# MEGA by AIXAM

### AROLA: an unlikely parent.

As far as I know, only the French produce strange wee cars, at least in any great numbers that until the late 80s often looked like outgrowths from Toyland. It seems to be a left over from the austere post WW2 days when money and raw materials were in short supply. In those times, even Germany and Great Britain produced their share of these reinvented cyclecars!

However, some of the early French models looked even more like motorised perambulators than most, which may seem quaint and whimsical to the casual observer. Nowadays these cars are far more trendy and modern, like current super mini's and coupes, but their forbears' toy looks were no doubt an outcome of both the French penchant for creating rather different sorts of cars, where the term practical stands above all else, and the intriguingly convoluted driver's licensing system that at its core allows a person to drive a car on public roads without a licence, provided the car is limited to a top speed of 45 kph and has no more than two seats. Because of the restrictions on performance and passenger capacity, these 'no-licence' cars are treated as mopeds which don't require licences to ride; a provision now applicable in at least six European countries.

The basis for what became Aixam started out in 1975 as the AROLA; a small 2-stroke petrolengine powered tricycle that made use of these no-licence laws. In 1977 the AROLA had a small ute-tray added in behind, then an extra wheel in 1988 to become a quadricycle! A steering wheel replaced the handlebars the same year and by 1980 it got full height acrylic doors that closed, rather than open spaces... Between 1981 and 1983, more substantial materials were adopted for the bodywork and doors, and proper headlamps then indicators, but the outward appearance and mechanical base remained much the same. However, what had originally been a successful venture went into administration in 1983.

Seeing an opportunity, a new company AIXAM was formed by Georges Blain who acquired AROLA and started the company on a new path. By 1984 a new modern looking car was launched that looked a bit like a cheaper version of the FIAT Panda. It was called the 325 D, with 325 standing for cc rating and D for diesel. It too was limited to 45kph. This car took AIXAM into what is known as the TQM class and in doing so became the 400 D. TQM allows cars to be driven up to 75kph on certain types of restricted licences (A1, A4, AT, AL, B1). By 1987 the base AIXAM













model had grown into what could almost be seen as a mini Peugeot 205. In 1988 AIXAM put their cars through European simulated frontal impact tests, which they pass even though this is not required for quadricycles, while the following year they branched out into TQM light commercials using a 500cc engine...

This roughly coincided with an extended range of larger 599cc diesel engines and such things as CVT transmissions, rack and pinion steering and front disc brakes as standard. But still, the mechanicals were relatively straight-forward with the base 'moped' versions of these more modern models remaining the main stock-n-trade of Aixam. It should perhaps be noted here that such cars are not mere toys in France, but are serious business. AIXUM has become France's third largest vehicle manufacturer, starting at 3000 vehicles annually in 1986 and reaching 10,000 in 2002 with more to come...

Mechanical developments after taking over AROLA included the use of Japanese Kubota diesel engines that have a rather industrial heritage but are both economical and reliable with geardriven ohe heads. However, the 1991 introduction of the all-new twin-cylinder water-cooled ohe

petrol engine began with mixed blessings. While it was fitted with electronic ignition and fuel injection, it suffered in early form from an occasional crank-angle sensor failure. This engine is an Italian Lombardini design made under licence in France, and produces around 20 bhp in standard form. The continuously variable CVT transmission is supplied by CVTech-IBC and is fitted along with an Italian COMEX 8:1 final drive that includes an integrated reverse gear. COMEX also supply a number of other parts such as braking, suspension and steering system components.

### **MEGA: The TRACK emerges.**

In 1992 AIXAM gave birth to MEGA! MEGA is presented at the time as an all-new marque which forwards a flip-coin philosophy on the type of car being offered that goes one hundred percent in the opposite direction on at least two counts. One is in creating the largest and one of the fasted passenger cars seen in France at the time, and the other, in the





development of a notable motorsport programme based around prototypes created out of an all-new 'resort-utility', the Mega Club. The stated objective of MEGA was to demonstrate the AIXAM team's technical know-how, because since taking over AROLA, Aixam had been developing these basic urban quadricycles into advanced little machines. But there was still more, as we shall find out...

These three projects were more-or-less consecutively run, but first up let's look at the mighty MEGA TRACK. This was an all-new car in more ways than one. Work actually started on the Track at least as early as 1991, before the birth of MEGA



as a separate entity. A prototype was developed in conjunction with DELTA DESIGN. Together DELTA and AIXAM built the original prototype as a development mule to study and to look at solutions for the TRACK's unusual specifications; in particular the car's suspension and 4 wheel-drive transmission, both of which are fairly unique in terms of specification. In association with these there was a need to develop a chassis that meet the car's strength requirements while also allowing for the chosen mechanical layout.

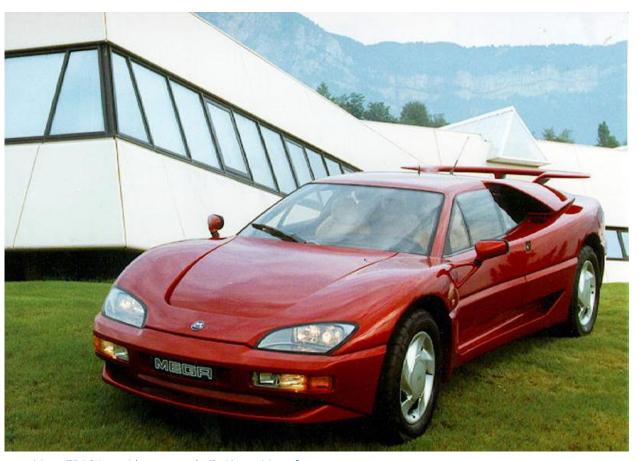
First of all Aixam chose to use the current M120 S-Class Mercedes Benz V12 motor. This engine, displacing 5987cc with a bore and stroke of 89x80mm, had produced 402bhp until 1993 when it was detuned to 389bhp to meet new emission standards. The engine as fitted to the Track is quoted at 394bhp at 5200rpm, which is the European PS figure, while torque is specified as 422

Ib.ft @ 3800rpm. However, there is no comment on output changes that may have occurred due to the fitment of new exhaust systems, electronics etc. The engine and transmission is fitted longitudinally in the chassis but it has never been spelt out which way around the engine resides, yet by the description of the 4WD system it seems obvious that the engine was reversed from its Mercedes position - like the Lamborghini Countach - with the 4-speed 4G-tronic automatic gearbox nestling partially between the rear passenger seats. There is no central differential. Drive travels directly forward from the nose of the transmissions to a special front differential that deals with both the differential action between the front wheels and the drive to the rear. It has been described as a planetary gear diff with viscous coupling, and a torque split of 32:68% front/rear.

To achieve this it seems that the viscous coupling that deals with the front-rear drive split is incorporated within an epicyclical gear train that produces the prescribed torque split, while the front wheels are driven via a spur-gear planetary differential incorporated within the casing. The rear diff is a mechanical device with 30% self-locking. The transmission was the work of Aixam's technical director, design engineer Philippe Colançon.

During the early prototyping stage, American contractor Visco-Drive was consulted for its expertise in high-torque transmissions. Naturally, to house at least the nose of the transmission, plus two drive shafts (one forward, one back), requires a substantial transmission tunnel which additionally forms a part of the central chassis structure.

The central chassis itself is of folded, galvanised, sheet steel construction with an integrated rollcage that has been described as both substantial and immensely strong. It takes care of passenger safety and provides a rigid platform to mount the front and rear tubular subframes. These are made of a French spec



Mega TRACK outside purpose built Aixam-Mega factory.



Chrome-molly 25CD4S steel that were designed to accept all the mechanical equipment from suspension, steering, differential, hydraulics and battery up front, and likewise at the back including engine, but no rear steer!.. more anon.

The suspension itself deserves special mention with large double wishbones all round designed to take the car off road at high speed while allowing for an exceptional ride height variation between 220mm normal ground clearance to 320mm at full off-road height (i.e.

part of the suspension medium.

clearance to 320mm at full off-road height (i.e.

8.66 to 12.60 inch height adjustment). To achieve this while maintaining requisite camber, caster, toe and track width settings would mean that the wishbones need to be long and pivoted further inboard than is normal, plus more or less parallel and of equal length top and bottom; they could, in effect be almost the same design all round as photographic evidence shows very little camber change throughout the long wheel travel with only castor at the front giving some negative camber gain on turn-in. They would also need a fairly wide base because of this, to maintain good wheel alignment and control; hence their size, which has been described as huge. There is also inbuilt anti-dive and anti-squat geometry respectively, front and rear, though again, no mention of how this is achieved. Raising and lowering of ride height is managed by an hydraulic system that is integrated with the spring damper units and by implication also works as

The engineering of the car is described by Mega as using traditional racing technology, borrowing solutions from both track racing and off-road rally-raid motorsports. As a result, the Track is fitted with two spring damper units per corner. In comparison, Mega's rally-raid Mega Track Dune Buggy had three or four units per corner; the road car being a balance between road, race and rally.



Prototype 1991 Dimensions: 5.60mx 2.20m

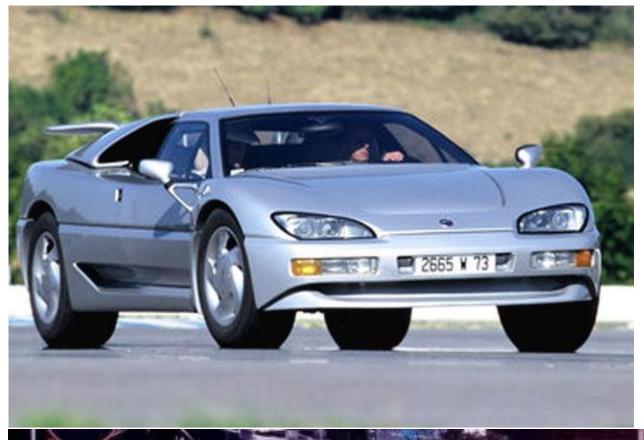


All this was essentially the brainchild of owner and CEO Blain, and his chief confidante, engineer Colançon. Birth of the idea went back to 1987. Being both committed petrol heads and passionate about mechanics, they apparently just wanted to see what they could achieve by taking things to the max. When asked about the idea behind the Track concept, Blain said it was 'apparently crazy'!

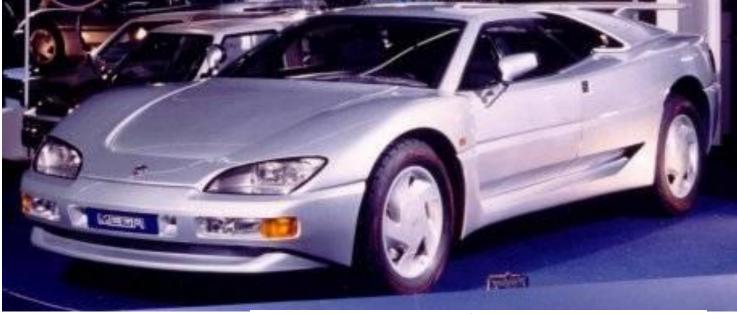
Other tasks of the original Delta-Aixam prototype included a comprehensive study of the car's packaging, including cockpit layout, mechanical and occupant cooling etc. It apparently had a steel body too. This first prototype was said to measure 5.60 x 2.20 metres long and wide. Quite massive, yet does not appear quite so large in the photos; I think those especially large tyres help disguise the fact.

The essential body shape was established with Delta, but then a second prototype built with Sera-CD took the car into production. Here CD stands for Charles Deutsch, the famed French aerodynamicist who founded and headed the Sera-CD consultancy. The essential shape and concepts of the Delta car were maintained and honed, with final work being carried out by Aixam and Sera-CD on the choice of subcontractors, and the setting up of production faculties at Aixam's new factory that lay next to the highway at Savoie, Aix-les-Bains.

This modern building and facilities was built new in 1983; a concept it appears created by Blain, and designed specifically for Aixam car production. It marked the start of AROLA's transformation from a simple means of city transport into a relatively



Prototype with alternative test engine.

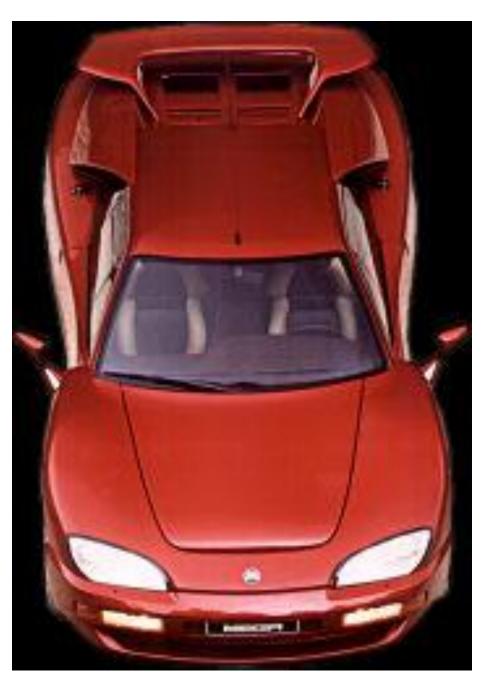


1992 Mega TRACK Paris show car – the first production version

sophisticated city car. The building incorporated areas for design, engineering, development and production, and also included a full competition department. It covers a total of 8 hectares and importantly for enthusiasts, lies at the foothills of the French Alps. Blain employed a team of enthusiastic young engineers, with the total staff numbering around one hundred and fifty. The facility provided for greatly expanded production which in 2007 peaked at 15,500 units per year. They have had a captive market with both the young and elderly, and as a consequence are very profitable – a stated 70% margin, which funds both the Mega competitions department and the development of special projects like the Track, and a constant R & D programme.

Back on Track, at Sera-CD the re-worked body shape was carried out by industrial consultant designer and aerodynamicist, Sylvain Crosnier. Work went into developing final production tooling for the body, as well as time in the wind tunnel to achieve acceptable results for both drag and lift. While a Cd of 0.39 might not sound too exceptional, the large cooling intakes found at the front of the car, plus those beside the C-pillars and in front of the rear wheel arches, along with the four inlets on the front half of the engine hatch, would have much to do with this result ...as would the gargantuan rear wing and the rather huge tyres which present a considerable drag factor when so notably exposed to the oncoming airflow, as they are in the Track. Yet its Cd figure is not too different from a Countach 5000S which is listed as being 0.40, or a 1991 Testarossa Ferrari with a figure of 0.36 (some have quoted 0.33 but it seems the factory says 0.36). It may also be worth commenting that on modern F1 cars the large exposed tyres are a major drag and lift factor; 0.39 would appear to be a fairly honest figure too, with no attempt to tweak for good press.

Other interesting design features that would affect aerodynamic performance include two rear-mounted radiators, both behind the engine with large cooling fans blowing the air through a substantial slot below the rear wing. The engine hatch itself, being part of the design to get air both into and out of the engine bay is another thoughtful piece of engineering. Each radiator is described as being the equivalent to one full size Mercedes S600 'heat exchanger'. As pointed out, these need to take care of cooling the rear mounted engine which requires extra cooling because of its more thermally protected location, plus the fact that it is driving a continuous four-wheel-drive system and because the Track has a powerful air-conditioning unit design to deal efficiently with hot Arab climes. This of course has to be driven by the



engine at a time when there is greatest thermal load on the motor due to high ambient temperatures.

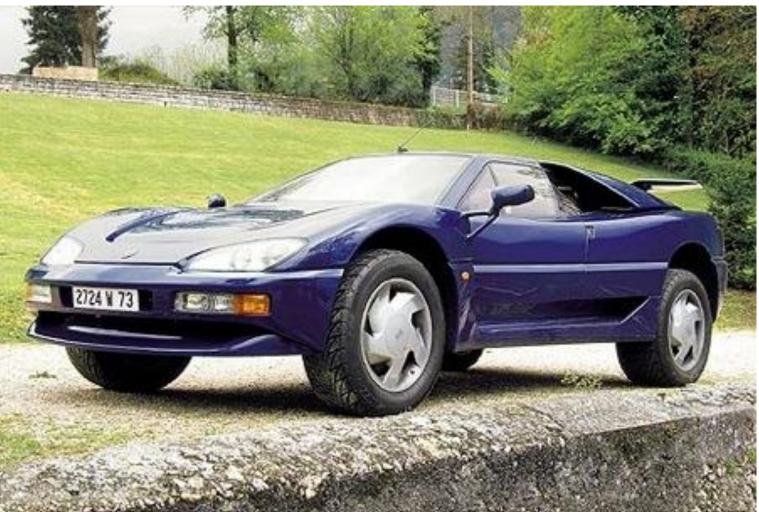
Further things of note in this area of airflow management are the slot-outlets behind front wheels and large almost venturi like outlets behind the rear wheels, exhausting the heated air from brakes, air conditioning heat exchangers and transmission.

Tyres were specially made by Michelin for MEGA, designed with the diverse performance needs of the Track's all-terrain GT-supercar potential in mind. Therefore onroad handling, roadholding and grip verses comfort and off-road traction mixed with good performance on ice and track required something different. It would also result, naturally, in some compromises which, it appears, Michelin have attempted to counter by the extreme (for the time) diameter and width to balance the more forgiving profiles. Of course, more hidden parameters such as tread design, compounds and carcase construction are Michelin's secret!

At the time, the last of the Countach models including the 25<sup>th</sup> Anniversary had been

wearing 225/50 and 345/35 VR 15 tyres front and rear, while the current Testarossa had just gone from 225/50: 255/50 VR 16 to 235/40: 295/35 ZR18 tyres with the introduction of the new 512TR model. The Mega Track's tyres were

the largest production car tyres made by Michelin at that time, being 285/55 ZR20 unidirectional front and 325/50 ZR20 asymmetrical rear, of MXX3 Pilot design. These fit special 10 x 20 and 12 x 20 inch alloy rims, meaning even at the standard 220mm ground clearance they leave a lot of



Suspension in raised position

tyre exposed to the slipstream. Also notable is the rather high profile aspect of 50 and 55 percent, which not only gives the tyres an enormous rolling radius compared with other supercar tyres of the time, but undoubtedly takes into account the off-road needs and low traction conditions the car was designed to negotiate - long footprint rather than wide footprint gives better results in these conditions. Obviously this would affect the way the car felt on the road; one would expect it to be more progressive.

The car's top speed was limited to 155.3mph, probably in keeping with the self-imposed 250kph limit of many European manufactures, whereas nominally ZR rated tyres allows a car to do over 300kph, or 186mph. Mind you, with a final kerbside weight of 2280kg and an ability to raise the car to 320mm off the ground at full speed, the limited maximum may have also been a precautionary move.

Track with Monte Carlo

As well as Sera-CD, another contractor, Team Snobeck, was brought in to assist with subcontractor sourcing. These included the windscreen and door hardware from the concurrent Renault Alpine, projector lamps under the special glass covers, a VPAS rack and pinion and Alcon ventilated discs front and rear that at

14.8 inches in diameter were the largest brakes on a production car at the time and featured in the Guinness Book of Records. By comparison, the latest 512TR had only just exceeded a 12" disc diameter. Even more impressive were their 32mm or 1.25" thickness, matched to large four piston alloy callipers all round. The finished version of the second prototype was the essential basis of the production model. However, it has been stated that the second car originally had an even more powerful V8 engine fitted at one stage, but what it was in order to have been more powerful than the V12 is not stated. Perhaps it was a Brabus motor, as certainly there are many claims that the V12 is a Brabus tuned engine, whereas in real life its stated specs align with those of the standard S600 Mercedes Benz Saloon and Coupe.

The Tracks dimensions are in places even greater that the S600, being 5080 x 2250mm long and wide (200x88.6"). Wheelbase at 3120 (122.8") is limousine like, while front and rear tracks are an exceptional 1800 and 1880mm (70.9 and 74.0")! Height at 1400

(55.1") is an inch lower than the Mercedes, but weight is slightly up at 2280kg (5027 lb). The S600 Coupe, for example is 5113 x 1895 x 1427mm (L.W.H.) with a wheelbase of 2944mm, or 3040mm for the saloon, while the weight ranges from 2060 to 2240kg.

The extra weight of the Track would have been mainly from the chassis, 4WD transmission and large wheels and tyres, and luxury equipment such as full leather upholstery, four electrically adjustable seats, inbuilt digital phone, hi-end sound system with CD recorder, colour rear view TV for reversing that displays on console mounted screen, fully equipped wood trimmed dash,

hi-spec air-con and so forth. The body itself is robust but relatively light compared with a steel equivalent, being made of a mix of fibreglass and Keylar.

The seating requires a special note because unlike so many GT cars, and probably unique amongst mid-engined production cars (save, perhaps the Scottish build Argyll GT), is the fact that rear passenger space reflects that of the front; the seats are the same full size adjustable leather clad items with proper leg room. They are described by one road test article as being an amalgam of race-car design finished to luxury car standards. The only notable features of difference between front and rear seats is the massive backbone tunnel between left and right passengers, and the fact that the front seat servos provide 16 different states of adjustment. Additionally, the rear seats are mounted slightly higher than the fronts to ensure rear passengers don't become claustrophobic. Getting in and out of the car, whether into the back or front, is said to be easy.



Another unusual characteristic for such a vehicle is its rather huge boot. It is 6000 litres, or over 21 cubic feet. In fact the term huge and massive characterises virtually the whole car; even the fuel tank is a rather large 110 litres giving around 430 kilometre range in daily commuting (see

table below), or over 570 kilometres when cruising on economy – approx. 14.6mpg. The big S600 is said to do around 11.3mpg on sports and 15.3mpg on economy settings, although it appears that these figures may well be based on US gallons.

In terms of safety and European type approval - this was a high priority for Mega. Evidently they were able to design the whole car to comfortably pass all interior and external impact tests, but apparently this did require some 'soul searching' to get the results they wanted for the frontal impact test. However, the standard was met and surpassed without the need for airbags; I suspect the high padded space between the rear passengers is also an interior impact safety feature.

On road driving characteristics have been described as GT like, until it gets off road where its real potential comes to the fore. Indeed, apart from the speed limited top end it has been described as performing like a Countach, riding like a Mercedes 600 and handling the off road terrain like a Range Rover. Actually, the off road performance was said to be next to none at the time in terms of handling, ride, comfort and speed potential. 0:60mph to 0:100kph (62mph) times have been described variously as being as low as 5.3 seconds up to 5.8 seconds. The Mercedes saloon and coupe from whence the motor came is said to take between 5.5 to over 6.2 seconds for the same sprint, again depending on who you reference; its top speed as also 179mph unlimited.

Even though the Track's weight is marginally greater this small but measurable gain in performance will mostly be attributed to better traction due to its 32:68 4WD with 44:56 front to rear weight distribution and extralarge footprint; neither would there be need for performance limiting traction control intervening on take-off... and perhaps gearing is ideal too?

Another first-hand account had this to say "This (V12 engine) allows it to readily reach a speed limited 250 kph; nothing extraordinary for an expensive car, you say, but the Track reaches this speed as easily in the desert as it does on asphalt with its height adjustable hydraulic suspension: ground clearance increased from 220 to 320 mm by pressing a button... its behaviour on the road is nothing more exciting than a "normal" GT ", but off road the Track unveils its full potential. Very stable, incredibly comfortable, it shows an unusual handling prowess while



Showing off versatility

retaining amazing driveability; a real pleasure to be placed in tight corners, or embarking on long slides, despite the imposing weight of the car." Steering lock of 2.5 turns is quite quick, but with variable power assist it appears to be an effective compromise between on and off-road, and on ice. Also, the Mercedes auto is switchable between Sports and Economy settings; the latter possibly proving helpful in low traction conditions like mud, snow and ice.

Two other quite extensive road test articles were carried out around 2009 and 10: one Russian the other French. They covered a number of aspects mentioned above, but there are some interesting additions. The Russian article points to a large gap that existed in the market for a performance goanywhere vehicle that they Russians can use in their harsh winter environs, and conversely in which Arabs can charge across deserted sandscapes. They saw the tying of this gap by Aixam, in conjunction with their newly achieved Ice Racing successes just prior to the Mega Track's launch, gave Aixam-Mega a marketing vantage point unexplored by others. They point out that breaking into the supercar market has not been easy in recent years, with well-established names sucking up most of their potential customers. They saw this as a new way in, and as pointed out by the article, it gave Mega something truly unique to pedal. It is also rather intriguing that it has taken around 20 years for other established names to look at a similar concept viz the 2013 Giugiaro Parcour which even looks like an updated 2-seat



version of the Track, and the quite similar *Audi* nanuk quattro that uses a V10 turbo diesel.

Just to support their argument, the Russian article points to the fact that of the first four production cars three went to Russian and one to Saudi Arabia. One Russian car was returned to the factory to be rebuilt after the owner lost control on ice and hit a wall... The article mentions that they knew of nine production cars having been built...

The writers go on to talk about some of the details but start by expressing the shear presence of the car due to its size and proportions, stating that its grandness is no less impressive in 2010 than when it was first revealed at 1992 Paris Motor Show. They say that since first testing the car in the 1990s, they had driven many a supercar and yet were astounded that when reunited in 2010, their sense of excitement and fascination was still fresh ...they said that Blain and his team of young engineers had created a unique person-machine (or was that passion-machine?).

Entering the car, the doors open by simply pressing a button near the rear of the door itself. They comment that although the car is undoubtedly sporting in style, it is easy to enter with its elevated ground clearance, making it almost like stepping up into a limousine... neither is it cramped inside, and finish is to the highest standard. The seats are amazing they say, providing real comfort with competition style support. The only noted downside in the whole setup is for rear seat passengers due to the relatively small side glass



area. Luxury, they conclude, concedes nothing to the Mercedes 600.

Out on the road the weight, long wheelbase, huge diameter wheels and comfortable seats swallows up all irregularities. No doubt suspension frequency would be lower than most harder sprung supercars to allow for good all-terrain performance yet cornering is stable and reasonably flat in lowered form. Even at full off road height, the body control is said to be exceptional. Mega's experience and successful performance on ice and desert would have played a big part in the brilliance the road testers found.

On the Alpine roads surrounding Aix-les-Bains the straights were consumed rapidly with hard acceleration up to 200kph, tracking arrow straight and stable on all surfaces. Performance on the narrow mountain passes is "just scary", they said. Beyond 200kph, the size and thus CdA starts to take its toll on such rapid progress, and yet the 255kph limiter can be reached without much effort. Braking into corners is impressive and with 4WD, traction out boarders on intense, riding on a combination of accessible power and a broad span of torque. Of course, mountain passes readily accentuate the experience yet in this domain they found the Track shrunk around them and felt as compact and nimble as any sports car. They say it feels nimble in a way such a big car should not, while hard use of the brakes down long passes showed no visible signs of fade, much to their surprise with such mass to contend with. To quote in translation "Thanks to the 'fourtrack' and so informative steering, control of the 'Monster' on narrow winding roads is conducted with mesmerizing ease, fitting comfortably through the most treacherous of bends. Directional and cornering stability is great, surprising absolutely neutral, and unlocking an enormous stock of adhesion even on a wet roads. The dizzying, meandering roads of the Alps uncovered for us the terrific handling, manoeuvrability and stability of this machine of huge dimensions..".

Elsewhere it was also stated that *on the open road* it feels like a fast GT, but the best is saved for off-road... Rapid movement over rough terrain is done with ease; no galloping, pitching or wallow. Steering, as on the road, is well weighted, accurate, informative and obedient. Traction is excellent, even on broken surfaces. There were so many superlatives stacked on the Track's off road performance ability, from steering, handling, ride and traction, that that it makes things simpler just to say; for all the cars impressiveness on alpine roads, its most brilliant performance is saved to off-road. Even no squeaks or rattles save for some noise from the dampers when contending with a wheel that fell into a large hole while travelling at speed. The experienced French road tester Denis Morin also invited past and present rally champions Denis Bernard



(Stratos, Quattro and Fiat) and more recent WRC contender Darnish Snobeck to participate in the 2010 expedition. Not only were they both impressed, but all commented that the car is no less relevant or capable amongst peers than it was 15 years prior, when it first appeared. The only noted question raised in all the superlative prose was the standard 4-speed automatic transmission. Perhaps, since the advent of AMG modified M120 Mercedes V12 engines for Pagani, there exists a place for some custom made versions with around 650bhp and a 6 or 7-speed automatic transmission (of course with gentler economy mode for ice and sand!) ...sounds good, but would the complex transmission still cope?

On another tack, the Track is accredited by some as having won the ice racing championship 'Trophée Andros' in 1994, but I think they are mistaken. Certainly, Mega won the championship that year in a 4WD car, but I suspect not in the Track which would have been too large for the role; overall size of the finished car would seem to preclude that possibility, but rumours persist... see more to follow.

There are also rumours that the Track had success in the early 1990s Paris Dakar events. It appears that this may not be so far off the mark as there exists a Porsche powered desert-raid GT-style buggy that has a mildly bizarre looking body reminiscent of a 'drawn and quartered' Mega Track road car. Its nameplate says Mega Track too! This car has long arm, long travel, multiple spring-damper s dune buggy style suspension, but whether it uses a tube frame chassis or some hugely lightened derivative of a Mega road car frame is not revealed. However, it appears to retain a 4WD system, which is most un-buggy-like. Apparently at least two were built and were still seen competing many years later as the accompany photo was taken in 2008. Mega obviously participated with some success in this vehicle, but little information exists on both the car and it competition history other than it competed for two consecutive years in the Paris Dakar around 1992.





The only other thing that remains to be said is the fact that the original car, at 1,900,000 francs made it one of the most expensive cars one could buy at the time, rather limiting sales. However, there persists strong rumours that only 5 cars were made, with no mention of prototypes, yet apparently one can still get a car built today, or at least up to 2010 when George Blain was quoted as saying that Mega had built at least ten cars - in fact about one car per year to order for most years since its launch, with just some years none. Later references quote 5-speed automatic transmissions being fitted. With the second prototype having been developed with a more powerful engine to check cooling requirements et al, I wonder whether any 'phase two' customer versions might have been created as certainly there appear to have been engineering changes over that time. Keeping Giugiaro and Audi in mind, how about a 'phase three' using the modern AMG V12 with 700bhp or more, unrestricted top end, a 7 or 8-speed transmission, and electric motors of course! ©

## MEGA TRACK Specs

engine Mercedes M120 V12
valvetrain 4 Valves per cylinder
displacement 5987 cc / 365.3 in³
bore 89.0 mm / 3.5 in
stroke 80.2 mm / 3.16 in

compression 10.0:1

power 290.0 kw / 388.9 bhp @ 5200 rpm

specific output 64.96 bhp per litre bhp/weight bhp per tonne

torque 570.0 nm / 420.4 ft lbs @ 3800 rpm fuel economy 11.6 mpg average, ~ 25.4 L/100km fuel capacity 110 litres / 23.1 imperial gallons

driven wheels 4WD w/Viscous Coupling

front tires F 285/55ZR-20 rear tires R 325/50ZR-20

brakes Vented Discs all round

front brake size 32 x 376 mm / 1.25 x 14.8 in



callipers aluminium 4-piston all round

 curb weight
 2280 kg / 5027 lbs

 length
 5080 mm / 200.0 in

 width
 2250 mm / 88.6 in

 height
 1400 mm / 55.1 in

 front track
 1800 mm / 71 in

 rear track
 1880 mm / 74 in

 transmission
 4-Speed Auto

gear ratios 3.87:1, 2.25:1, 1.44:1, 1.00:1, :1

final drive 3.46:1

aero specs Front Area: 2.615m2 Cd: 0.39 top speed ~250 kph / 155.3 mph limited





The idea for the other side of Mega started to form around 1990. Blain had been aware of the lack of recreational utilities on the market since the demise of the original limited edition 2CV pickup and the later production Citroën Mehari of which almost 145,000 were built between 1968 and 1987. He cast his eye on the Citroën AX as a suitable basis, because it was not only the right size, but offered a 4WD version just like the Mehari. This was launched as the Mega Concept 1 prototype in 1992 with the launch of MEGA. It was quickly productionised and became the Mega Club. Initially offered in FWD form, with two petrol engine sizes, 1124 and 1360cc, it was next followed by a 1527cc



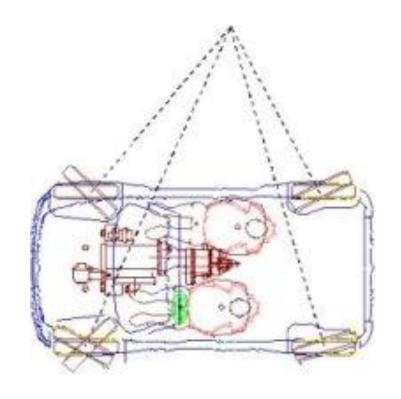
version. Power output ranged from 53 to 70bhp. This was the engine fitted to the rarer four-wheel-drive model that could also be had in diesel form with 5-speed manual, diff-lock, and slightly raised ground clearance. There were four or five different versions offered all with different names, from Ranch to Cabriolet, but they were in essence the same base vehicle with different upper body layouts.

While the mechanicals were mainly Citroën AX, the Club got a unique and rigid looking galvanised monocoque chassis with interconnected tubular steel roll hoops, and unique body of course. The Ranch, a high back utility van even made use of polycarbonate in its rear superstructure, with ABS plastic making up most of the bodywork.

Length, width and height are given as 3510, 1625 and 1460mm, which should be pretty standard throughout the range, sharing all major panels including front windscreen and frame. Just the rear of the Ranch High was elevated somewhat. Around 1000 were built from 1992 to 1998.







These formed the basis of MEGA's ICE of which a number appear to have been built. Ice's were in a sense prototypes as they weren't offered for sale as roadgoing production cars, but several were campaigned by a number of drivers with various power plants for different classes. This race car was definitely purpose built for ice racing. Here is a list of some of the events competed in and won, the drivers of those cars and engine options denoting the various competition classes raced in: Andros Trophy competed by factory in 1992-1998 with a win for François Chauche in 1994 in the constructors championship. Philippe Gache, later in a MEGA Glace, went on to win two more driver's championships in 1996 and 1998 with three test wins and seven podiums. Success in the Chamonix 24 hours and Andros Trophy that included other drivers such as Chauche Gache, Darniche Chomat and Coppier Belmondo running 2 litre Cosworth engines between 1993-94. 1994-96 saw Chauche, Chomat, Gache, Ferte, Ragnotti and others compete in 2-litre Cosworth engine cars while 4-cylinder and private V6 Honda powered cars competed in the last two years. The original cars built for 1992 remained in use for six years of competition.

When you view the photos you can see that they look like rather four-square 2-door hatchbacks that in a way show a passing resemblance to the Renault R5 Turbo II. The basic chassis, which is a combination unitary tub with tube rollcage and intermediary steel skeleton, is retained along with the lower half of the Club bodywork. The chassis is reworked to handle a front-mid-mounted engine with seating for two moved well back. The upper body and doors are specific and normal car-like but closely follow the dimensions and shape of the standard Club. The Cosworth engines are low pressure turbocharged and put out 300bhp. There is no mention of the power outputs of the Honda or other engines used.

A new four-wheel steering system is incorporated into the design, and shown above in graphical form; I don't think the steering centre needs to be taken as gospel, just illustrative, although it was likely to be adjustable / variable too. Specially developed suspension is added along with a redeveloped cooling system that is integrated with the front aero package in the form of a scoop like airdam-splitter, and a large rear wing for traction and directional stability.



ICE above and later GLACE below



It appears that much of the research and development for the Ice was conducted in-house, including the bodywork and master buck. However, sub-contractors provided other equipment which was overseen by Mega and assembled at Mega's factory. After 1998 Mega temporarily pulled back from competition but in the same year presented the Mega Concept 2 which became the Mega 5Cv in convertible, saloon and utility forms. They were listed between 2000 and 2003 and were an updated replacement of the original Club as the AX it was based on was now out of production. Mega used the AX replacement for it mechanical base; the new Peugeot 106, Citroen Saxo with their 1.4 litre (1360cc) fuel injected engines that now developed 75 bhp. This gave the cars a 95-100mph top speed allied with lively performance and good economy due to their light weight which ranged from 700 to 900 kg, depending on format (18.7 sec 400m, 7.4 ltr/100km).

Chassis were a revised version of the former Club's galvanised chassis with 100mm added to its wheelbase and a new six-point rollcage structure that supported the upper ABS-polycarbonate bodywork. In this guise the body is described as having a tinted film covering it with a clear-coat painted over, providing good UV protection and finish.





PICK-UP

CABRIOLET

BREAK



True to all the smaller and Mega Aixam models, the Club-2 had rack and pinion steering, strut front suspension and trailing arms rear concentric coilwith spring dampers units. Length, width, height quoted are 3510x1620x1460mm, or 138.2x63.8x57.5 inches.

The salons are five seaters with power windows, power steering, central locking, immobilizer, electrically controlled sunroof (or hardtop for the convertible), plus other equipment interior either from - or similar to - the PSA cars, while the utility can be had as a simpler two seater, hence its lighter weight - the convertible, I believe, was available either way.

Versatility was part of



the cars ethos and so it became the basis for campaigns into both desert racing and a renewed interest in ice-racing for the 2000 season.

The Mega Desert debuted first in 1999, although it appears that Mega may already have been rallying since the 1997-98 season with a 2-litre car. The Desert used parts of the then current Mitsubishi Pajero Evolution as its mechanical base. In racing photos one could easily mistake the Mega Desert as simply being a complete Pajero Evolution that Mega had modified itself for desert raids. However, on closer inspection and comparison with the Concept 2, one starts to see the closeness in silhouette – a crossover version of the saloon if you will. Just what mechanical parts were used from Mitsubishi is not discussed, but at least the 4WD system if nothing more... This vehicle went on to come second in the Paris Dakar 2000 event with Stéphane Peterhansel and Jean-Paul Cottret driving, losing out to Mitsubishi in their 3.5 litre V6 Pajero Evolution by only a small margin.





However, it is said that the Desert was 'slammed' in effect to become the Glace 2000. This was not the same physical car as the Desert as they were running concurrently, but it is implied that it used the same mechanical underpinnings and body. It is here that we get the clue that the Mega Desert and Pajero did not share the same chassis; just the 'intelligent' 4WD drivetrain and perhaps some suspension parts.

The Ice's wheelbase is close to the Pajero's, but not the same at 2450mm verses 2420mm – 30mm longer. The engine, while being a 3.5 litre dohc 4-valve per cylinder V6, was of different bore/stroke dimensions, but is close to the Honda V6. Mitsubishi's V6 engine is 3496cc with 93x85.8mm internal dimensions, and 206 kW standard. The Mega engine was exactly square at 90x90mm, giving 3435cc; the Honda 90x91mm giving 3475cc. It weighed in at 170kg and produced 440bhp/ 324kW at 7000rpm. I can find no proprietary engine that exactly fits this description, so from where it was derived remains hidden to me. The Glace weighed just 1179kg; just how much lighter this was from the Mega Desert is not specified, but a standard Pajero Evolution weighs 1990kg.

The Mega also had a 5-speed manual verses the Pajero 5-speed auto only (no manual version, although the Dakar version may have had a manual gearbox). Some interesting specs are given for the Glace... Although the engine produces over 131.5 bhp per litre, the car is quoted as having a fuel economy of 18.9mpg, or 12.4 L/100km. The power needed at a stated 81mph (130kph) is only 57bhp. However, for all this the claimed straight line performance seems a bit dull until one realises the snow tyre sizes being used ...on an Ice surface. Tyres are just 135/95-16 all round. 60mph is reached in 5.3 seconds at a distance of 90 metres, the quarter mile in 17.1 seconds at 82mph and a standing kilometre on 35 seconds at 93mph. Funnily enough, there is no mention as to who drove the Glace 2000 or how well it went, but it is only listed as being a 2000 car.

For 2010-11 Mega returned to competition with an entry in the Electric Trophée Andros. Pilot Soheil Ayary, unfamiliar with electric characteristics, eventually achieved 4<sup>th</sup> overall and 2<sup>nd</sup> at St-Dié des Vosges. These are 800kg spec cars by Exagon Engineering, with 67kw and 200N.m @ 0 rpm. For history sake, Soheil tested an original Mega ice car and enthused over its driveability and finesse.



#### **MEGA MONTE CARLO**

Mega launched their next big project in 1996. It was the Monte Carlo; said to be Mega's response for people who did not understand the Mega Track. The true roots of this car went as far back as 1985 when one Fulvio Ballabio established MCA - Monte Carlo Automobile - in Monaco. The excuse Ballabio created was to celebrate the 100<sup>th</sup> anniversary of the Automobile Club de Monaco. The intention was to produce a world class supercar at the home of possibly the greatest Grand Prix motor racing event of the time. It was to be a car that matched the best of the rest on road and track. At the time Ballabio was better known as a fairly successful race car driver, rather than a race car designer, as he'd had some success in F3, F2, Formula 3000 plus Indy and CART racing between 1987 and 1999, and was a former powerboat champion.

However, he was not without some relevant credentials to tackle this very ambitious project, and elicited some good support for what he planned to do... Ballabio owned a company that manufactured power boats, Monte Carlo Marine, otherwise known as TAI MCM-Boats which was based at the time in Fontvieille, in the south west of Monaco.

Support for the project on the engine side included Carlo Chiti, ex Ferrari engine designer who built his own motors that were used in these cars. Lamborghini also supplied their latest Quattrovalvole Countach engine for the main production versions. Joining him on the chassis side was Guglielmo Bellasi who had built a number of formula cars in the days before carbon tubs, but had also been one of the pioneers involved in developing carbon fibre composite structures for Formula 1. It is said that the inspiration for its construction came from the fully composite one-off Lamborghini Countach Evoluzione, with the

Centenaire having a full carbon composite body and chassis also. In August 1990 MCA presented a Centenaire to His Royal Highness, Prince Rainier of Monaco, who was an avid car collector. No doubt the kudos and recognition value of this stunt was not lost on Ballabio! Five Lamborghini Quattrovalvole powered production cars were sold, along with at 7-litre 720bhp Chiti V12 powered Spider, a smaller Chiti bi-turbo flat 12 powered GTB, and at least one Porsche powered vehicle.

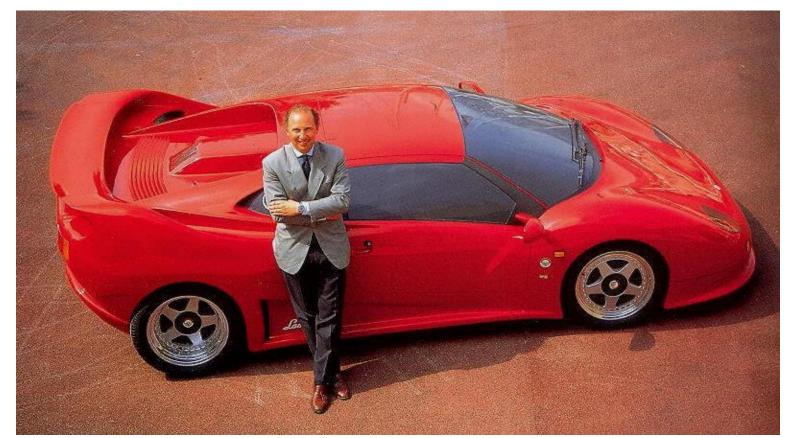
However, that is all another story. The Centenaire went on to be sold in 1993 to a Russian group, Georgia Automotive, who bought the smaller capacity twin turbo Carlo Chiti road car, along with manufacturing rights, and modified it for competition. Known

as the MIG M100 (unrelated to the aircraft, but derived from one of the two companyowner names: 'Migrelia & Georgia'), it was entered at Le Mans the same year. However, it practiced but failed to make the starting grid and no more was seen of the company.

Mega bought out Monte Carlo Automobile late 1994 – some reviews say 1995, but just what they purchased is an interesting question as their first car, launched at the Geneva Motorshow in March 1996 was all new in both design and construction. According to a Russian review of the car, Bain and company got the remains of a couple of early prototypes, drawings and a large assortment of obscure bits and parts. It seems that the Russians had got the rest. However, he also got the Rainer kudos and Monte Carlo name, along with right to use the names and symbols of Monte Carlo's prestigious Royal Automobile Club of Monaco...



Fulvio Ballabio with his MCA Centenaire



Whatever the case, Mega-Aixam had already shown their ability to take a concept and, with the enlistment of appropriate specialists, produce a production ready car in a reasonably short time. Sera-CD's Sylvain Crosnier again headed development of the new body design. He paid special attention to achieving a smooth underbody with flat undertray and a strongly developed rear diffuser. Sera used both CAD and the wind tunnel to help develop an all-new shape that is quite different from the original MCA. The outcome was a Cd of 0.35 with a frontal area of 2.086 m², giving a CdA of 0.73. This frontal area, although not great for a salon (similar in section to a Peugeot 406), is larger than some of the more 'serious' cars of similar style and layout. A Pagani Zonda C12 has a 0.33 Cd and a cross-sectional area of 1.97m², for example. Some commentators suggested that this would have put it at a possible disadvantage with Mega's sports-racing plans.

The original silver coloured show car differed notably from the two or three yellow cars often seen photographed, in that it had no roof mounted engine snorkel, and had a heaver front splitter and deep twin tunnel diffuser. This car had a carbon fibre body like all subsequent cars, but the chassis was of steel; it was the work of chief engineer Philippe Colançon. Why a steel



chassis was chosen when the company had gone to the effort of buying out the rights to the design of an all-carbon car is another interesting question, but it possibly lies in the fact that until then, Mega's expertise lay in steel construction and various forms of composite bodywork. Perhaps Blain and Colançon felt an all carbon chassis at that stage was just a step too ambitious. It has been recorded that after the Geneva show, Mega took the plunge and started development of an all-new carbon tub that included honeycomb in its construction. However it seems just as likely that Mega was working on a carbon tub in parallel with the building of the first car, but being an all-new field of design and construction for them, was still working towards it being a production ready proposition at that stage.

As to the honeycomb chassis reference for the subsequent production cars, it is in fact a system known as Carbon-Nida where Nida is a Polypropylene honeycomb material with an impermeable felt-like scrim thermofused to the surface. This was fairly revolutionary for a 1996 road car... Like the Centenaire, the production cars were all carbon fibre, although a reliable reference quoted the body as being a carbon-glass-Nida-epoxy sandwich. Whether this was the case, carbon featured throughout the car;

body, chassis as discussed, and ventilated disc brakes too which were made by Carbon Industries who were also supplying two F1 teams at the time. These were 355 and 330 mm diameter, front and rear, with 4-pot callipers all round. Steel Brembo discs and callipers were an option. The Monte Carlo was only the second French car to be offered with carbon fibre discs; second only to the Venturi 400GT.

At this point it may well be appropriate to discuss just how many cars were built as it is said production spanned from 1996 to 1999 only with, it is thought, only one road car built. Mega won't be drawn on the topic, however there is evidence that perhaps five cars in total can be accounted for, with the possibility of more if Mega takes the same approach as they do with the Track – build to order. Aside from the silver grey show car, there was a least one race car, also in the same grey colour that has been pictured alongside a road car. Whether this was originally the show car, later modified, is a





possibility. However, it differs in that it has a roof snorkel, different front guards both top and bottom, different front splitter and what looks like the later rear diffuser with a multi-plane wing affair fitted into it. These things in themselves make no proof as they could all have been added later, along with the large rear wing and lower ride height. However, Mega apparently were quite serious about competing in both GT1 and GT2 classes, so it is unlikely they would have chosen the steel frame car as the basis when they had developed a carbon fibre chassis for the road car.

There is also a photo of what *may* be a second competition car, also in silver; perhaps a GT2 version as opposed to the other possible GT1. Again, it may be the same car as that mentioned above, but it did have production style wheels, what appears to be a rear facing vent in the roof and more advertising graphics on the front bumper, but less on the side sill fences. There is also less negative camber on the front wheels and marginally higher ride height. However, both had coloured wing mirrors though one appears more yellow than the other which has a green hue. Both race cars

have their windscreen wipers parked in the vertical position up the screen for better airflow.

There is a yellow car that has been highly photographed, but this may be one of two or even three cars. The one that is pictured the most wears no number plate, has alloy wheels and door mirrors on short stalks. Another has yellow wheels, mirrors on a long stalk and a number plate 2665 W 73. There is another that fits the same description with a 2663 number plate. The yellow seems brighter too but that may just be the photography.

There is also a road car that has the licence plate 2664 with a rear diffuser like the show car. It is grey coloured so may well be the original show car now with roof



snorkel – the original car updated? Funnily enough there is a Track with a number plate reading 2666 W 73, but it is likely to be the car featured in a December 1999 article in one of the prolific Filby magazines *Kit & Specialist Cars International*. This tends to suggest that not only was the featured Track a 1999 car, but perhaps also the Monte Carlo, as they were said to be in production between 1996 and 1999. Indeed, the Track article even gave the contact details for 'further enquires', which indicates that the Track was still being promoted in 1999. The main question that arises around all this is, was Aixam throwing a smokescreen? It's possible, but when one is aware of all the material around pronouncing only five Mega Tracks were ever built when in 2010 a blog quotes MD Georges Blain as saying at least ten cars had been built at that stage, one gets the impression that Aixam-Mega were not all that concerned about the rumour mill. They do most of their business in the 'unlicensed' arena selling up to 15,000 units a year. Aixam are the most successful company in this rather profitable field, so why be too concerned what the media drum out over a relatively minor issue? Those who are keen to have a Track or Monte Carlos will find their way to Mega's door anyway!

Returning to the car itself and looking at some of the items in more detail, the suspension was all new and special to the Monte Carlo, using double wishbones with anti-dive and anti-squat geometry front and rear, and a tiny vertical anti-swaybar up front; the rear was free (i.e. no anti-swaybar) in order to provide maximum independence and vertical compliance for the greatest possible traction. A short rocker above each of the four top suspension arms operates almost horizontal inboard concentric spring damper units, providing inboard suspension. French Donerre racing dampers that are fully programmable in damping and rebound control, are used all round. They have separate hydraulic cylinders, and include self-levelling via this medium. Donerre have supplied dampers to a long list of winning race crews, mainly for off-road and harsh environment events like the Paris-Dakar, Morocco rally, Baja, Andros and motocross. It is implied that the units fitted to the Monte Carlos were special to the car. Michelin also produced bespoke Pilot Sport tyres, 275/35 ZR 18 front, 345/35 ZR 18 rear, fitted to 10" and 13" wide rims respectively. Details of the rack and pinion steering are sketchy other than it has variable hydraulic power assist.

This page and the next; the slightly different interiors of the two yellow cars



The engine, the same V12 Mercedes Benz unit found in the Track, is mated to a 6-speed ZF manual transaxle that sits in the normal position, behind the engine. The engine runs its own electronics and computer system, fitted by Mega in order to derestrict tuning and other functions, and to free it from the various S600 parameters such as traction-control that were unsuited to the Monte Carlo. A dry sump, pump and oil cooling system was made standard by Mega for engine longevity in hard use, and importantly, to lower the block centre-of-gravity for serious performance and handling gains. Mega also added their own free-flow exhaust system and inlet manifold, and rebalanced the whole engine. Using their own ECU also allowed retuning fuel delivery to suit these changes with a resultant increase in power to 450 bhp being mentioned in one report.

All mechanical parts were again mounted to front and rear subframes that included two struts and a large x-brace from the

top of the integral rollcage at the rear of the passenger cell to the suspension 'towers'. Final weight for the luxuriously equipped and trimmed road car has frequently been quoted as a middling 1500kg. Perhaps this is the weight of the original steel chassis car for the only road test I've found (on one of the yellow cars) quotes a curb





weight of 1435kg. However, this may well be 'test weight' which includes driver, as Mega says 1350kg curb which is distributed 44:56% front and rear.

When fitted with a standard 396 bhp engine, the 0:100kph time is quoted as taking 4.4 to 4.5 seconds, or around 4.2 to 60mph, with a standing quarter mile and kilometre taking 12.5 sec and 22.2 seconds respectively, with a top speed of 186mph. By comparison, the slightly lighter original Pagani Zonda with the same engine does a 0:100 kph sprint in 4.1 seconds, 0:100mph in 8.2 seconds and a standing quarter in 12.1 seconds.

The interior used special seats that incorporated yellow leather panels with black alcantra inserts for the yellow cars, giving a rather buzzy aura. However, it is very neat, upbeat and upmarket with extensive use of carbon fibre to save weight - the acme of perfection, so described. The grey cars were finished in a rather more sober colour scheme. Use of yellow on yellow was as much to prove Mega's claim that any colour scheme is possible. As the road cars were intended as luxury transport, albeit with current supercar performance; they were fully instrumented and sported an elaborately trimmed interior, a powerful climate control system, hi-end stereo system, power windows etc and a much more spacious interior than the norm - once past the threshold that is, of the wide door sills that formed a part of the carbon structure. All this luxury added up to 150kg once insulation was included.

The only road test I have unearthed is from the same Russian site that tested the Track. Most likely French publications like Echappement have covered the car, but I have not yet found a copy. By the sound of the Russian report both cars were tested at the same time, although they mention that the test arose out of contact made during the 2007 Goodwood Festival of speed where the factory Monte Carlo was featured in the supercar display.

Mobil [

Is this the same as grey 2664 W 73 above? It has no roof snorkel, different graphics and wing mirrors...

It seems very likely that this factory car is fitted with a Mega tuned engine as the test starts off by noting that it was running a distinctive smelling 101 octane racing fuel during the time of the test, although it also ran the latest French patented trifunctional catalytic converters with lambda sensor — a system used to monitor converter temperature to maintain most effective operating temperatures. They also quickly note that the 6-speed ZF and clutch felt 'past generation' in comparison with some of the latest transmissions, being slightly heavy and stiff through the gears.

However, the only other none-glowing comment in this test related to the chassis. This is my best translation: "Up to 180 kph on the freeway when cruising at a steady speed, an acoustic resonance with accompanying vibrations can set up between the V12 engine and the road, which discourages a long journey in this mode" They then say that they have found this to be a common feature of all supercars with carbon-fibre monocoques. Other than that, all other comments were hugely positive.

The driving report was a solid two pages plus long, but can be summarised. On first acquaintance, getting in over the wide high sills reminded them of its close structural resemblance to a "super-sports vehicle for most serious racing", i.e. Le Mans prototypes... Once inside, room is not an issue, but the polished carbon fibre dominates the senses in an almost menacing way, further reminding them of 80's Le Mans prototypes. The seats themselves support and hug in readiness for some serious driving while the controls are nicely aligned too for feet, hands and torso.

Start the engine and there is "an impatient voice from the megaphone silencers" as the engine idles. Off the line the car easily breaks traction of its unheated 345/35ZR tyres, furiously "tail wagging" in a spectacular way; no mention of tyre wear rating given! The accompanying engine note was somewhat unbridled when compared with the S600 – more like a Le Mans version of the Mercedes Benz CLK GTR - and in this much lighter car pulls rapidly from down low due to a strong torque band from 2500 rpm to well over its normal 6500 rpm limit. They compare it with a typical Italian V12 which they say has little to offer in comparison below 4000 rpm. Consequently the acceleration is described as brutal, with little to give





Road above, race version below

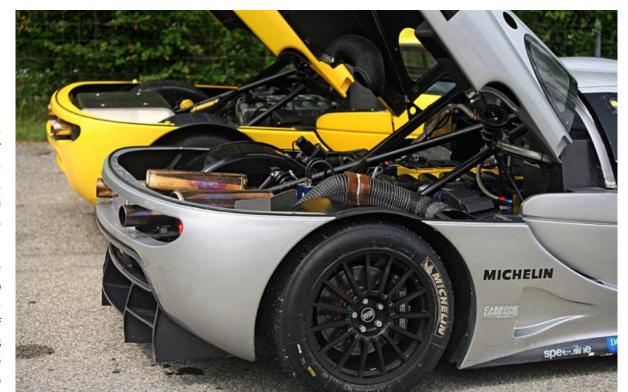
away to some of the latest and best supercars. For all the cold tyre antics, traction is described as excellent and easy to control.

On the flipside the car remains civilised and dutiful in city traffic, comfortably trundling at 40 kph in 5th gear before switching down a gear or two and accelerating rapidly to 260 kph when 6th gear is slotted. Even then, they say, such is progress that the 300 top-speed is not far away... Mega, they say, has found a good compromise between acceptable cabin noise levels in normal use versus a hard racing edge when full power is unleashed.

However, the Monte Carlo is in it element when traversing the alpine passes near Aixam's home grounds. It took Aixam-Mega three years to perfect, but according to the testers it leaves most other contestants in the dark with precision and chuckability that combines the attributes of the best of French GTI hatchbacks with those of ultra-spartan sports cars like the Lotus Elise. And yet they observe, Mega stayed honest to true French character by combining such precision with impressive bump absorption over hollows and undulations without any prejudice to the ride quality.

Steering is described as having surgical accuracy while the rear could be placed at any angle the driver so desires, from a drift to any all-out tail slide, yet maintaining such degree of traction so as to canon the car from one corner to the next like an instant catapult. Additionally, the long downhill passes were not only easy to drive hard, but gave no hint or fear of brake fade... ABS intervention was minimal and non-invasive, and only occurred when locking was undesirable they said, allowing the brakes to be used to help rotate the car, and yet allow correction of any (un)prescribed manoeuvre.

The test, it seems, is concluded on a test track. Here they speak of such things as "virtuoso chassis tuning and control" and" like the Mega Track the Mega Monte Carlo generates almost childish joy that the machine behaves as you would expect". There is more, but I think we have the picture well enough by now. I think, in order to provide some





counterpoint, driving on relatively narrow winding roads provides a sense of speed that is not felt on wide-open spaces, and yet their praise for the car on the track did not diminish at all...

The final comment was that director Blain stated that the company had little concern about producing the cars in any great numbers, preferring instead to meet the requirements of selective well-to-do enthusiasts.

engine	Mercedes S600 V12
position	Mid-Longitudinal
aspiration	Fuel injection
valve-train	DOHC 4 Valves / Cyl. Variable valve timing
displacement	5991 cc / 365.6 in <sup>3</sup>
bore	89.0 mm / 3.5 in
stroke	80.3 mm / 3.16 in
compression	10.0:1
power	294.6 kw / 395 bhp @ 5200 rpm
specific output	65.93 bhp per litre
bhp/weight	263.33 bhp per tonne
torque	570 Nm / 420.4 ft lbs @ 3800 rpm
Fuel tank	110 litres
Cd and CdA	0.35 and 0.73m2
driven wheels	Mid-Engine / RWD
front tyres	F 275/35ZR-18 Michelin Pilot Sport
rear tyres	R 345/35ZR-18 Michelin Pilot Sport
front brakes	Brembo Vented Discs w/4-Piston Callipers
front brake size	
HOHL brake Size	x 355 mm / x 14.0 in
rear brakes	x 355 mm / x 14.0 in Brembo Vented Discs w/4-Piston Callipers
	•





front wheels	F 45.7 x 25.4 cm / 18.0 x 10.0 in
rear wheels	R 45.7 x 33.0 cm / 18.0 x 13.0 in
steering	Rack & Pinion w/Variable Power Assist
steering ratio	2.5 turns lock to lock
rear suspension	Double Wishbones
weight	1500 kg / 3307 lbs
wheelbase	2660 mm / 104.7 in
front track	1670 mm / 65.7 in
rear track	1640 mm / 64.6 in
length	4450 mm / 175.2 in
width	1990 mm / 78.3 in
height	1190 mm / 46.9 in
ground clearance	130 mm / 5.1 in
	2.83:1, 1.72:1, 1.18:1, 0.92:1, 0.77:1,
gear ratios	0.64:1, :1
final drive	30% self-locking 3.78:1
top speed	~300.0 kph / 186.4 mph
0 - 60 mph	~4.4 seconds



Probably just a photoshop roadster...





This car with unpainted wheels and shorter wing mirrors always appears in photos with lighter shade of yellow paint.



