated fairly high on the car, they contribute to the general impression of dynamism and reinforce the impression of the generous width of the vehicle. Traditionally associated with powerful engines, twin chrome exhaust pipes

are a reminder of quality mechanical engineering. Enhancing the fluidity of the lines, the radio antenna is fitted into the rear window.

A distinctive estate

Dynamic and modern, New Laguna Sport Tourer stands out due to the bold, sharp angle of its rear window. With a long surface of glass, the shape of the third side window enhances the sporty line. As an option, side and rear windows can be tinted, as can the roof bars, which reinforce the fluidity of the design. While the Sport Tourer shares the same 2.76 metre wheelbase as the saloon, its 4.80 metre length gives New Laguna Sport Tourer a unique, distinctive personality. At the rear, there is a boot volume of 501 litres in the five-seat configuration. Its ease of use offers the owner a load space of up to 1,593 litres, with multiple storage and configuration options.

Interior harmony and quality

Renault has worked on the accessories and the fittings, particularly with regard to elements in the body. For example, the bumpers have had work done both on their spread and shape. New Laguna's profile gives the immediate impression of robustness and quality. Contributing to the high level of watertightness and seal against dust, all the joints have been tightened and their appearance also improved so that they

are invisible or aesthetic. Taking advantage of the design of the sides of the car, the low swooping lines of the car allow it to offer anti-gravel chip protection, as do the technical parts on the undercarriage, which are invisible at over five metres. On the side of the body, the lines of the door have been simplified, which contributes to the impression of a smooth finish and harmony between the outside of the car and its interior.



Haircell leather is naturally used in the finish of the **Initiale**, either in a light colour or charcoal grey, in order to satisfy the most demanding of clientele. The light-coloured wood on the fascia is also found on the door panels.

Privilège offers a level of equipment and performance worthy of a top of the range vehicle. The "Élégance » velvet – leather trim is offered in charcoal grey or beige, to match the dark or bronze chrome.

In association with a metallic decor and seats with enhanced side stability, befitting the definition **Dynamique**, the leather – fabric trim (Alcantara® as an option) is in dark charcoal grey, enhancing its sporty credentials with a flat steering wheel and aluminium insert.

According to the country, the range is completed by **Authentique** or **Expression**, with a charcoal grey warp and weft trim and the latest-generation anti-whiplash headrests as standard.



Chapter 5 Reduced running costs

With an accessible purchase price, New Laguna has been designed to be competitive in its running costs as well. The car is positioned among the best in its sector, with attractive running, maintenance and repair costs, in particular due to its dCi 110 hp (81 kW) and dCi 150 hp (110 kW) engines.

Economically attractive

Attractive running, maintenance and repair costs for all customers. This was the challenge facing engineers and management at Renault. Renault's point of reference is the « Total Cost of Ownership », which takes into account the financial aspects linked to ownership of the vehicle (depreciation and residual value), its usage costs (taxes linked to its fuel consumption for example), and finally maintenance costs (tyre wear, services, etc). As far as residual value is concerned, linked to the quality of the product and its image, New Laguna holds its own in terms of intrinsic and perceived quality and its performance on the road.

New Laguna makes life easy for its owner. The service

intervals are longer, with an oil change every **30,000 km** for both **petrol and diesel engines** (with its new Oil Control System) et every **20,000 km** for **petrol Turbo engines**. Spark plugs and air and diesel filters are changed every 60,000 km, distribution and accessories belt every 120,000 km in the petrol engine and 160,000 km in the diesel version (except the 2.0 16v petrol and 2.0 dCi, with distribution chain guaranteed for life). The air and diesel filters have a life cycle of 60,000 km. In everyday use, all aspects of the engine offer reduced consumption. New Laguna has a twelve-year guarantee against corrosion, with, in particular, wax injections in the hollow parts of the shell.

OCS (Oil Control System)

The OCS (Oil Control System) permits longer distance intervals between oil changes. A warning light tells the driver if his style of driving is constrictive for the quality of oil : driving on poor surfaces or when towing for example. The messages « oil change due » and « oil change necessary » appear on the dashboard screen when the oil change is necessary. Diesel engines also have longer intervals between

changes : extended to one year or 30,000 km in normal conditions of usage.



New Laguna dCi 110 hp, first Renault eco2 vehicle in its segment

Best in class for New Laguna, this diesel engine 110 hp (81kW) consumes a mere 5.1 litres per 100 km (with emissions of 136 g of CO² per kilometre driven). This high-performance, reliable engine is suitable for the most demanding of usage, and is particularly suited to clients who travel long distances, offering maintenance solutions adapted to the owner. The 110 hp diesel version meets all the conditions of « Renault eco² ». This signature bears witness to the environmental measures taken by Renault, with a view to producing vehicles which fulfil, simultaneously, both ecological and economic criteria.

Signature "Renault eco² "

A « Renault eco² » vehicle fulfils three environmental criteria over its whole life cycle, from its inception to its recycling, taking into account also its life usage:

- CO² emissions lower than 140 g per km or vehicle operating on biofuels
- manufactured from a minimum of 5% recycled plastic material
- manufacture in an ISO 14001- certified factory



The 2.0 dCi engine : optimum driving pleasure, reliable and economical

A leader in performance and driving pleasure, this 150 hp (110 kW) engine is particularly well adapted to the performance of the New Laguna's chassis. It has a very competitive fuel consumption, with six litres per 100 kilometres and 158 g of CO₂ for the saloon in mixed cycle. Designed to meet the requirements of a demanding clientele, it is available with a manual or automatic gear box, with or without a particulate filter and a timing chain which does not need to be replaced. Soon it will be offered with a range of alternative technology which will reduce its emission thresholds still further (particulate air filter, new valve for the recycling of exhaust gas recirculation gases, development of the fuel injection system). This engine meets the criteria of the future Euro5 norm which come into force in two years time.

Respect for the environment

New Laguna has been designed to respect the recycling quotas : 85% recyclability, with 95% planned by 2015. From its inception, operating times necessary for recycling have been reduced, in particular to make accessible and identifiable all tanks where liquid needs to be changed. Materials are clearly and systematically labelled where plastics and elastic materials are concerned, as well as fused aluminium parts (bonnet, bumpers, thermal screens, etc...). The mousse in the seats is fabricated in a single block, having been made specifically for the purpose. 120 kg of New Laguna's total mass can be directly recycled. With more than 35 kg of recycled plastic and over 15 kg of reusable materials, New Laguna has become Renault's standard bearer in the domain of recycled material. More than 90 components are involved, principally in the undercarriage and many exterior accessories and interior parts, including the floor mats and boot decoration.

Chapter 6 New Laguna rises to the challenges

With New Laguna, Renault has made the commitment to be positioned in the Top 3 in terms of product and service quality. The company aims to attract a demanding clientele, thus taking the first step to repositioning Renault in the top sector of the market.

Excelling in the field of quality

Quality for Renault means customer satisfaction. In 2003, Renault set quality as its number one objective and launched the Renault Quality Plan. This first break-away plan aimed to reduce the wide difference among vehicle models and across the network and to standardise and, above all, perpetuate product and service.

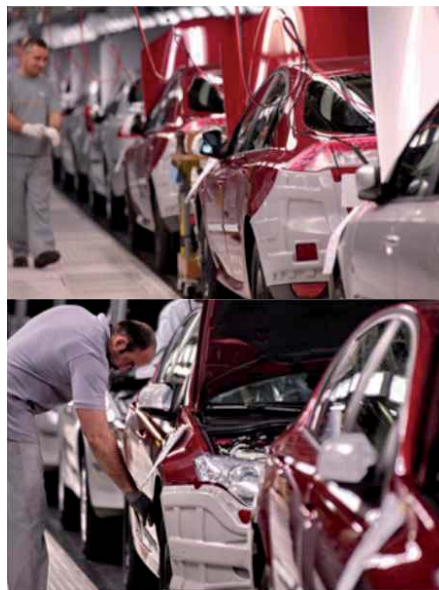
In order to consolidate the first results and to anchor quality excellence in the culture of the company, Renault launched the "Plan Excellence Renault" in 2005. This plan is divided into five points pertaining to the five axes relevant to jobs in the car industry. The Plan Excellence Renault 1 (PER1) has as its aim to "Design robust vehicles", the PER2 to "Produce compliant vehicles", the PER3 to "Increase reliability for all types of use", the PER4 to "Ensure sales and after-sales quality". Finally the PER5, aimed across the company, has as its aim to "Inculcate a lasting culture of quality within the company". These plans translate into measures which go into force from an early

stage (pre-vehicle project), right through to the final phase (the vehicle is no longer on the market and/or has been replaced by a new vehicle).

The Plan Excellence Renault has already borne fruit. The

variation in quality among the different products was greatly reduced between 2004 and 2006. Warranty costs have been reduced by 40% between 2005 and 2006 and the number of clients in the world who declare themselves « very satisfied with Renault's sales and after-sales service » rose from 71% to 75% in the course of 2006. Several Renault models are already in the Top 3 of their category for quality : after Modus, it was the turn of Clio III to take its place among the best of its category. The latest results published by JD Power CSI 2006 place Clio and Espace in the top three of their segment, and the

latest results published by Pannenstatistik ADAC (Germany) are very encouraging (Modus 3rd, Scenic 1st, a marked quality improvement for Laguna II).



Win over a demanding clientele in a market that is constantly changing

It is no easy task : to win the hearts and loyalty of the customers of the previous generation, to win back companies that have strayed elsewhere and to attract new clients – all in a market and a segment where the competition is fierce. Renault interviewed more than 9,000 clients in each of its five main European countries (Germany, Spain, France, Italy and United Kingdom) in order to understand their expectations, their general attitudes and opinions and specifically their opinions regarding vehicles.

Demanding consumers, the target customers appreciated pleasure and were attracted by brands. They look for quality and impeccable reliability, elegant, classic design but without ostentation. They appreciate a high-spec level, which contributes to making the driving experience more pleasant and easier.

Fleet clients, first and foremost, look for an attractive global cost on the whole-life cycle of the vehicle.

The New Laguna segment (M2) is demanding and traditionally dominated by specialist German manufacturers, with, in recent years, growth seen by Japanese manufacturers. With the effect of the development of new vehicle segments (people carriers, compact people carriers, SUVs) this segment has seen a decrease in Europe in the private car market, from 22% to 15% since the 1990s.

In 2006, the M2 segment market registered a drop of 3.5% in Western Europe. This drop has affected the vehicles in the segment in different ways: while the two leading manufacturers in the segment are seeing a sustained rise, the third manufacturer has recorded a slight drop.



Perfect the industrial system and its logistics chain

The Sandouville factory plays a key role in the success of the New Laguna. Its drive to improve quality started from the moment it put into practice the « Système de Production Renault (SPR) » - a new Renault production system which has been progressively deployed since 2003. Many concrete actions have been taken to inculcate quality at the heart of Renault's industrial system : particular attention has been paid to the management of suppliers, optimisation of operator training, reinforcement of a quality system and the implantation of systematic static and running tests after the car comes off the assembly chain. With more than 4,200 employees, and 7.7 million vehicles produced since 1964, the factory constitutes a major centre of employment and contribution to the economy of the Normandy region.

Prior to the arrival of the New Laguna, benchmark activities were carried out at the Nissan factories in Tochigi and Sunderland, as well as in the Renault factories in Flins and Valladolid, in order to capitalise on the latest, successful industrial launches, Clio III and Modus. The quality supervision plan was reinforced by the systematic analysis of all functions where there was a risk of error. For each of these, a checking process was put into operation, which operates from the suppliers until the car left the factory. The most complex functions (electronics, noise, geometry, water, air-tightness and engine box) were submitted to continual measurement and analysis.

The benchmarking operation, carried out against Nissan, helped to achieve an improved performance of the industrial system. One example is a rigorous quality standard system called the « AVES » (Alliance Vehicle Evaluation Standard) which comprises more than 500 evaluation criteria which was introduced to be carried out on a sample of vehicles when they

came off the assembly line.

The arrival of New Laguna at the Sandouville factory was greeted with enthusiasm by the factory's employees who are firmly committed to the vehicle's success. The Sandouville teams are committed to the project, from the realisation of the first numerical models created to ensure an optimal preparation. More than 160 employees from the factory have been moved to the "Centre de Réalisation des Prototypes Véhicules (CRPV) », the centre for the production of vehicle prototypes, and have worked on the improvement of the production process. All sectors in the factory (sheet metal, paint, assembly and quality) are thus involved in the production of New Laguna prototypes. In order to meet the variations of the production cycle and the major fluctuations of the markets, a solidarity between factories has been created. The 480 people who were relocated from Sandouville to other Renault sites during the lull in activity in 2006 and 2007, have now been reintegrated in the factory in preparation for an increase in activity.

The quality of the end product which emerges from the factory is dependent on the standard of quality from early on in the process. With New Laguna, the system of quality management of suppliers has been intensified. Renault has actually investigated as far as four stages along the chain of supply in order to identify risks and find a solution for them. The "Service Qualité Fournisseur" (SQF), the supplier quality service, is involved from very early on in the project in order to ensure that all suppliers are capable of committing, as Renault does to its suppliers, to meet a level of conformity of parts, which is clearly defined and set out in advance and which is, moreover, extremely demanding. This commitment must be made from day one.

New Laguna : a demanding, high-performance and profitable project

Developed in 32 months, Laguna necessitated an investment of more than **one thousand million euros**. Renault has devoted one thousand million and 52 million euros upfront costs for New Laguna, compared to approximately the same amount for the previous generation Laguna.

The costs are divided up as follows:

- **606 million euros** study costs,
- **407 million euros** industrial investments, of which half in Sandouville and the other half at suppliers for specific tools and processes
- **39 million euros** start-up costs.

In order to figure in the Top 3 in the field of quality, Renault gives priority to client requirements, while ensuring that costs are kept under control.

The study costs bear witness to a demanding brief, orientated at an improvement in performance; for example: strengthening of safety elements, a completely new air conditioning system, storage in the back armrests, an attractive interface of the radio and navigation system, high-quality sound system, bi-xenon headlights, rearrangement of the boot space to create a hatchback... National laws have also put demands on the styling of the front of the car, taking into account the pedestrian crumple zone. Taking environmental considerations into account, such as the Euro5 pollution regulations and the adaptation of engines to biocarburant fuels has had a significant impact on development costs. The study costs also bear witness to Renault's wish to offer a broad range of diesel engines from

entry level versions with an automatic gear box, notably on the 2.0 l diesel engine and taking into consideration the international versions to be launched six months after Europe.

In spite of all these factors, the carry-over and essential investment have allowed Renault to limit entry-ticket costs. For example, reuse of existing parts in the undercarriage have allowed a cost reduction of **100 million euros**. The industrialisation of the two versions on the same production line and the rationalisation of production tools has also contributed to optimisation of costs.

The **407 million euros** of industrial investments are divided up as follows :

- **207 million euros** ringfenced for production of specialist tools.
- **94 million euros** for stamping tools at the Sandouville factory
- **62 million euros** in sheet metal, corresponding to costs of adaptation of the old line of Laguna II to New Laguna.
- **44 million euros** shared between power train, assembly, ACI ground link, exhaust system and paint.

New Laguna was entirely developed at the Renault Technocentre : **32 months** have gone by since the initial design and the green light for manufacturing. The choice of design, in autumn 2004, made it possible to draw up the contract, an important step which necessitated the commitment of each department, with the support of selected suppliers, for a price : performance level within the

framework of detailed planning. The parts were then designed in the smallest detail, in order to check their suitability. At the same time, all Renault's wealth of experience in the field of quality was invested in the project in order to obtain top-quality results.

On 1st September 2005, the «RO» stage for the production of equipment and tools, marked the start of said production. A significant proportion of the investment was committed. The ensuing months were dedicated to the production of these tools and then to the first parts. The next step, AMSlot, marked the production of the first vehicle prototypes : all the vehicle parts were available and had been produced by the « finished article » tools. It was time to start the assembly line for the first cars. These were produced at the « Centre de Réalisation des Prototypes Véhicules » (CRPV), the centre for the production of vehicle prototypes, in order to validate the product and the process without disrupting production in the factory. The teams from the Sandouville factory who had been relocated to the CRPV had the opportunity, at this stage, to make suggestions for improvements. The first vehicle was driven in April 2006,

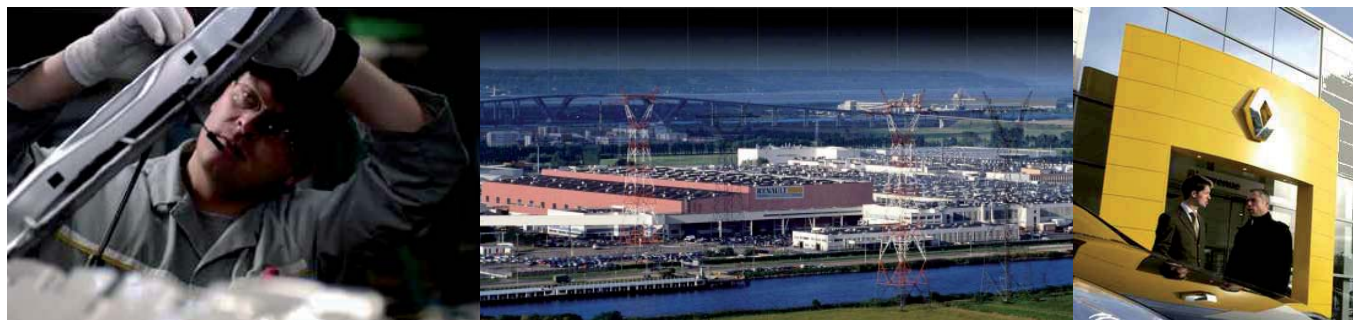
marking the start of the final production phase.

For more than six months, the prototypes were tested and analysed in order to make any adjustments to their parameters, however small : shock absorbers, rubber stiffness, engine calibration,...

On 22 December 2006, the vehicle went to the factory. The first pre-series cars were assembled on the same assembly line as Laguna II, with an excellent standard of quality.

During June 2007, the Manufacturing Agreement registered that the standard of quality required from Renault and from its suppliers had been reached. It authorised an increase in the rate of production.

New Laguna plays an important role in the attainment of the three commitments laid out in Renault Commitment 2009: Quality, Profitability, Growth. It will make a major contribution to restoring confidence in the quality of Renault's products and services, by positioning itself among the top three of its category. In terms of sales figures, New Laguna will achieve its objectives with regard to retaining and creating customer loyalty.





TECHNICAL CHARACTERISTICS New Laguna Hatch & Sport Tourer	Petrol		Diesel						
	2,0 16V	2,0 turbo	1,5 dCi	2,0 dCi 130		2,0 dCi 150		2,0 dCi 175	
Engine	M4R 704	F4Rt 811	K9K 780	M9Ra 742	M9Rk 802	M9Ra 742	M9Rk 802	M9Rk 805	M9Rk 800
Engine Type	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4
Emission regulation									
With particulate filter (FAP)	-	-	-	-	FAP	FAP	FAP	FAP	FAP
№ of cylinders / valves	4 / 16	4 / 16	4 / 8	4 / 16	4 / 16	4 / 16	4/16	4 / 16	4 / 16
Injection type	Multipoint / sequential		Diesel - Direct Injection Common Rail 1600 bars						
Balancing shaft	No	No	No	No	No	No	No	Yes	Yes
Engine Capacity (cc)	1997	1998	1461	1995	1995	1995	1995	1995	1995
Bore x Stroke (mm)	80 x 90,1	82,7 x 93	76 x 80,5	84 x 90	84 x90	84 x 90	84 x 90	84 x 90	84 x 90
Compression ratio	10,2 : 1	9,5 : 1	15,6 : 1	16 : 1	16 : 1	16 : 1	16 : 1	16 : 1	16 : 1
Maximum Power - kw ISO (Rpm)	103 (6000)	125 (5000)	81 (4000)	96 (4000)	96 (4000)	110 (4000)	110 (4000)	110 (4000)	127 (3750)
Maximum Power - hp DIN	140	170	110	130	130	150	150	150	175
Maximum Torque - Nm ISO (Rpm)	195 (3750)	270 (3250)	240 (2000)	320 (2000)	320 (2000)	340 (2000)	340 (2000)	340 (2000)	380 (2000)
Maximum revs (engine)	6400	6250	5000	5200	5200	5200	5200	5200	5200
Valve Gear									
Drive	chain	belt	belt	chain	chain	chain	chain	chain	chain
Variable valve timing	yes	no	no	no	no	no	no	no	no
Induction									
Turbo charged	-	yes	yes	yes	yes	yes	yes	yes	yes
Variable geometry turbo/twin scroll	-	twin scroll	variable	variable	variable	variable	variable	variable	variable
- Intercooler	-	-	yes	yes	yes	yes	yes	yes	yes
- Turbo pressure	-	-	2,65	2,5	2,5	2,6	2,6	2,6	2,8
Servicing									
Service intervals	18,000 miles / 1 year	12,000 miles / 1 year	18,000 miles / 1 year	18,000 miles / 1 year	18,000 miles / 1 year	18,000 miles / 1 year	18,000 miles / 1 year	118,000 miles / 1 year	18,000 miles / 1 year
Gearbox									
Gearbox Type	TL4	AJO	TL4	PK4	PK4	PK4	PK4	AJO	PK4
Manual gearbox	6 speeds	-	6 speeds	6 speeds	6 speeds	6 speeds	6 speeds	-	6 speeds
Automatic gearbox	-	6 speeds	-	-	-	-	-	6 speeds	-
Final gear	16/69	1/3,804	15/59	19/64	19/64	19/64	19/64	1/3,36	17/64

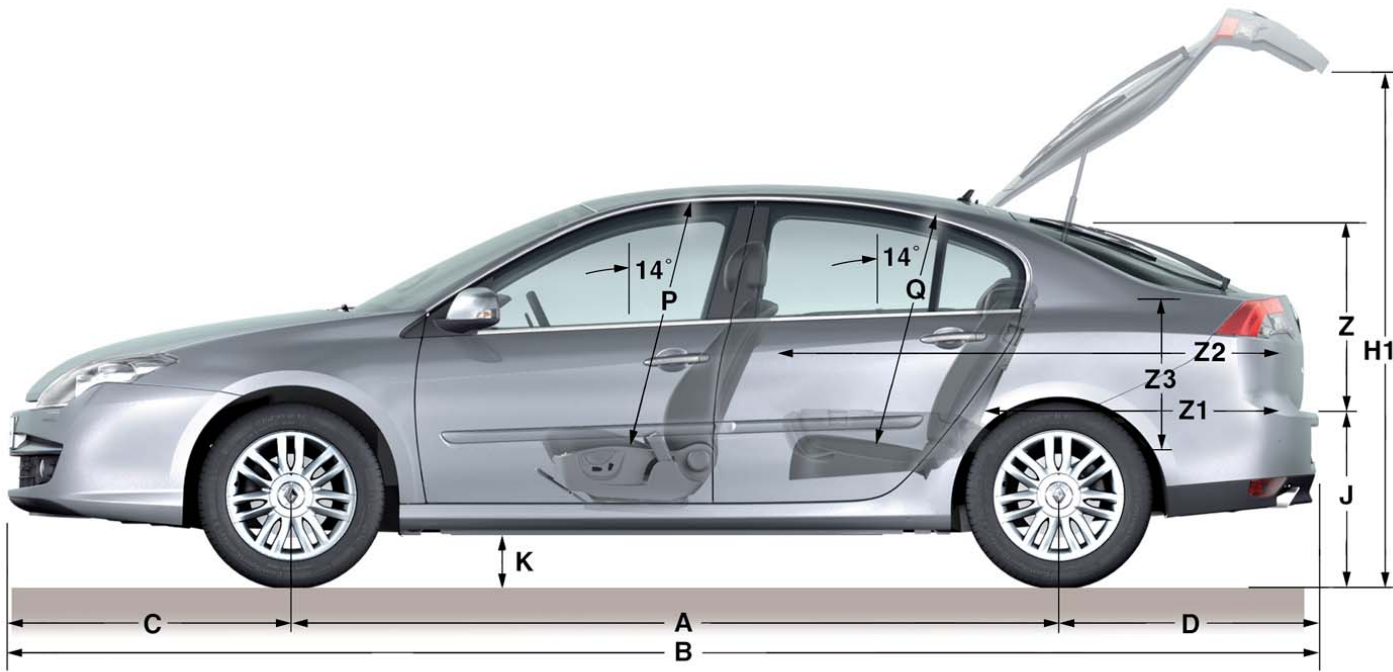
TECHNICAL CHARACTERISTICS New Laguna Hatch & Sport Tourer	Petrol		Diesel						
	1,6 16V *	2,0 turbo	1,5 dCi	2,0 dCi 130		2,0 dCi 150			2,0 dCi 175
Engine	K4M 824	F4Rt 811	K9K 780	M9Ra 742	M9Rk 802	M9Ra 742	M9Rk 802	M9Rk 805	M9Rk 800
Engine type	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4
Emission regulation									
Vehicle Speeds (km/h) @ 1,000 rpm									
- 1 st	8,17	7,42	7,99	9,00	9,00	9,00	9,00	8,4	8,15
- 2 nd	14,12	12,96	15,29	16,72	16,72	16,72	16,72	14,67	15,14
- 3 rd	19,74	19,68	22,51	25,37	25,37	25,37	25,37	22,29	22,98
- 4 th	24,67	26,84	30,54	34,4	34,4	34,4	34,4	30,38	32,67
- 5 th	30,07	36,43	39,02	43,24	43,24	43,24	43,24	41,24	42,16
- 6 th	35,82	45,44	46,65	52,23	52,23	52,23	52,23	51,44	49,94
- Rear	8,35		8,08	9,6	9,6	9,6	9,6		8,7
Front suspension									
Suspension type	Mac Pherson								
Front Anti-roll bar (ø en mm)	24	24	24	24	24	24	24	24	24
Front axle stiffness + 2 (m.daN/°)	136,0	142,3	138,1	142,3	144,5	144,5	144,5	147,0	144,5
Front shock absorber type / ø body et ø stem	Bitube / ø 50, ø 22								
Non suspended weight by side (kg)	54,5	54,5	54,1	54,5	54,5	54,5	54,5	54,5	54,5
Rear suspension									
Suspension type	Autodirectionnal flexible axle in "H"								
Front anti-roll bar ø (mm)	28,8	29,6	28,8	29,6	29,6	29,6	29,6	30,5	29,6
Rear axle stiffness + 2 (m.daN/°)	111,1 / 119,1	119,0 / 127,0	111,1 / 119,1	117,6 / 125,6	119,0 / 127,0	119,0 / 127,0	119,0 / 127,0	127,2 / 135,2	119,0 / 127,0
Rear shock absorber type / ø body et ø stem	Bitube / ø 45, ø 12,5								
Non suspended weight by side (kg)	48,25	48,25	48,25	48,25	48,25	48,25	48,25	48,25	48,25
Braking System									
Front ø / width (mm)	296 / 26	296 / 26	280 / 24	296 / 26	296 / 26	296 / 26	296 / 26	295 / 26	296 / 26
Brake callipers (mm)	Front brake discs - piston diameter 57								
Rear ø / width (mm)	300 / 11	300 / 11	300 / 11	300 / 11	300 / 11	300 / 11	300 / 11	300 / 11	300 / 11
Brake callipers (mm)	Rear brake discs - piston diameter 38								
ABS	std	std	std	std	std	std	std	std	std
EBV	std	std	std	std	std	std	std	std	std
ESP + CSV + ASR	std	std	option	std	std	std	std	std	std

TECHNICAL CHARACTERISTICS New Laguna Hatch & Sport Tourer	Petrol		Diesel						
	2,0 16V	2,0 turbo	1,5 dCi	2,0 dCi 130		2,0 dCi 150		2,0 dCi 175	
Engine types	M4R 704	F4Rt 811	K9K 780	M9Ra 742	M9Rk 802	M9Ra 742	M9Rk 802	M9Rk 805	M9Rk 800
Emission regulation	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4

Steering										
Power assisted	Hydraulic by electro pump	Hydraulic variable	Hydraulic by electro pump	Hydraulic by electro pump	Hydraulic variable	Hydraulic variable	Hydrolic variable	Hydraulic variable	Hydraulic variable	
- number of steering turns between Kerbs	2,9	2,9	2,9	2,9	2,9	2,9	2,9	2,9	2,9	
Turning circle between Kerbs/Walls (m)	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	11,05 / 11,64	
Turning circle between Kerbs/Walls (m) with 18" wheels	11,40 / 12,05	11,40 / 12,05		11,40 / 12,05	11,40 / 12,05	11,40 / 12,05	11,40 / 12,05	11,40 / 12,05	11,40 / 12,05	
Weight										
Kerb weight	1369 / 1390	1467 / 1488	1386 / 1407	1462 / 1483	1480 / 1501	1480 / 1501	1480 / 1501	1536 / 1557	1492 / 1513	
- on the front - Hatchback / Sport Tourer	846 / 839	947 / 940	868 / 861	949 / 942	959 / 952	959 / 952	959 / 952	1018 / 1011	973 / 966	
- on the rear - Hatchback / Sport Tourer	523 / 551	520 / 548	518 / 546	513 / 541	521 / 549	521 / 549	521 / 549	518 / 546	519 / 547	
Gross Vehicle Weight	1919 / 1940	1961 / 1995	1936 / 1957	2012 / 2033	2025 / 2051	2025 / 2051	2025 / 2051	2021 / 2055	2042 / 2063	
Gross Train Weight	3219 / 3240	3261 / 3295	3236 / 3257	3512 / 3533	3525 / 3551	3525 / 3551	3525 / 3551	3521 / 3555	3542 / 3563	
Payload (MMAC - VODM) min/max - Hatchback	435 / 550	400 / 494	441 / 550	438 / 550	433 / 545	433 / 545	433 / 545	400 / 485	440 / 550	
- Sport Tourer	425 / 550	401 / 507	430 / 550	427 / 550	427 / 550	427 / 550	427 / 550	400 / 500	430 / 550	
Maximum towing weight (braked)	1300	1300	1300	1500	1500	1500	1500	1500	1500	
Maximum towing weight (unbraked)	650	650	650	650	650	650	650	650	650	
Boot volume with rear seats in place / Whith rear seats down (dm³) - Hatchback	450 / 1377	450 / 1377	450 / 1377	450 / 1377	450 / 1377	450 / 1377	450 / 1377	450 / 1377	450 / 1377	
Boot volume with rear seats in place / Whith rear seats down (dm³) - Sport Tourer	508 / 1593	508 / 1593	508 / 1593	508 / 1593	508 / 1593	508 / 1593	508 / 1593	508 / 1593	508 / 1593	
Tyres										
Spare wheel	185/65 R 16	185/65 R 16	185/65 R 16	185/65 R 16	185/65 R 16	185/65 R 16	185 / 65 R 16	185/65 R 16	185/65 R 16	
Tyres Reference	195/60 R 16 205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	215/55 R 16 215/50 R 17 225/45 R 18 215/60 R 16	195/60 R 16 205/60 R 16 215/50 R 17 215/60 R 16 (SUSREN) 215/55 R 17 (SUSREN)	205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	205/60 R 16 215/50 R 17 225/45 R 18 215/60 R 16	215/55 R 16 215/50 R 17 225/45 R 18 215/60 R 16	215/55 R 16 215/50 R 17 225/45 R 18 215/60 R 16
Capacity										
Fuel tank litres	66	66	66	66	66	66	66	66	66	
Oil reservoir capacity - Litres	4,2	5,4	4,5	6,6	6,6	6,6	6,6	6,6	6,6	

TECHNICAL CHARACTERISTICS New Laguna Hatch & Sport Tourer	Petrol		Diesel						
	2,0 16V	2,0 turbo	1,5 dCi	2,0 dCi 130		2,0 dCi 150			2,0 dCi 175
Engine	M4R 704	F4Rt 811	K9K 780	M9Ra 742	M9Rk 802	M9Ra 742	M9Rk 802	M9Rk 805	M9Rk 800
Engine Type	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4	Euro 4
Emission regulation									
PERFORMANCE									
Aerodynamics : Cx - Hatchback / Sport Tourer	0,293/0,316	0,293/0,316	0,293/0,316	0,293/0,316	0,293/0,316	0,293 / 0,316	0,293 / 0,316	0,293/0,316	0,293/0,316
Aerodynamics : SCx - Hatchback / Sport Tourer	0,645/0,696	0,645/0,696	0,645/0,696	0,645/0,696	0,645/0,696	0,645/0,696	0,645 / 0,696	0,645/0,696	0,645/0,696
Weight/power ratio (kg/hp) - Hatchback	9,78	8,63	12,60	11,25	11,38	9,87	9,87	10,24	8,53
Weight/power (kg/hp) - Sport Tourer	9,93	8,75	12,60	11,41	11,55	10,01	10,01	10,38	8,65
Acceleration									
0-62 mph (0-100kph) in seconds	9"10/9"30	9"20/9"40	12"10 / 12"30	10"60 / 10"80	10"60 / 10"80	9"50 / 9"70	9"50 / 9"70	9"80 / 10"	8"70 / 8"90
Standing quarter mile (400m) in seconds	16"60/16"70	16"70/16"80	18"30 / 18"40	17"50 / 17"60	17"50 / 17"60	16"80 / 16"90	16"80 / 16"90	17"00 / 17"10	16"40 / 16"50
Standing 1000m in seconds	30"20/30"50	30"20/30"50	33"30 / 33"60	31"90 / 32"20	31"90 / 32"20	30"60 / 30"90	30"60 / 30"90	31"00 / 31"30	29"80 / 30"10
Maximum Speed (kph)	210 / 205	220 / 215	192 / 187	204 / 200	204 / 200	210 / 211	210 / 211	210 / 205	220 / 215
- Acceleration 80-120 km/h 5th gear / 6th gear - Hatchback	10"70/14"30	7"70	11"50 / 15"	10"80 / 14"10	10"80 / 14"10	9"20 / 12"10	9"20 / 12"10	8"10	7"80 / 9"80
- Acceleration 80-120 km/h 5th gear / 6th gear - Sport Tourer	10"90/14"90	7"90	11"70 / 15"60	11" / 14"70	11" / 14"70	9"40 / 12"70	9"40 / 12"70	8"30	8" / 10"40
Fuel consumption (80/1268/CE Norm)									
Urban Cycle	10,7	13	6,1	7,8	7,8	7,8	7,8	9,6	8,6
Extra Urban Cycle	6,3 / 6,5 *	6,6 / 6,7	4,6 / 4,8	5,1 / 5,2	5,1 / 5,3	5,1 / 5,3	5,1 / 5,3	5,6 / 5,7	5,4 / 5,5
Combined Cycle	7,9 / 8 *	8,9	5,1 / 5,3	6,1	6 / 6,1	6 / 6,1	6 / 6,1	7 / 7,1	6,5 / 6,6
CO ₂ emission (g/km)	185 / 189 *	210	136 / 139	158 / 160	158 / 160	158 / 160	158 / 160	185 / 188	172 / 174

* Only available on Sport Tourer versions in Nordic Countries



Dimensions New Laguna		HATCH	SPORT TOURER
B	Overall length	4695	4803
G	Overall width with door mirrors folded	1811	1811
G1	Overall width with door mirrors extended	2060	2060
H	Unladen height	1445	1445
A	Wheelbase	2756	2756
C/D	Front overhang / Rear overhang	1014 / 926	1014 / 1031
E/F	Front track / Rear track	1557 / 1512	1557 / 1512
K	Ground clearance, laden	>120	>120
H1	Height with hatch up	1900	1900
J	Unladen sill height	711	546
N	Front elbow width	1487	1487
N1	Rear elbow width	1490	1490
M	Front shoulder width	1440	1440
M1	Rear shoulder width	1400	1400
P	Front headroom at 14 degrees	890	890
Q	Rear headroom at 14 degrees	842	895
R	Rear legroom	220	220
Y	Upper width of boot opening	870	890
Y1	Lower width of boot opening	910	1030
Y2	Width between wheelarches	1000	1000
Z1	Maximum load length (seats in place)	1005	1120
Z2	Maximum load length (seats down)	1805	1910
Z3	Height under parcel shelf	470	436

