



### ***Lamborghini Murciélago 6.2, magnificent V12 power ...***

When Audi took over, the Diablo replacement was nearly ready in Sant'Agata, the Zagato designed model that Vittorio di Capua, the president of Automobili Lamborghini SpA at that time, wanted to call 'Canto' was about to enter production, but Ferdinand Piëch didn't like this design, it featured giant air intakes at the rear and just wasn't what Dr Piëch expected from a Lamborghini, so he decided to have the Diablo successor redesigned.

Dr. Piëch asked for a new proposition from the Audi design department, this one would be compared with a reworked Zagato Canto, a design from I.D.E.A. and a third prototype that was ordered from the Bertone design studio's. Zagato's new design was again rejected, also the I.D.E.A. model wasn't what Dr Piëch had in mind, so the Bertone design and the one from Audi would be used. At this moment, time was running out on the Diablo replacement, so a restyling of the current Diablo model was needed, before the focus could be directed to the new model. The Audi designer Luc Donckerwolcke was asked to update the aging style of the Diablo, so he created the refreshing 6.0 VT model, when we look at it, now that the L147 is shown, it is clear this model was a preview of what Lamborghini was about to present as a successor.

'A Lamborghini isn't just designed and presented to the public like a normal car, it is born from below the earth, like a volcanic eruption, under thundering lightning it will emerge from the dark ...'

The new Lamborghini, which was known only as the L147 project during development, was first unveiled during an awesome show at the foot of the Etna volcano on Sicily, a select group of about 200 people were flown to Sicily on Friday to participate in the most impressive release of any Lamborghini model ever. On a closed down section of road on the Northern face of the Etna an entire stage was built for a special, 45 minutes show that would present the L147 to this small group of journalists, Lamborghini dealers, all-time owners, VIP's and celebrities, Prince Albert from Monaco was actually invited, but unfortunately couldn't make it.

At 10pm on Friday evening, the guests were driven to this area at a height of 1500m, it was very cold and windy, but still the stunning event would show the new Lamborghini emerging from the earth. The show used the 'Seven Mortal Sins' as a theme and featured music composed especially for the occasion, a series of dancers symbolized these 'Sins' while a 4min30 introduction movie of the new Murciélago was projected on a giant screen, special lightning and thundering sound effects were combined with artificial lava streams and smoke effects.

This very nice movie was actually recorded in the Andes mountains and took a total of eight days to complete and a massive budget, it can be downloaded from various sites.

At the end of the show, a brand new, black metallic Lamborghini drove by the audience at 90 Km/h while the giant screen showed the name, 'Murciélago', an extreme name for an extreme car, the latest Lamborghini model, for the first time under the mighty Audi wings.

Two other cars joined the festivities, another black one and a yellow one, the cars would be shipped to Frankfurt on Saturday morning to be shown to the general public.

At 9am on Saturday, this group of people flew back to Sant'Agata to take part of the press conference held at the factory during the afternoon, while at 5pm a large group of Lamborghini owners and fans were allowed into the factory which had been closed to all visitors for months while it was being renovated and made ready to take over the production of the Diablo successor.

Automobili Lamborghini SpA actually invited owners and enthusiasts from all over the world to witness the unveiling of their new model during a special event on September 8th at the factory, on Sunday morning the car would be shown on the town square of Bologna to the public together with a large selection of stunning Lamborghini's that were present, over 180 different cars were at the factory that weekend, most of them joined the Murciélago in Bologna.

It was possible to take a look on the factory floor and visit the brand new official museum and restoration department before a special show was organized to unveil the brand new, long awaited Lamborghini, Mr Guiseppo Grecco himself announced the Murciélago at 7 pm on Saturday evening, when it was driven onto a stage in a secured section of the factory floor, a shining, 'Miura' green metallic Lamborghini was presented, while two other cars, a black one and a yellow one, were simultaneously unveiled in the large entry hall of the factory.

As usual with Lamborghini, the 'Murciélago' name was taken from bullfighting, during a fight in 1879, this legendary bull was still standing after 24 stabs from the 'espada', the matador's sword. Pressured by the audience, this fierce bull was kept alive, later it was acquired by Don Antonio Miura, yes, the guy that bred the famous Miura bulls that named the very first mid-engine road car, the magnificent Lamborghini Miura.

The rather controversial styling of this new Lamborghini stirred some emotions from both owners and enthusiasts all over the world, it is true that the refreshing new Murciélago design wasn't created by an Italian, but by Luc Donckerwolcke, who was also present at the presentation at the factory. At first Donckerwolcke supervised the design together with a team of Bertone designers, but this combination didn't work out so it was decided to end this partnership and the new Lamborghini would be designed by Luc Donckerwolcke himself.

This 36 years old, Belgian designer, was raised in Peru, where his father was working as a diplomat, he first got an engineering degree before he successfully followed a degree in design. He ended up at Peugeot and a year later, during 1992 he joined Audi AG, where he designed the stunning A4 Avant, after that he was responsible for the new designs at Skoda, where the Fabia and Octavia were drawn by him.

He returned to Audi to design the aluminum A2 model and the R8 Le Mans race car, he can also be held responsible for the prototype shown by Audi during the 1998 Paris Auto Show, it was in fact during that show that his bosses, among them Peter Schreyer, called him into an office and proposed him to design a car in a foreign country, Luc actually had to decide what to do without knowing Mr Schreyer was talking about Lamborghini, when Donckerwolcke accepted he sure didn't regret this decision.

Donckerwolcke wanted to create the ultimate Lamborghini, a combination of the best Automobili Lamborghini SpA offered until now, the Murciélago boasts a rather angular design, one could say it looks like a direct successor to the Countach, using similar angular lines at the front, although completely up to date. Some Diablo influence was also visible in the rather forward driving position, while the engine cover reminds us of the legendary Miura, it is therefore safe to say, that even if it wasn't designed in Italy, the design still uses some details from the most famous Lamborghini models in the past to take the new Lamborghini model ahead into the future.

The styling of the Murciélago could be seen as an evolution of the last Diablo model, but it is clearly visible this new car featured a very clean design with a highly professional look, also the Murciélago still uses the wedge shape bodystyle with the cockpit completely integrated into the overall body. The design featured very angular lines, especially at the front, combined with magnificent curves and covered with various air intakes and outlets to cool the massive brakes and fabulous V12 engine. Lamborghini even revived the stunning 'Miura green' color on this new model. Note that there is no signature of the designer found on the car, not like on the early Diablo, where Marcello Gandini's signature was mounted on the side.

Donckerwolcke actually involved the Lamborghini engineers into the design, asking

them what they needed and expected, their input considerably styled the bodywork, since they actually asked for the massive air intakes in the front bumper and the shoulder mounted intakes to cool down the massive, new 6.2-Liter V12.

The engine in the Murciélago was still closely related to the famous V12 that roared into life over 30 years ago, but now used the latest technology in motor management. Also a dry sump lubrication was used on this 6.2 liter unit, which allowed the engine to be lowered a full 50 mm in the chassis, improving the weight ratio and roadholding capabilities of the new Lamborghini.

The extra power was mainly created by using electronically controlled, tubular intakes with three different lengths, a by-pass valve and variable intake and exhaust valve settings, the induction system was in fact closely based on the one used in the very rare Diablo Jota edition, the Murciélago also featured a 'drive by wire' throttle, all of which made the new engine comply with the strict EU4 emission standards. At only 2000 rpm a massive torque of 400lb ft was already delivered, according to Ceccarani Lamborghini had been working for seven years on this system, they even developed a special exhaust system that wouldn't reduce the power output and still wasn't too loud for certain markets.

At first the Murciélago would use the 6.0 liter engine used in the Diablo 6.0 VT, but Lamborghini's Engineering Director, Massimo Ceccarani didn't think the possible customers would like the fact that the latest Lamborghini used an engine with the same displacement as the 'older' model. Therefore they decided to create a 6.2 liter unit, three prototype engines were tested on the Lamborghini test benches and proved to be extremely reliable, note that this new engine had an enlarged stroke of 86.8 mm resulting in a displacement of exactly 6192cc.

Torque output was very important in the development of this new engine, a very flat curve and a value of 650 Nm at 5400 rpm with a power output of nearly 600 Bhp was the result, however the placement of the radiators to cool this 'hot-blooded' powerplant at the rear of the car caused some headaches to Luc Donckerwolcke.

Enough cool air was needed to flow through the engine compartment, but the amount of air needed varied depending on the outside conditions and the cars actual speed, so installing intakes that would supply enough air, even at the most extreme conditions would be overkill, several options were tried and Luc finally decided on a system that was used in the Countach Restyling prototype, adjustable intakes, these were designed to be neatly integrated into the overall Murciélago design.

When conditions require it, these air intakes actually open up about 20 degrees to allow more air into the engine compartment, the intake surface is thus increased by no less than 80 percent.

Most of the time the intakes will only be raised when the car is at rest or driving slowly because at speed the intakes are sufficient in their lowered position, the positioning is naturally fully automatic, although a dashboard mounted button can also raise them, just to impress the guy next to you. The intakes would automatically open when the engine temperature rose above normal operating levels or when the outside temperature was above 32C, also once the speed of the car reaches 125mph, they would be retracted again to improve the aerodynamics of this Lamborghini.

The Lamborghini Murciélago will currently only be available in the well known VT

version, a right hand drive version will become available during 2002 with a Roadster version following in 2004, when the new L140 V10 powered model will also be introduced for which both Luc Donckerwolcke and Giorgetto Giugiaro have made designs.

This new model, which could very well use the 'Gallardo' name, will be built on a aluminum spaceframe with an alloy body. Just like with the Jalpa in it's time, this new Gallardo bodywork will be built at an Audi plant in Neckersulm, from where the finished body shells will be shipped to Sant'Agata for finishing.

One can say without a doubt that the new Lamborghini model was probably the most developed model ever built by Automobili Lamborghini SpA, with the help of Audi this Lamborghini was thoroughly tested and re-tested, until everything was exactly to way it should be. The Murciélago had been tested in the most extreme environmental conditions, this was actually a first for Lamborghini, since the previous models were all tested on the roads surrounding Sant'Agata and on the Nardo circuit. The Murciélago was even taken to a deserted area in the United States to be tested in very high temperatures and at a very low humidity, just to make sure it would perform up to the specifications, no matter under which conditions.

Another note is that there were only 5 Diablo prototypes built before production began, while a total of twelve Murciélago road going test cars were made, with different bodies naturally, another four units were built to perform crash tests and airbag tests, the Murciélago was tested on the Nürburgring and various test circuits from VW and Audi while top speed tests were conducted on the Nardo and the Imola circuits.

This new Lamborghini drove like no other model ever before, featuring a variable suspension with double wishbones both at the front and the rear, using automatic or manual adjustment, while the nose could be raised by 45mm when driving over speedbumps, and an adjustable rear wing would raise itself when speeds rose, it also used the latest technology available at that day, drive by wire to name but one, but also a Variable Intake system with very impressive air intakes mounted on the rear shoulders. According to Maurizio Reggiani, the man who supervised the L147 project, the near perfect 48/52 % weight distribution of the Murciélago made it perform extremely well under hard braking and accelerating while remaining very stable under all conditions.

The massive, cross drilled disc brakes were covered with new 18 inch wheels, also designed by Luc Donckerwolcke, they remind us of the first Bravo style wheels used on the early Countach S models, naturally now in a multi-piece design, these wheels used a special design to maximize the cooling effect of the disc brakes, the tire size at the front was slightly enlarged compared to the Diablo, while the rear wheels were still covered with massive 335/30 ZR 18 Pirelli's, only for the Murciélago the new Pirelli P Zero 'Rosso' was chosen.

For the first time in Lamborghini history, a six speed gearbox was installed as standard issue, it could however be ordered with an optional, short ratio gearing for the four upper speeds, also a completely automatic by Magnetti Marelli manual gearbox is under development right now.

A special system was installed to limit wheel spin when accelerating fast, also the self blocking differentials were still used on the Diablo derived ViscoTraction system, 25% at the front axle, while 45% was used at the rear, a further development of the ABS system seen on the Diablo has been integrated into the Murciélago.

The Murciélago featured a very low drag coefficient and actually has zero lift at the front and only 0,02 percent downforce at the rear, a Cx of only 0.33 which would rise to 0.36 when the air intakes were in their open position and the rear wing was engaged at it's highest level. This rear wing sat completely flush with the bodywork until the car reached 130 Km/h, at which time it rose itself to it's first position at 50 degrees, around 220 Km/h it would raise itself a little further to its most upright position of 70 degrees were it would generate enough downforce for the Lamborghini to remain extremely stable, even at speeds over 330 Km/h.

The impressive front spoiler of the new Lamborghini incorporated some very large, rectangular air intakes, while the rear bumper also received large air extractors, a rather special intake was mounted in front of the rear wheels, pulling air onto the massive, ventilated and perforated disc brakes. The new Lamborghini featured Bi-Xenon headlight underneath square shaped covers, note that the small black section in front of them actually holds the special washers to clean the headlights.

A nice anecdote was found in one of the first magazine articles featuring the new Lamborghini, in the October 2001 issue of the UK based EVO magazine, they stated the next thing happened when Valentino Balboni saw the first L147 prototype designed by Donckerwolcke built as a full scale model, when the latter was introduced to Balboni, the famous test driver actually said to Donckerwolcke he was the guy who designed the engine cover, Luc replied by 'no, no, I designed the entire car' and Valentino replied without a doubt, 'sure, we'll built the engine and you'll design the cover around it'.

The interior of the Murciélago was also designed by an Audi employee, Ralph Kluge, who was involved in the Audi Rosemeyer concept car, the ergonomically perfect dashboard and seats were all new, the very luxurious interior featured dual airbags, an on-board computer and all the comfort anyone would like to have, special, new seats with integrated headrests were installed, a stunning two tone leather upholstery was optionally available.

Some minor switches were taken from the Audi parts catalog, like the mirror controls, but most parts have been designed and created solely for this Lamborghini. The interior became much roomier, mainly because of the enlarged wheelbase, a very clean dashboard which features an audio system created especially for this Lamborghini, a DVD based satellite navigation system was still available as an option however, compared to the Diablo the passengers have 40mm more headroom and about 25mm more space at the shoulders, a fully adjustable Momo steering wheel could be adjusted both in rake and tilt, combined with very stylish seats, nearly everyone could find a suitable driving position inside this stunning Lamborghini.

On the 2003 IAA Frankfurt Auto Show the Murciélago was shown with an optional e-gear, a sequential gearbox first seen on the Gallardo.

Note that the opening angle of the doors was enlarged by 5 degrees, while the sills were about 25mm lower than those on the Diablo. When we further compare both models, we'll notice the Murciélago has a 15mm longer wheelbase and used enlarged tracks, the new Lamborghini sits about 25mm taller, 5mm wider and 110mm longer while it also gained some 25 kg in the process. The bodywork is made from Carbon Fiber, only the roof and both doors are made of steel to improve rigidity.

For a price around the same level as the previous Diablo 6.0 VT, around US \$ 205,000, the new Murciélago was bound to become a success, Automobili Lamborghini SpA was counting on building nearly 400 units each year, this would make the Murciélago a very important competitor when compared to Ferrari or any other marque, although most competitors are more a GT while the Lamborghini is really a supercar in the purest meaning of the word, and with the workmanship and finishing level we all know from Audi, we can only expect the best from this new model from Sant'Agata.

### ***Murciélago, how to pronounce :***

The name of the latest Lamborghini model could be rather confusing to pronounce correctly, a small help can be found here, since the name is a Spanish word, you should roll your tongue and say it like 'more thea lago', with the accent on the 'thea' section, or something like 'murthialago', both pronunciations will be close to the original name.