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**PART
ONE**

This is the Le Mans you've never heard of; an extremely special edition, litre-class competitor, capable of 135mph and more. Nolan Woodbury explains how it came to be built almost five years before the factory equivalent...

Photos by Joel Danielz, Samuel Mutschle, Nolan Woodbury, Bill Ross

It's a little-known fact that, in 1980, a special run of modified twin-cylinder, shaft drive Moto Guzzi sports bikes was built, specifically to battle against the era's fastest motorcycles. Given the brand's past accomplishments the matter is not beyond imagination, even though Mandello's chosen motor originated from a touring heavyweight. The engine spec – developed over years of endurance competition and experimental tuning – certainly demonstrates the serious intent of this endeavour. That makes the bike's mysterious omission from history even harder to explain. Most people will never know that this V1000 Le Mans existed – yet it heavily influenced subsequent Guzzi production.

Factory commissioned or otherwise, special order models have emerged in the auto industry for decades. Some spawn factory versions – think of Craig Vetter's BSA which became the Triumph Hurricane – and they can be built to satisfy demand or simply generate interest. Either way, the development skills of the well-connected aftermarket industry can add levels of performance and luxury which don't then easily adapt to the production line. That's exactly the case with the 1000cc Le Mans, a machine which causes confusion by calling Guzzi's set-in-stone timeline into question. Given the historic nature of its works racing program it is natural to assume Moto Guzzi were capable of building anything they wanted, but circumstance often trumps expectation.

A quick recap for anyone unfamiliar with the marque's progress through the 20th century: Founded in 1921 by namesake Carlo, much acclaim followed engineer Lino Tonti 50 years later for carving the big V7 into the small V7 Sport. Alejandro de Tomaso's entry as owner altered Guzzi's trajectory, shifting emphasis (and funds) from the tuned twin to a range of badge-engineered inline multis culminating in the Benelli 750 SEI.

Plenty of De Tomaso's money was spent keeping his various oars pulling, but the rejection of his 'Italian Honda' contrasted with the sentiment that Guzzi was back on track when the Le Mans 850 appeared for 1975.





Built by Agostini to DMB's engine spec, this V1000 Le Mans was originally shipped to South Africa with its factory bodywork. Over time it's been modified with a Stucchi fairing, revised rearsets and a new paint scheme



Agostini in Mandello Del Lario, sometime after 1977

Following market cues, the flashy 850 morphed into the edgy 850 MkII in 1979, styled with more coverage and a four-pod dash. Heavily reconfigured and meeting tighter regulations, Guzzi's new-for-1982 850 MkIII begat a full 1000cc Le Mans three years later. Like its predecessors, the MkIV was a world market model with continuing updates.

Even with this steady progression, the European twins and triples of their time looked a little lacking compared to the Oriental opposition. The Guzzi, Ducati and Laverda bikes were more athletic but lacked certain critical numbers when it came to outright horsepower. Each of Japan's big four weighed in, spitting out a

succession of fireballs that began with the XS-Eleven and ended with a 500lb stick of dynamite called the Z1-R. Suddenly pale next to Suzuki's 130mph GS1000 and four cylinders down on Honda's CBX, the Le Mans' three-digit capacity skimmed a layer off its panache – so plans were put in place to change all that.

If, in 1979/80, there ever was a market where outright capacity and bhp mattered, then it was Germany, as the importer explained. 'Many Le Mans pilots made us understand they want a more sporty motorcycle with more displacement and more power,' said Motobecane CEO Fritz Schaper. 'Therefore, DMB have decided to launch a small, special series on our own. The V1000 Le Mans was developed especially for the Federal Republic.'

There. The first mention of a V1000; a full four years before Wikipedia even mentions the existence of such a thing. Pinpointing the exact origins of that special series draws a direct line connecting DMB's 1000 to a pair of V7 Sport racers campaigned by Mandello dealer Duilio Agostini, once a GP Championship rider for Guzzi.

Finding success post-competition as a tuner, this Agostini was in the right place at the right time when De Tomaso closed the works race shop in 1972. Agostini and a group of key partners took the opportunity to continue V-twin development offsite. The V7s were taken out to 850 and entered into popular events throughout Europe.

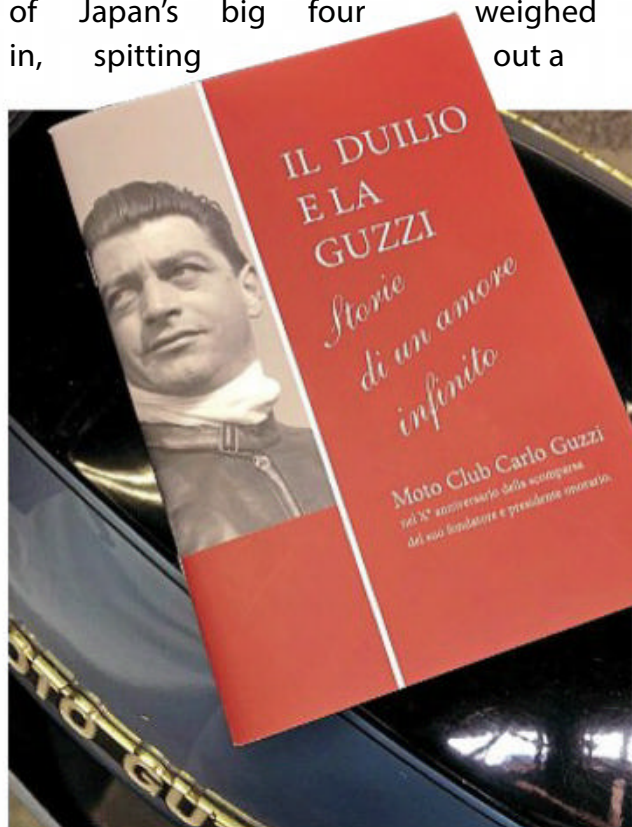
Done well, such competition not only offers exposure but the racing is an ideal laboratory for testing. The components and procedures which passed the exam were added into Agostini's manifesto, and the competition exposure definitely attracted attention. Described as a reserved man, Duilio directed the spotlight towards his racing results which were impressive and attainable. And he was rewarded with a very special order from Germany.

Although Agostini's records show that 75 Le Mans V1000s were built for DMB, only 60 were actually sent to Germany. That explains why you'll probably never see one, or never know it if you did. A trained eye might spot the matching red Marzocchis or Dell'Orto PHMs, but hundreds of copies have come since and 1000cc conversions were common.

'These are mythical motorcycles, drawing odd looks of doubt from other Guzzisti when discussed,' says Le Mans V1000 ace Gary Danielz. One look at Gary's bold red racer pins it as classic, but it's what you can't see that matters more. Purchased new in South Africa by Gary's father, the bike was sold after a while and then spotted on eBay years later.

'As a long time Guzzisti I'd never gotten past that Le Mans,' said Danielz. Bought sight unseen, Gary wasn't aware the V1000 was his father's old machine until finding the family name at registration. 'Few take the production of these seriously. Those I've told probably thought I'd made the entire thing up.'

I uncovered the origins of this forgotten Le Mans in a 1983 edition of Cycle Guide magazine. 'For most sports riders a stock Moto Guzzi Le Mans 850 is enough,' read the headline. 'For DMB it's just the starting point.' The specs described the Le Mans as



Agostini: 'The Duilio and the Guzzi. Stories of an infinite love...' A little known biography



Above: Lindy (left) and Alis Agostini at the dealership in 1988

Left: Duilio and Alis Agostini

an 850 MkIII with a twin-lamp fairing and matching bellypan. 'Up to 992cc and 140-plus on the autobahn.'

Assuming little but knowing less, in time I'd learn this was a newer DMB-built machine, more of which next month. When Gary Danielz got in touch and offered to share his research on the DMB V1000, an international research taskforce was formed: Gary and myself, archivist Bill Ross, Joe Caruso in the UK, and

transcription duties by Alex Woodbury. Gradually, the history of Gary's V1000 took us back to Italy, and to Agostini's daughter, Alis.

Taking over day-to-day management of the tuning business from Duilio, Alis Agostini successfully grew the Mandello emporium for nearly three decades. Graciously allowing repeated interruption of her retirement, Ms Agostini's information clarified how the Danielz

V1000 landed in Johannesburg.

'In addition to the bulk sent to Germany via contract, we also shipped the Le Mans 1000cc to South Africa, Australia, and the UK,' reported Alis from her Mandello home. Mick Walker handled Agostini UK, while in Australia the highly respected Ted Stolarski is credited with several impressive endurance specials using Agostini parts. 'All components of the tuning kit were available for purchase at Agostini,' said Alis, adding that a substantial number of orders for performance equipment were also placed by the Swiss importer.

After the 850 MkII's 1979 release, DMB (Deutsche Motobecane) specified a more powerful 1000cc version, by then a common request at Moto Guzzi. The factory had already begun production of a 1000cc Le Mans CX100 for the US, a model created by mating the 850 MkII and Convert 949cc touring engine. 'Guzzi management did not appreciate the fact that official dealers were modifying their products,' Alis explained. 'An agreement between us and the factory did exist but, as opposed to a commissioned order, it was more of a personal agreement between my dad and Mr Giuseppe Ermellini, export manager at that time for Moto Guzzi.'

Reaching back in time, Ms Agostini relayed several snippets that confirm her father's personal connections, including the purchase of Guzzi-made camshaft blanks later treated to Agostini's grind. 'It is to be said that there was some "unofficial" support inside the factory.'

Some endurance secrets are revealed when studying the V1000. Offering more than a simple power boost, the Le Mans

Gary Danielz's V1000 SA. Remarkable, no?





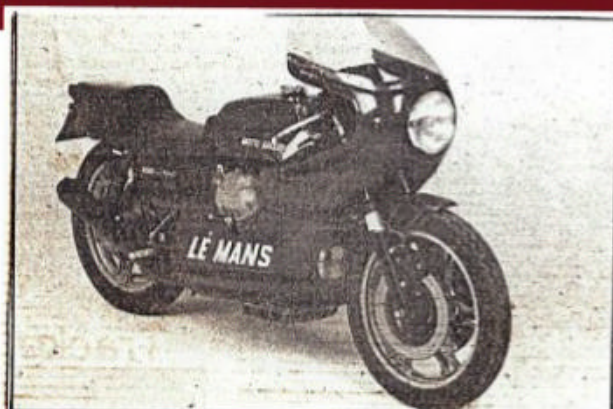
An authentic DMB V1000 Le Mans II from a period photo



Gary Danielz's V1000 – look closely to spot subtle differences

mixed Duilio's racetrack gallop with new levels of stylish comfort. Agostini's first licensed workshop opened in 1956, located at Mandello's AGIP service station. Moving into a three-story emporium in 1977, Agostini became a worldwide destination for enthusiasts, friends and families. Ready to build, the process began with new 850 MkII models taken ten at a time from a storehouse in Lecco, then reworked by Duilio's tuners at the old facility. Seeing the target set by darting Desmos, fast Lavs and rapid Japanese fours, these hand-picked components resulted in more power and more speed behind the Agostini bubble.

'It was a crazy system,' says Peter Horvath of the transformation process. Hired in 1980 to build performance customer engines, he's since become Austria's expert as Horvath Moto Guzzi. 'Officially Guzzi delivered ten Le Mans 850 MkIIs at a time to German importer Deutsche Motobecane, via a transport company that shipped bikes from the Guzzi factory to Lecco. We would go to this warehouse, take the bikes out from the crate, fasten an old tank with fuel, fit a battery and ride back to Mandello. The performance



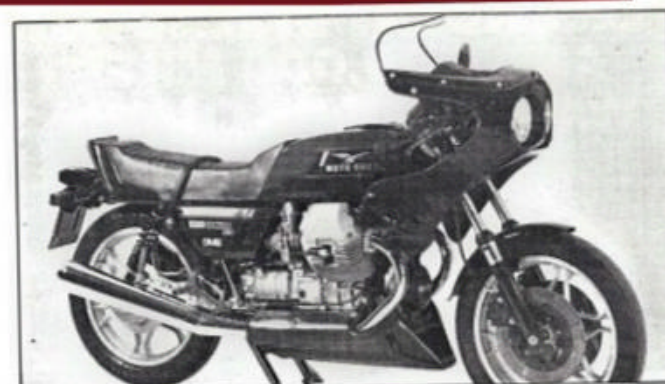
IF YOU would like a superbike capable of travelling over twice as fast as Britain's 70 mph speed limit the Italian Duilio Agostini company will be pleased to help. They have taken the 850 Moto Guzzi Le Mans and given it the racing treatment (above). You ask what stage tuning you want and they will provide it. They can for example boost the engine capacity to 960cc and they dress it to fit the part. The Le Mans pictured features an Agostini fairing, seat unit and rearsets and special Lafranconi silencers and Marzocchi shocks are also fitted.

UK dealer Mick Walker's Agostini advert

package remained identical for this production, and once finished the process was reversed and the bikes were returned to their crates for shipment.'

Spanners would spin well into the night for, according to Horvath, he and English mechanic John Gahan completed 75 Le Mans V1000s that year.

Those with experience inside Guzzi's hi-po 949cc twin will see familiarity in the specifications. First, the top end was pulled and back on went 88mm Nikasil-lined Gilardoni cylinders and matching 10.8:1 Gandini pistons. Stroke remained at 78mm. Horvath and Gahan then swapped the stock heads with castings reworked



For most sport riders a stock Moto Guzzi 850 Le Mans is enough. But for Deutsche Motobecane it's just a starting point. (Cyclo-Guide Magazine, Nov 1983)

This was the first FMB V1000 Nolan Woodbury saw. A 1983 V1000 Le Mans III

with enlarged 46.5 / 40mm inlet and exhaust valves, stiffer springs and opened ports. A pair of 40mm PHM Dell'Ortos attached to custom manifolds, opposite, 40mm exhausts fitted with Lafranconi's Competizione silencers. These hug the sides tightly.

Most interesting is the inclusion of Agostini's P3 cam, altogether more aggressive than Guzzi's racing B10. Replacing the cam / oil pump drive chain is Agostini's straight tooth timing gear set in Ergal and an oil breather box was hung on the frame. Between the case and sump a spacer was fitted to lower oil temperature and prevent the crank's counterweights ➤



Agostini fitted their own pattern of rearset rests



from drafting lubricant from the supply.

Additional ancillaries include the matching Marzocchis and Duilio's patented rearset controls. The aerodynamic efficiency gained by Agostini's endurance-spec fibreglass made the most of the claimed 82bhp at 7500rpm.

Able to navigate high speed autobahns or the alpine lanes around Lake Constance, that 1000cc muscle spreads across the powerband. 'Cold starts with the ticklers takes some practice,' says Danielz of his own machine. 'Everything being right, a couple of quick jabs has it running on the button. Flood it, and fuel will run out the carb mouth onto the starter solenoid.'

Gary's Le Mans once used the close-ratio gearbox but has since returned to the standard shafts, trading high end flexibility for low speed drivability. 'There's a fair amount of work to switch it back, but it's all doable,' Gary muses. 'Dad had a stock Le Mans too, and the bigger bike is basically



an 850 MkII on steroids. The difference between the two is very little, and vast all at once. Both sit the same but the Agostini feels stiffer, more rigid, whereas the 850 MkII is fluid, a more natural machine. Basically, the V1000 has bags more power and much longer legs.'

Even with taller gearing, those 88mm pistons help pull the bike up and away easily. The engine almost deceives the rider by going faster through a slower rate of spooling, more throttle brings a surge at 5000rpm that changes the exhaust in pitch and intensity. There's lots of inertia generated by the engine's beefy crank and



Gary Danielz's V1000 SA boasts big carbs. Big valves, too

flywheel, but rowing Guzzi's close-ratio five-speed through sweepers returns even more stability from an already forging motorcycle.

Guzzi's linked Brembo brakes and Tonti's stout chassis needed no upgrade to cope with the enhanced engine output. Rolling down the highway at just over 500lb, Agostini's slippery street twin is well capable of speeds past 130mph. The cost of a DMB V1000? 30% on top of the price of a standard Le Mans 850 MkII.

Agostini's race team in the early 1970s consisted of handpicked technicians and ex-factory types, some employed by Guzzi prior to De Tomaso's involvement. Local Fiat dealer Colombo Pisati and the president of Lafranconi, Nino Gini, both contributed to Agostini's commercial



A Le Mans 850 with Agostini fairing, seen in 1979

enterprise. Technical supporters included engineer Umberto Panzeri (Gilardoni cylinders) and the highly skilled Piero Pomi. A master tuner during Moto Guzzi's golden GP days, Pomi worked in the factory racing shop alongside Ing Giulio Cesare Carcano, considered by many to be the most significant engineer in Moto Guzzi history.

'Piero was a very good friend of my dad, his favourite mechanic,' says Alis Agostini. 'All of these people and more contributed to the V1000 Le Mans by virtue of their involvement with Agostini's endurance racing program.'

There's certainly considerable credit to share in the shape of the DMB V1000 and the remarkable achievement it represents. Sadly, too few of Agostini's international team remain and many critical details have been lost over time. The serial number

sequence, for instance. 'We only invoiced DMB for parts used,' explains Alis. 'They received complete 1000cc Le Mans and boxes with spares.'

A number of road tests feature a pre-production V1000 (still wearing 850cc badges) made available late in 1979 to the German press. 'Over the entire speed range, the significantly increased power is noticeable,' wrote MO magazine early in 1980. 'And this impulsive, on the gas hanging four-stroke is the fastest production engine so far from Guzzi.'

Testing the same bike, Motorrad drew similar conclusions. 'First dab, then start – this long-standing instruction applies not only to rusty classic cars, but also for the latest creation from the house Moto Guzzi. The V1000 Le Mans II is a Super-Le Mans, with added engine capacity and 82hp. Those not irritated by such ceremony should seize the opportunity before others arrive first, for only limited copies of the fiery red traveller will be available for sale.'

For me, filling some of the blanks in the Moto Guzzi Le Mans story has been immensely satisfying, especially understanding the pivotal role that Duilio Agostini played in developing Guzzi's icon V-twin. 'We were told to keep the tuning details a private matter,' remembers Peter Horvath. Yet this isn't the whole story – there's more to learn about the DMB

1980 MOTO GUZZI V1000 LE MANS II DMB/ AGOSTINI FACT PACK

Engine	942cc VE-code ohv air-cooled two-valve 90-degree twin
Bore/stroke	88 x 78mm
Transmission	5-speed, shaft drive
Tuning	2x PHM 40mm Dell'Orto on custom intakes, oversize valves, heavier springs, P3 cam, Ergal gear drive, 40mm performance exhaust, Agostini frame breather.
Frame	Tubular cradle
Front suspension	Moto Guzzi tele forks
Rear suspension	2x Marzocchi AG Strada shocks
Wheels	FPS cast wheels
Bodywork	Agostini full fiberglass fairing, rear-sets, special badge
Weight	500lb
Top speed	136mph
Seat height	la velluptati a evelitio
Dry weight	la velluptati a evelitio

V1000 and other global variations on the theme. What other mysteries could be uncovered? What other myths might be exposed? To be honest, I'm rather curious to find out for myself.

Passion dictates that we never stop our personal quest to learn, experiment, improve and experience that same passion with those who share it. Learning of the Agostini V1000 Le Mans II was a revelation; few opportunities of the kind exist in the US. It is an honour to collaborate with the many who helped bring this story to the front. Resurfacing with remarkable historical provenance, this machine's Grand Prix roots date back to Moto Guzzi's golden era of the 1950s.

The specs describing Duilio's 1000 would certainly have placed it in the same performance league as the later Le Mans 1000 of 1985. Top speeds for the Agostini Le Mans put it on par with the 135-140mph range of the newer, square-fin version.



The familiar Le Mans clockery. Observe the sticker above them



Something a little different. An experimental Agostini V4 on display

Agostini chose the P3 camshaft for his hot rods, an excellent performance cam for street or track. With a modest 276-degrees of duration (7-degrees more duration than the factory's B10) it lifts the valves another 0.025" higher. The P3 cam would make for higher peak horsepower and torque pushed higher up the rpm scale, then pushed even higher when combining larger valves, 40mm carbs and the Lafranconi exhaust.

High compression pistons, set at 10.8 to 1 static compression ratio, worked with Agostini's P3 to develop a cold cranking cylinder pressure of 177.95psi. The dynamic compression ratio would have dropped to 8.73 to 1, corrected for con rod length, cam timing and adjusted for sea level. 40mm Dell'Orto carbs complement the package to create an additional advertised 8-10bhp over stock.

Improved streamlining allowed a top end well above the standard 850 II, especially with the large valve conversions; speeds that rivalled or exceeded the very fastest production bikes then available on the planet! What's confusing in this study is the wide range of displacement figures stated: 952...960cc? Whoever stamped 942cc on the V1000 II's ID plate must know, because the mathematical sum of a twin with 88 x 78mm bore and stroke totals 948.8cc.

Duilio Agostini offered yet more performance for the discriminating Guzzi enthusiast. Tossing in his available 90mm pistons, Nigusil cylinders, 51mm intake valve conversion and other custom racing parts would result in an absolute beast of an engine. Based on my own experiences at Bonneville, these fully modified Le Mans have 150-plus capability, especially if the 8:33 rear-ratio (developed for the Convert sidecar) was used. At 7800rpm with the standard gearbox, 8:33 drive and a 110/90-18 tyre would net 154.2mph, variables permitting.

The performance of the V1000 Agostini remains undated even now. **Rc**



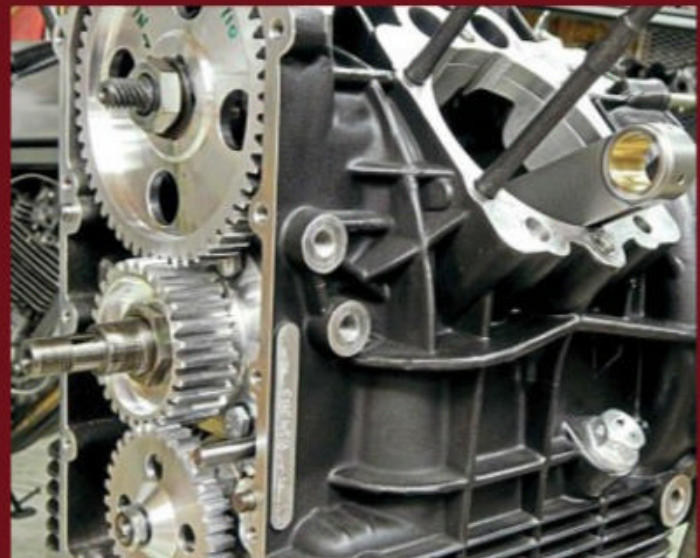
Nolan and his international research team have spent months rummaging through archives, seeking information about the DMB V1000. Do you know any more? If so, get in touch with RCHQ@RealClassic.net and we'll pass the word

PERFORMANCE PARAMETERS

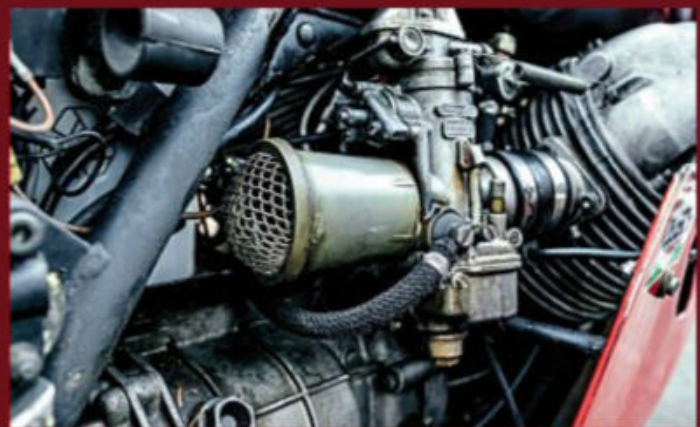
As a record holder and the man behind the world's fastest Moto Guzzi, land speed ace Bill Ross knows a few things about fast pushrod twins. Currently aiming for 200mph as his next project comes together, Ross examines the Agostini 1000 to explain how and why it worked.



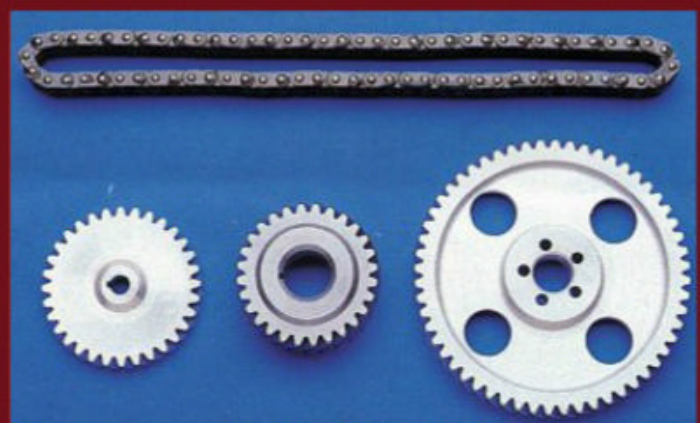
Handsome camshafts, pushrods and valve springs to match



Agostini Ergal timing gears



Large carb on DMB V1000 Le Mans II



Timing gears replace the original chain