

# RETROMOTIVE

ISSUE 11 SPRING 2021



ISO BIZZARRINI AC/3

RETROMOTIVE

**SUBSCRIBE**  
**TO RETROMOTIVE**  
**MAGAZINE**



**4 ISSUES** delivered  
to your door

 **SUBSCRIBE NOW!**

[www.retromotive.co](http://www.retromotive.co)



# RETROMOTIVE

ISSUE 11 SPRING 2021



**08**

ISO BIZZARRINI AC/3

**24**

DODGE CHARGER 440

**38**

NICK VEASEY - X-RAY ART

**48**

MARIO ANDRETTI

**58**

PORSCHE 906

**72**

HOLDEN HURRICANE

**82**

BOB LUTZ

**88**

GRAND PRIX NOIRE

**98**

MERCEDES-BENZ CLK GTR

**112**

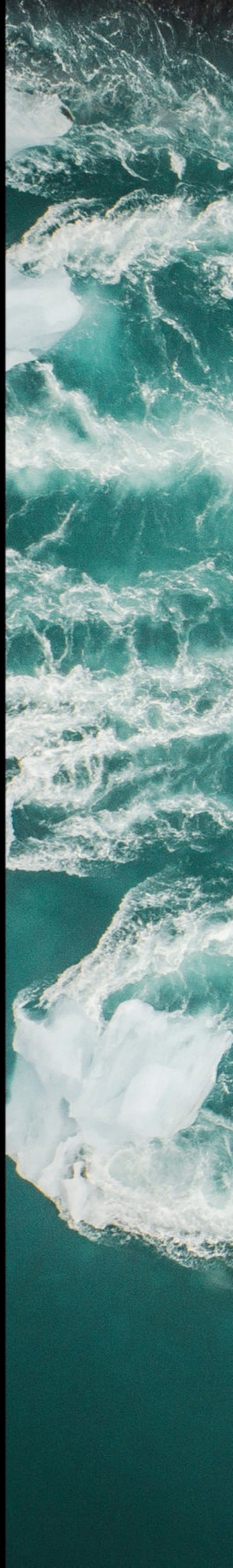
A DEFENDER IN ICELAND

**130**

BMW E36 M3

**144**

McKINLEY THOMPSON JR





# 112

A DEFENDER IN ICELAND





## **PUBLISHED BY**

Retromotive PTY LTD

## **EDITOR**

Nathan Duff

## **PHOTOGRAPHY**

Zach Brhel

Patrick Curtet

Nick Veasey

Saam Gabby

Aaron Brimhall

Thomas Schorn

## **COPY EDITOR**

Dr John Wright

## **WORDS**

Nathan Duff

Bruce McMahon

John Wright

Justin Jackey

Daniel Lackey

Iain Curry

Emma Woodcock

## **EDITORIAL ASSISTANT**

Yvette Stephanie Hallam

## **ART DIRECTION & DESIGN**

Nathan Duff

## **SPECIAL THANKS**

Julie, Jimi, Jesse & Johnathan

## **CONTACT**

[contact@retromotive.co](mailto:contact@retromotive.co)

PO Box 3403 Victoria Point West QLD, 4165

[www.retromotive.co](http://www.retromotive.co)

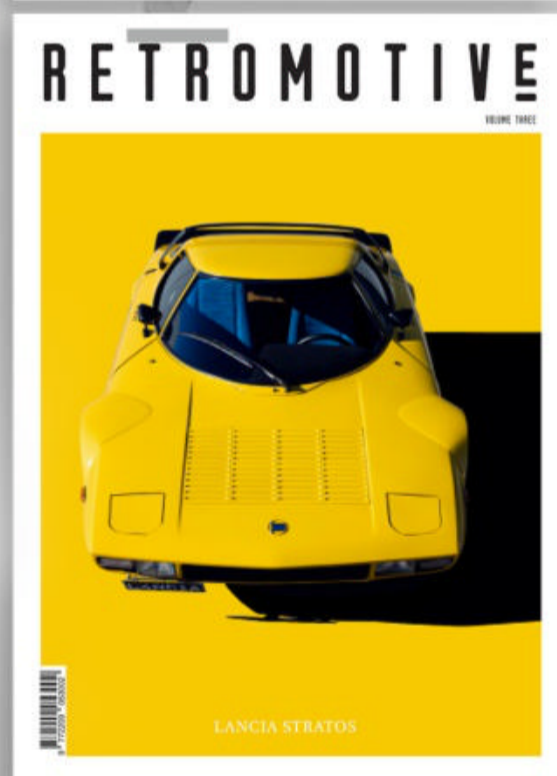
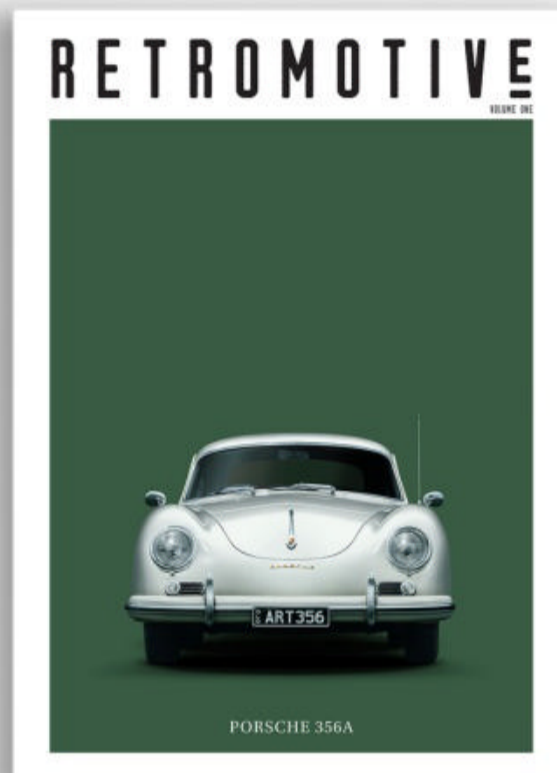
## **ISSN 2209-0533**

All material is ©Retromotive PTY LTD 2021. No part may be copied, reproduced, reprinted, scanned, shared or sold without permission from the publisher.

Printed Canada

RETROMOTIVE

**SUBSCRIBE**  
**TO RETROMOTIVE**  
**MAGAZINE**



**4 ISSUES** delivered  
to your door



**SUBSCRIBE  
NOW!**

[www.retromotive.co](http://www.retromotive.co)

# BEST BUNDLE EVER! **TWO WORLDS** IN ONE SUBSCRIPTION



**12-MONTH SUBSCRIPTION**  
Retromotive + Engage 4x4

 **SUBSCRIBE NOW!**



# FRONT END

NATHAN DUFF

---

Greetings and welcome to Retromotive magazine! What is this new publication you find yourself thumbing through? If I had to sum Retromotive up in one sentence it would be. We tell stories about cars and the people who drive them. Until now, you could only purchase Retromotive at [www.retromotive.co](http://www.retromotive.co). This is, in-fact, our twelfth publication – but we've decided it is time to take the plunge and get out into the big bad world of US retail.

At Retromotive, we're enthusiasts – car lovers of course, but the stories that colour the automotive landscape are as interesting to us as the machines themselves. Art, design, innovation and culture – we weave as much of this as we possibly can into our story-telling, both visually and verbally. Our design philosophy is simple and clean. As such, advertising is minimal (none for this issue actually). We save event coverage for our on-line content so not to date the magazine – it should be as relevant in 10 years as it is today. Our covers employ a bold graphic treatment and minimal cover lines so it feels more like a piece of art, not just a magazine.

Retromotive started life in Brisbane, Australia, as a blog style website in mid-2017. As an automotive photographer, one of my very first assignments was

shooting for a local classic car magazine. I always loved chatting to the owners – there was always a fascinating element to their story – how they found their car, where it had come from and the life it led before it found them. I missed that aspect of the job terribly when the magazine folded and I started doing more commercial work.

The idea behind Retromotive was to find those like-minded people again and hang out, chat and take cool photos of their cars, to rediscover what had first attracted me to classic car culture. Before I knew it, the website wasn't enough for me and I was planning to print and distribute an 88-page magazine. Unfortunately, there isn't enough space here to tell you about the headaches of printing – suffice to say, it's not all sunshine and unicorns.

Now, some four years later, we find ourselves breaking ground in the US market. We have a stable of über talented photographers, writers and designers working on the magazine. We're very excited about this step and have pulled together some amazing content for you to devour. So, enough of me – please enjoy our special US Launch edition of Retromotive and keep an eye out on your newsstands. You'll be seeing a lot more of us. I promise.



*When he is not out shooting classics or putting the magazine together, Nathan likes to pretend that he'll actually finish the series 3 Land Rover that sits in his garage gathering dust. Follow Nathan on Instagram @retromotive\_editor*



*ISO BIZZARRINI AC/3*

✦ WORDS **IAIN CURRY** ✦ IMAGES **SAAM GABBY**













**F**or the automotive aesthete, 1965's 24 Hours of Le Mans was a near-unrivalled visual, acoustic and sensory feast. True, sports car enduro events from any year of the '60s were hardly short on eye candy, but '65 with its grid of striking primary colours over sleek, exotic bodywork was something extraordinary.

Lining up at a hot and sunny La Sarthe that year were six Ford GT40s (not one of which finished), five Ferrari 250 LMs, five AC Cobra Daytona Coupes and seven Porsche 904s with a mix of flat four-, six- or eight-cylinder powerplants. Ferrari's armada was strengthened by racing 275s, 330s and 365s, while smaller-capacity classes were flush with curvaceousness including Alpine A110s, Austin-Healey Sebring Sprites and Alfa Romeo Giulia TZ2s.

Even the drivers looked good: minimal sponsorship on simple race suits and fresh, handsome faces including Jochen Rindt, Bruce McLaren, Pedro Rodriguez, Jackie Stewart, Peter Revson and a chain-smoking, bespectacled, and ultimately victorious Masten Gregory. On the podium, the American's two-finger salute alongside co-driver Rindt – both sporting boyish grins – highlighted what a surprise victory it was.

There was a surprise further down the

finishing order too. Back in ninth place, and first in the 5000cc+ Prototype class was the Bizzarrini Automobili-entered Iso Grifo A3C, the very car seen here. The fact its only other class competition were the expired 7.0-litre GT40s can be glossed over: a Le Mans class winner is still a Le Mans class winner.

That Le Mans history is a key reason California's Bruce Meyer – car enthusiast par excellence and founding chairman of the incomparable Petersen Auto Museum in Los Angeles – bought this bright red Italian racer. History shows its creator, Giotto Bizzarrini, personally drove it from its birthplace of Livorno on Italy's Tuscan coast to the '65 Le Mans race, and after 303 laps of day-night competition, promptly drove it home again. Properly usable race cars. That's of huge appeal to Bruce, and why he says he regularly drives it on his local roads, and occasionally stretches its legs at the track.

'Its design is extraordinary, but its race record completes the package,' its owner said. 'It walked the walk. Le Mans is the most important race in the world. It's the World Cup, Olympic Games and Super Bowl of motorsport. Knowing this car finished in the top 10 and won its category outright makes the drive experience all the more meaningful.'

**LEFT:** The Bizzarrini is still sporting its original Italian registration plate.













## *HAD BIZZARRINI STAYED AT FERRARI THIS IS WHAT THE NEXT GENERATION GTO WOULD HAVE LOOKED LIKE*

Bruce is one of those car guys whose enthusiasm and genuine joy of sharing such cars make him instantly relatable, it's just his toys are worth several million apiece. Like most of us he loves a car story, and his Bizzarrini isn't short on those. 'Its rarity and Le Mans history moved me to action (to buy it),' he said. 'For me it's all about the story, and the Ferrari "Palace Revolt" and winning Le Mans meant I had to have it.' So, the Bizzarrini story. Giotto Bizzarrini (with a name like that, you're not going to create ugly cars) is well into his 90s today, and is one of few survivors from Ferrari's glorious design and engineering days of the 1950s and 60s. A legendary ingegnere and test driver, Bizzarrini was Ferrari's chief engineer after being head-hunted from Alfa Romeo. His engine, chassis and aerodynamic work drove success for the 250 Tour de France and the 250GT SWB amongst others, but he'll be forever remembered as father of the 1962-64 250 GTO – now, as we know, among the most revered and valuable machines ever created.

Ferrari's 1961 'Palace Revolt' Bruce speaks of can be boiled down to good old fashioned Italian hot-headedness, politics and pride.

Be it Enzo's wife Laura's meddling, the letter from staff demanding her removal, poor pay or the Old Man's stubbornness for compromise – probably a combination of all – a lot of engineering talent was shown the door, race engineer Carlo Chiti and Giotto Bizzarrini included.

For all the 250 GTO's brilliance it was a conservative effort – a leaf sprung rear and engine designed in the 1940s – whereas Bizzarrini was hungry for innovation. Now away from Ferrari he helped found the ultimately unsuccessful ATS F1 team, engineered the one-off Ferrari 250 GT SWB Breadvan for Count Volpi to challenge Ferrari's 250 GTO (Enzo wouldn't sell him one), and in just four months designed Lamborghini's V12 engine – first used in 1964's 350GT – and whose basic design was used in every V12 Lambo until 2010. Quite the resume.

In 1962 Bizzarrini was hired by Renzo Rivolta to work for Italian firm Iso – famed for the Isetta bubble car – to produce performance GT cars. Bizzarrini had by then had his first taste of a Chevy V8 engine, was smitten, and used the 5.3-litre (mated to Chevy's four-speed gearbox) to power what became the Iso Rivolta. Itching

**LEFT:** Utterly Italian in every detail: how about these gorgeous wheels!















## *HOW MANY OTHER RACERS THAT TOOK THE LE MANS START LINE IN '65 STILL CIRCULATE A PUBLIC ROAD SOMEWHERE?*

to get back racing, by 1963 another model, the Iso Grifo, was born. Bizzarrini had insisted on a 'Corsa' or competition version – the A3C to go with the A3L super coupe road car.

Long story short, the Bizzarrini-Rivolta relationship failed to last more than a few years, race results were patchy, but the Iso Bizzarrini AC3 Competition with Bruce today is arguably the most original product of the relationship, and unquestionably the most successful.

'I think of the A3C as my 1965 250 GTO,' Bruce explained. 'Had Bizzarrini stayed at Ferrari this is what the next generation GTO would look like. The A3C was seriously advanced for 1965. Mid-front engine, slab sides for aero, in-board rear brakes and an uber-low profile. Like no other design of its day.'

Under the AC3's aluminium bonnet its Chevy 327 – basically a fettled Corvette engine – lacks the exotic beauty and intimidation of a Maranello or Sant'Agata V12, but the exposed quartet of 45 DCOE Webers and how the motor sits so far back in the engine bay is ample to feast upon. Besides, an Italian V12 can be as delicious as it likes, but most of us would have greater confidence returning from a Californian

canyon drive sans dramas using a Chevy V8. Parts? Rebuilds? Tractability through town? Go USA.

An Iso AC3 Competition without Le Mans history sold earlier this year for US\$1.2million at a Mecum auction, so you can forgive Bruce saying he 'doesn't really drive it ten-tenths.' But he doesn't cotton-wool it either. 'It's frisky with all the power and sound to excite; it's always entertaining and creates excitement wherever it lights. I've done track days, Pebble Beach and tours and every trip is memorable.'

Back at Le Mans in '65 things were a dash more balls-out when it was driven to ninth place by Frenchmen Jean de Mortmart and Regis Fraissinet. Bruce says the car was going just shy of 190mph on the Mulsanne straight – only the 7.0-litre GT40s were faster. The Chevy V8's performance was aided by Bizzarrini's quest for cutting-edge aerodynamics (hence the slab sides) and the body's lightweight aluminium and fibreglass construction. Then there was the De Dion independent rear suspension – Ferrari still used cart springs on its 250 GTO remember – in-board brakes and eschewing the normal wire wheels for more solid – and stunning – Campagnolo cast rims.

**LEFT:** Centrally mounted tacho not ideal for the Mulsanne straight, but aesthetically this is a beautiful interior. Note elegant thin-rimmed wooden wheel, a pure 1960s touch!







## *'YOU DON'T WIN LE MANS BY LOOKING PRETTY'*

The body is as original, including its hand-painted no.3 racing numbers and yellow dot on its flanks signifying it ran as a Prototype at Le Mans. Its survivor status was helped as after its 24-Hour success it saw minimal on-track action. It competed in World Sports Car events at Nürburgring and Reims, was piloted by Le Mans winners Chris Amon and Maurice Trintignant, and then went into retirement as personal and promotional transport for Italian-based American actor Remington Olmsted at his Rome café.

A three-decade stint in a museum followed to preserve its originality, before classic and race car dealer Gregor Fisker purchased it and had GTO Engineering re-commission it for racing. Its next owner died in a car accident, leading Bruce to buy it from his estate and bring the Italian with the American heart to California. 'Its sound rivals that of a GTO,' he said, and certainly the muscular burble turning to power-packed roar as it loads up to the redline delivers enough aural pleasure to match the characteristically 1960s Italian body. 'In its day it probably had 400hp, but there's around 500hp today. The top end is where

it's at; it cries for more at the top end.'

Noise and performance aside, this Bizzarrini strikes you dumb just with its looks. Bruce has said 'you don't win Le Mans by looking pretty,' but his A3C damn near could have done. So low-slung, so gloriously curved from head to toe. Period racing elements – the enclosed round headlights, the low-mount front fog lamps, swept-up rear end and, fittingly, retaining its impossibly stylish Italian registration plate. Vents for the in-board brakes plus the fuel-filler entry are flush in the lightweight rear screen: race car elements from a different age that must shock and awe those in their bore-box SUVs cruising the same LA streets as this Italian legend.

How many other racers that took the Le Mans start line in '65 still circulate a public road somewhere? Values of anything that raced in this supremely stylish era are off the charts, so we can be grateful this Bizzarrini has ended up in Bruce's enthusiast hands, eschewing trailer-queen life to be driven and enjoyed. Mr Bizzarrini, who 56 years ago crossed the Alps in this very car to make the Le Mans start line, would be very proud.

**LEFT:** Note how far back engine sits in interests of weight distribution, now makes about 500 horsepower.

















*DODGE CHARGER* 440

✦ WORDS DANIEL LACKEY ✦ IMAGES [WWW.CURTET.COM](http://WWW.CURTET.COM)



**W**hat makes a car iconic? There are many cars one could consider great, but how many are truly iconic? Two qualities come to mind, form and function. No car can reach such a lofty status without these two qualities; when they are united in a single design, one could argue that cultural impact becomes inevitable. To mid-century Americans, the automobile was a physical manifestation of their hopes, dreams and aspirations and through the 1960s they aspired to going ever faster. The muscle car era began in 1964 and kicked off an arms race between the major American auto manufacturers. Throughout the decade each manufacturer would try to outdo the next with ever-increasing engine capacities and horsepower figures.

When it came to horsepower, Chrysler was the first to start setting benchmarks, as early as 1957 the 300C could be optioned with as much as 390 brake horsepower. Its legendary 426 cubic-inch Hemi engine had dominated racetracks up until it was outlawed by NASCAR in 1965. For 1966 the Hemi was repackaged for public consumption and joined the ranks alongside the already popular 440 big block. It seems odd, then, that Chrysler would be late to the muscle car party. In '66 and '67 the Pontiac GTO outsold the first-generation Dodge Charger more than three to one. Chrysler's struggle was not for lack of muscle but lack of aspirational design. That all changed in 1968.

The first-gen Charger was poorly received by critics and consumers alike. Proportionally, it was unbalanced with an ill-conceived fastback roof slapped atop a boxy body. Carl Cameron's design wasn't unattractive but it lacked the sense of drama and occasion that consumers had already come to expect from a muscle car. In 1967 sales dropped to an all-time low of 15,788 units. Chrysler had no choice but to rework the Charger for 1968, this time under the direction of Dodge design chief Bill Bownlie. The results were nothing short of spectacular.

The second-generation Charger was an instant hit. In just one year Chrysler jumped from the bottom off the pack to the top with the hottest muscle car on the market. The Pentastar finally had an offering that combined unbridled horsepower with the looks to arouse men and women alike. Gone was the slab-sided box and in its place were subtle curves, wide hips and a drawn-in waist. The hidden headlights and full-width grille were retained but were now recessed deeper into the body. Like a blindfold, the blanked grille added to a sense of mystery. The resulting aesthetic was uniquely powerful, it was muscular and masculine but had a feminine subtlety at the same time. It was both dominant and submissive, an object of pure desire.

Chrysler created an icon and American consumers couldn't get enough of it. In its first year of production, this new Charger outsold the Pontiac GTO and Chevrolet















Chevvelle SS by 8000 and 33,000 units respectively. The new Charger appealed to the consumer on a base level and had a human connection that was undeniable. This concept – that great car design must create a connection – is shared with the owner of the Dodge Charger you see here, and it is exactly why he came to own one.

The car belongs to LA-based car designer Florian Flatau, a German native who spent many years of his childhood living in America. During these formative years Florian developed a fascination for American muscle.

I grew up in Boston and our neighbour was a race car driver and our other neighbour had a bunch of muscle cars. When we moved back to Germany I was always looking towards American cars, mainly muscle cars. When I had my first internship in 2007 at BMW Design Works in LA I bought a 1970 Buick Skylark, white with black vinyl roof and caramel brown interior. That car I brought back home to Munich and had it until I left in 2013.

Florian had long set his heart on a second-gen Dodge Charger but they proved to be too rich for a young design intern. That all changed in 2013 as he packed up to move to London. Thanks to the ever-increasing desirability of good quality muscle cars in Germany he was able to sell the Buick for a tidy sum.

I sold the Buick for a lot more than I bought it for because muscle cars had gained so much popularity over the years

in Germany. That money went directly into the purchase of the Charger which was always my ultimate muscle car.

From Nissan's Infiniti Design studio in London, Florian's next opportunity would take him back to the USA. With plans to move to Los Angeles, he decided that it was finally time to find his Dodge Charger. He found a matching-numbers 1967 example in Minneapolis; it looked super clean and very original, both important qualities to Florian, but the best part was the price!

The price was so good and it looked so good. Even if there was something mechanically wrong, for that price I couldn't go wrong. I was living in London when I found the car, within four days I flew to Minneapolis to buy it. It was snowy in Minneapolis so I just drove it back and forth where there was no snow on the pavement. I had the container come and the car was loaded, shipped to LA and put in storage. When I arrived in LA, almost a year later, I drove it for the first time, and I was like, we need to have the brakes done!

When Florian first arrived in LA the Charger was his only set of wheels, so it had to be reliable. He quickly set about refreshing the mechanicals whilst still trying to drive it to work daily. 'I was driving it daily for a year. It was great. But then I bought a Porsche so I started daily-driving that instead, the complete opposite!'

He started with the Charger's brakes, rebuilt the original discs in front and drums at the back, then installed a rebuilt Dana 60

**RIGHT:** Equal parts stunning and intimidating from any angle















axle and differential. Cosmetically the car is just as he bought it. Part of the appeal was the complete and original interior.

Cosmetically I've done nothing to it. It has original bucket seats, original steering wheel, dashboard, headliner. I think it has new carpet but that's all. It's had a coat of paint but looks pretty original. We've only been through it mechanically.

Florian's Charger left the factory with the 335-horsepower, 383 cubic-inch engine. But for any true muscle car aficionado the pursuit of more ponies cannot be resisted. In August 2017 he found an original factory 440 big block including the fabled 'Six Pack' carburettor arrangement. The factory claimed 390hp from this engine backed by an enormous 490 lb-ft of torque, but Florian sourced quality internals and a sufficient camshaft to generate closer to 500hp, more than enough to destroy any fine set of tires. The matching-numbers 383 was pulled out and put to one side and the 440 was duly installed. Mated to the new engine is the original A727 three-speed automatic – a strong transmission long popular with drag racers. I asked Florian if he ever considered swapping it for a four-speed manual.

I thought about putting in a four-speed but a friend of mine let me drive his manual Corvette Stingray and it was brutal. The clutch was so hard. I thought I'd stick with the automatic on the muscle car. For that kind of driving I prefer the Porsche. The Charger is more of a Sunday cruiser, and

in LA traffic as well, I think the automatic is better.

With the second-gen Charger, Chrysler created something with universal appeal. The design was subtle yet communicated its intent directly. To look at it is to see power. As you might expect from a car designer, Florian's desire for the Charger was dominated by its aesthetic. 'The form language is just so pure and brutal, the proportions, how the volumes of the front and rear intersect, and just the simplicity of it.'

Forming an impressive two-car solution, Florian's other set of wheels is a 1982 Porsche 911. Two iconic cars, each representing wildly opposing design values, but seeing them side by side you're immediately struck by how well they complement each other. The Charger was built for American roads, but the 911 couldn't feel more at home in the winding canyons to Malibu. When asked what it was like to drive the Charger, Florian responded, 'Well, you can't compare it to the Porsche! It's a very powerful cruiser!' So, what's next for Florian? He has no plans to part with the Charger, for him it represents a pinnacle of great design and continues to inspire him to design better cars that have the capacity to emote and connect with their owners. The next project on the horizon is his girlfriend's recently acquired '68 Mustang Fastback... in dark Highland Green no less (cue Bullitt soundtrack).

**RIGHT:** Second-gen Charger design is clean and minimal, best suited to very dark colours.

















## NICK VEASEY

*X-RAY ART*

★ WORDS **NATHAN DUFF**

★ IMAGES **WWW.NICKVEASEY.COM**

Finding a unique perspective on automotive photography is hard: it's nearly all been done before. Techniques that break the mould are generally popularised and are quickly embraced by amateurs and professionals alike. However, to the best of my knowledge – and that of Google – Nick Veasey is the one and only photographer out there producing X-ray imagery of classic cars, and these are spectacular!

'X-ray found me. I didn't go all the way through school, and I had a bunch of dead-end jobs. It wasn't until I was in my thirties that I really found what interested me, and since then I've become obsessive – maybe a little nerdy – about it.'

The origins of how a car came into being is key for Nick. Design and aesthetics drive his passion for classic cars and each one he X-rays as part of his ongoing project has been chosen on these criteria. It may

not necessarily be the rarest or the most expensive car in some cases but is always an icon of design.

While modern cars often sport a stunning exo-skeleton, that beauty isn't necessarily reflected internally – as it is with classic cars. Excessive wiring, technology, crumple zones, speakers, lighting, airbags and so on become distracting when viewed holistically as an X-ray.

The project started a lot smaller in scale both in car and machine. Once Nick had come up with the idea of X-raying a car, the logistics proved to be the first of many hurdles to overcome.

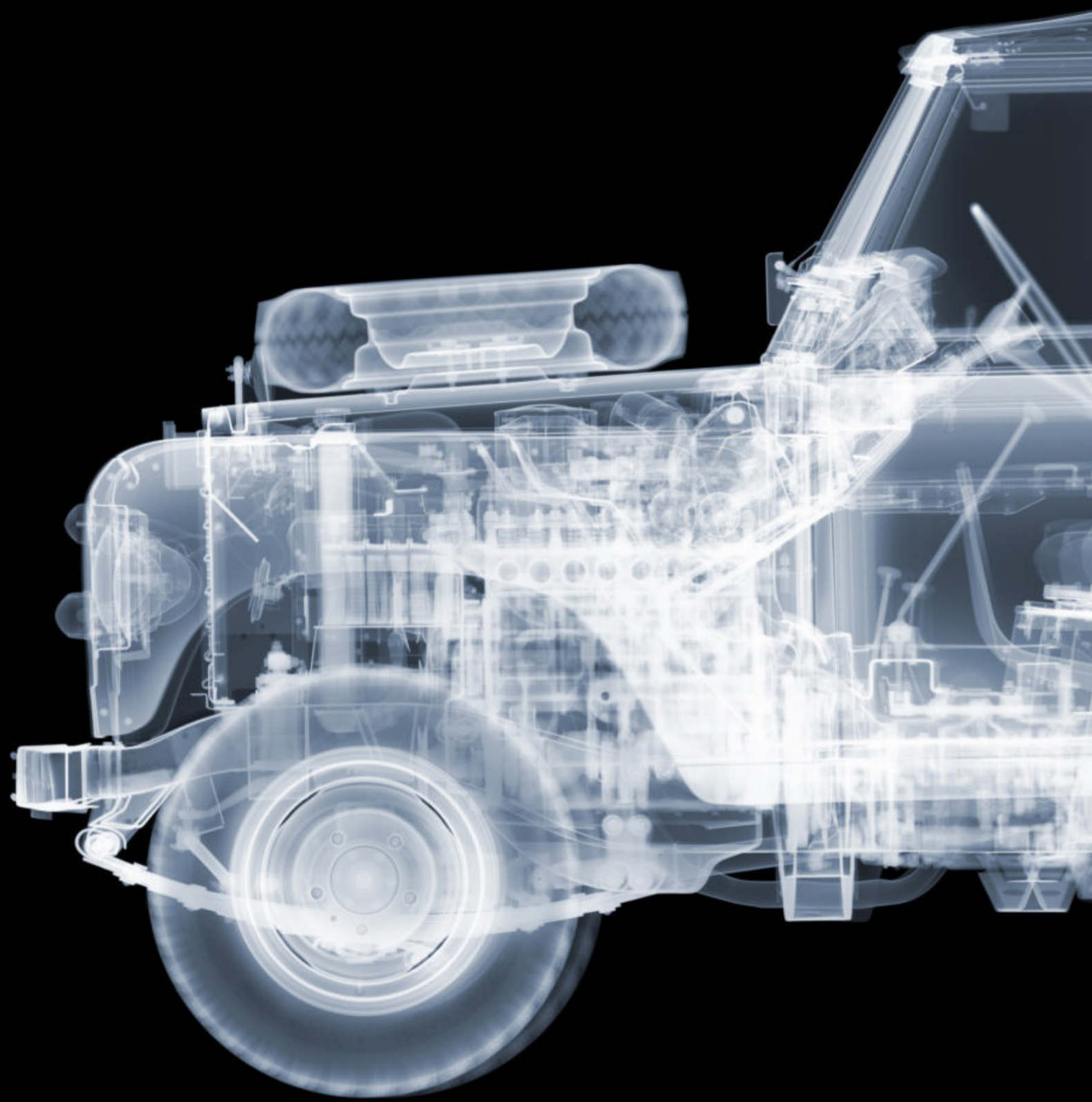
Nick purchased a Mini for £175: 'An old rust bucket that was going to be scrapped. We literally cut it up with an angle-grinder,' he explained. Nick and his team then individually X-rayed each piece of the Mini. 'When you produce an X-ray, the





*MINI*









*1972 SERIES 3 LAND ROVER*



image on the film comes out the same size as the object – so the larger the object, the more complicated it is and the more time it takes, that’s why we started with a small car.’

Each film piece is 35x43cm, so it was necessary to overlap each piece to make up an image. ‘A door may be one shot, but that’s made up of 8-12 X-ray images, which need to be processed, scanned and put back together in Photoshop.’

Nick and the team worked systematically from the front of the car to the back, painstakingly labelling each image as they went. The team used a Haynes repair manual to assist in piecing the Mini back together afterwards.

It required 350 individual images to make the complete image of the Mini, ten working days producing the images, and then two people for three months doing the post-production.

‘If I’m honest, it’s one of my favourite images in the series. The level of detail in the final image is amazing.’

However, Nick needed to find another way to produce the work without destroying the cars in order to continue the series. The X-ray community is a small one; and at about the same time that Nick was wrapping up the Mini, a new facility built specifically for material science was about to come on-line in Germany. The main building housing the specialty X-ray equipment measures 20x20x20m with 2.5m thick walls – more than enough space to accommodate a full-size vehicle.

‘They knew about the work I had been doing with X-ray machines and invited me to the opening. I drove a mini digger from the construction site in and we X-rayed that as a demonstration of the facility’s capabilities.’

The X-ray machine at the facility is extremely powerful. If you were in the same room while the cars were being X-rayed, you’d likely be dead in about three weeks.

The standard X-ray machine Nick has in his studio uses about 250 times more power than the average household light bulb. The machine at the new facility is about another 36 times more powerful than that!

And yes, it is a very, very expensive process – each image costs Nick around £25-30k to produce.

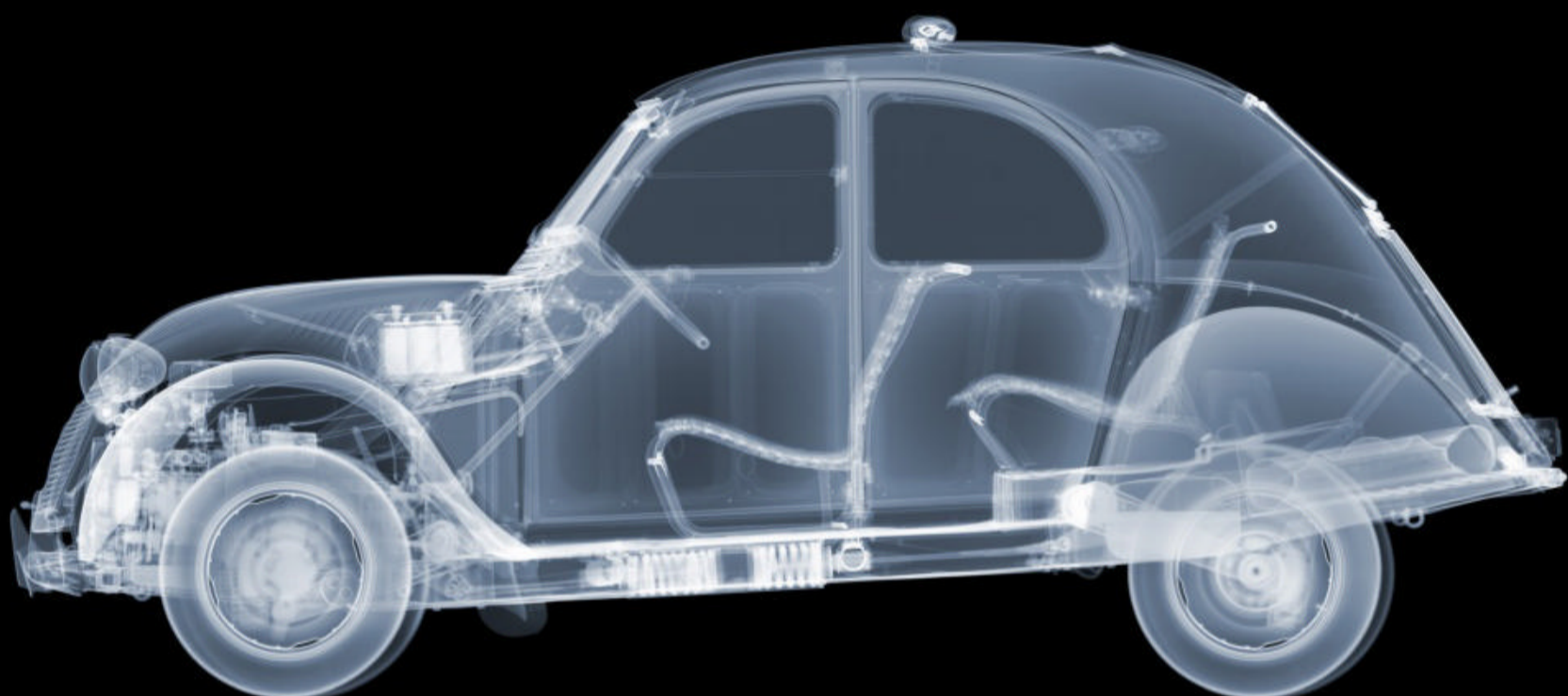
Surprisingly, it’s not too difficult for Nick to get owners to volunteer their cars to be X-rayed. ‘It’s a very unique image and car owners love to have a talking point with other enthusiasts about their car being X-rayed.’

‘Honestly, I prefer the freedom of picking the cars myself, but I also do commissions for private collections and car manufacturers.’ His most recent commission was for Mercedes-Benz, where he X-rayed an AMG GT-R.

What’s next? ‘I’d love to do an ice-cream van or a submarine – now that’d be a challenge.’

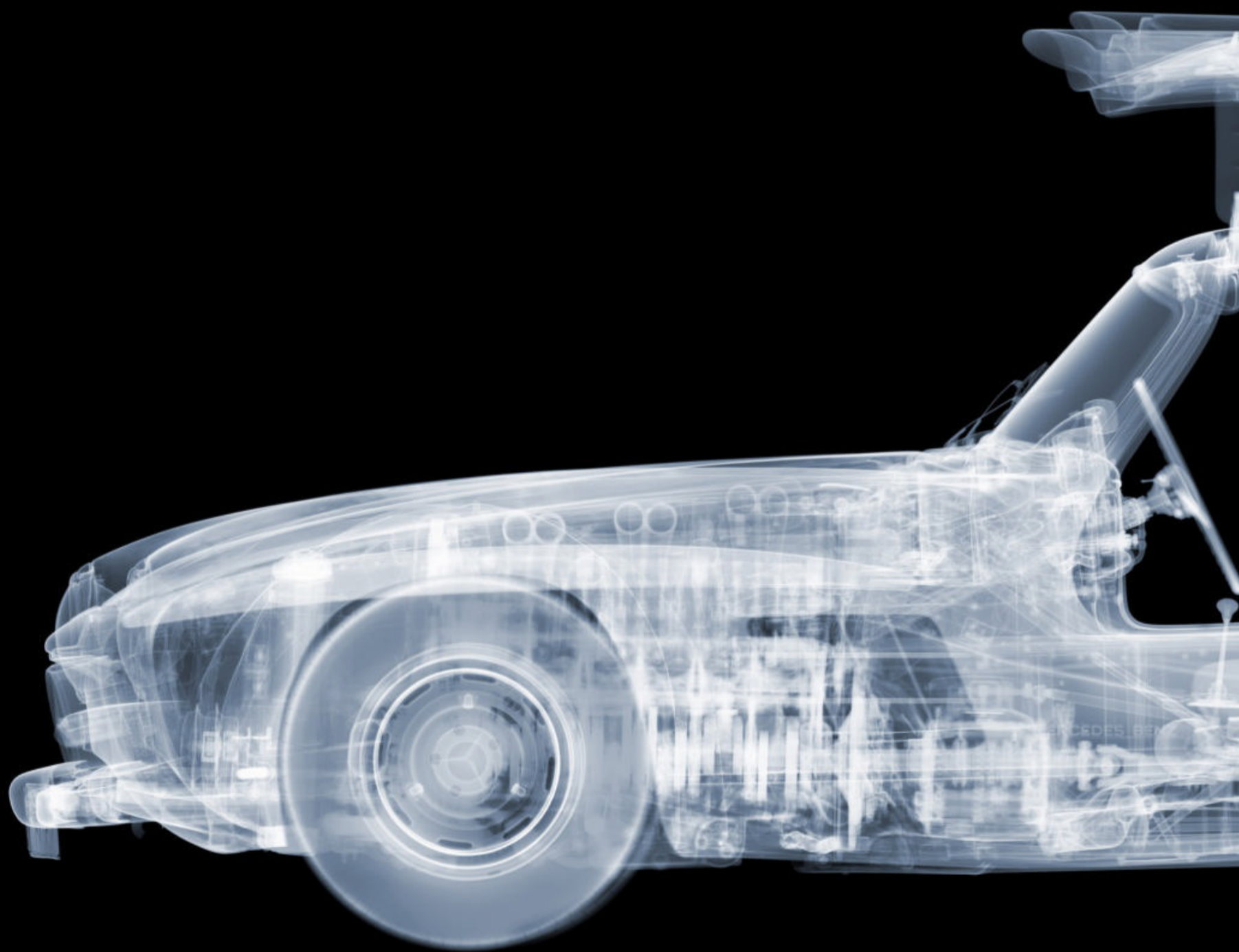
You can see Nick’s stunning work with X-ray at [www.nickveasey.com](http://www.nickveasey.com) and currently on display at the Lyons Gallery [www.thelyonsgallery.com](http://www.thelyonsgallery.com)



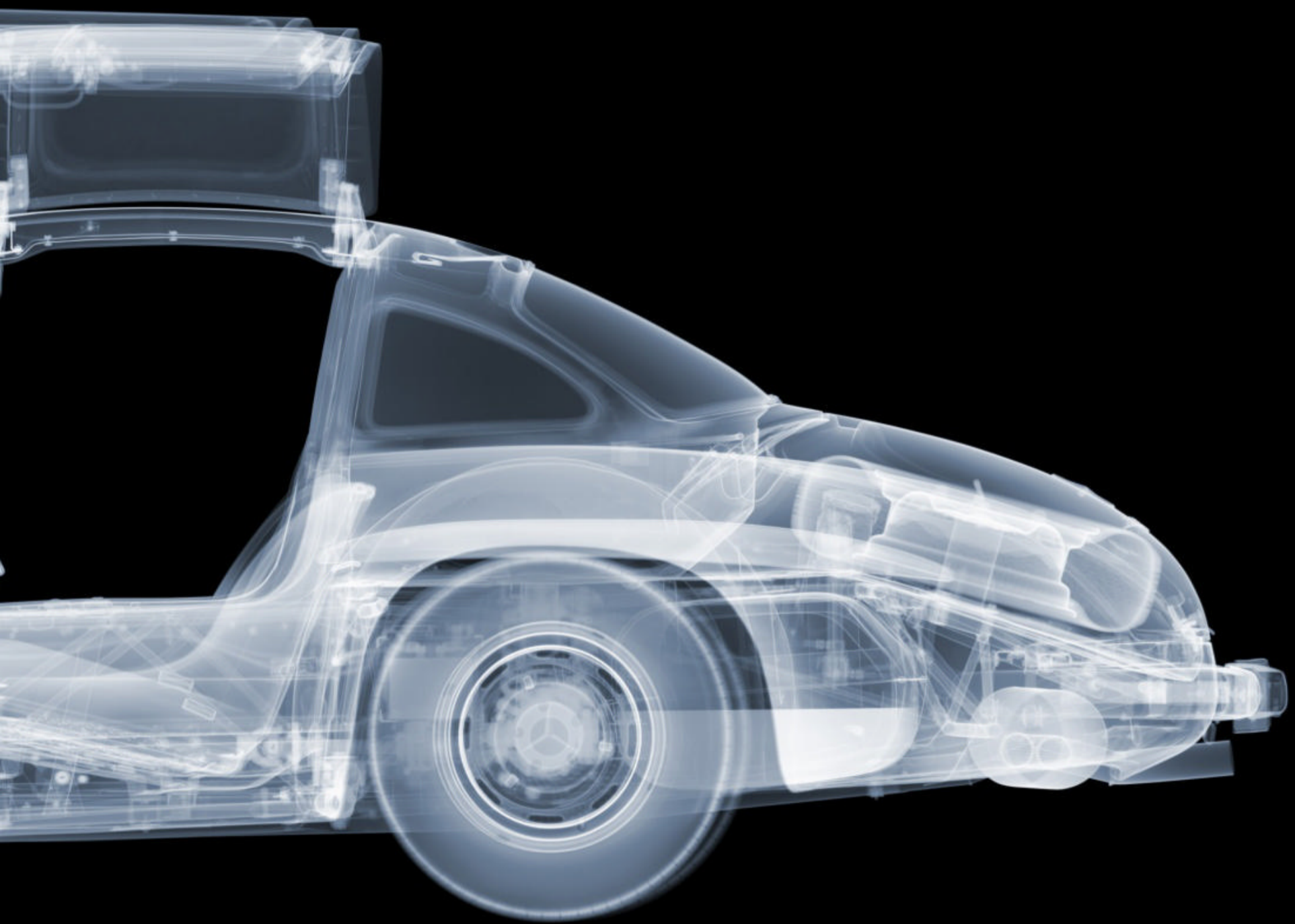


*1957 CITROËN 2CV*



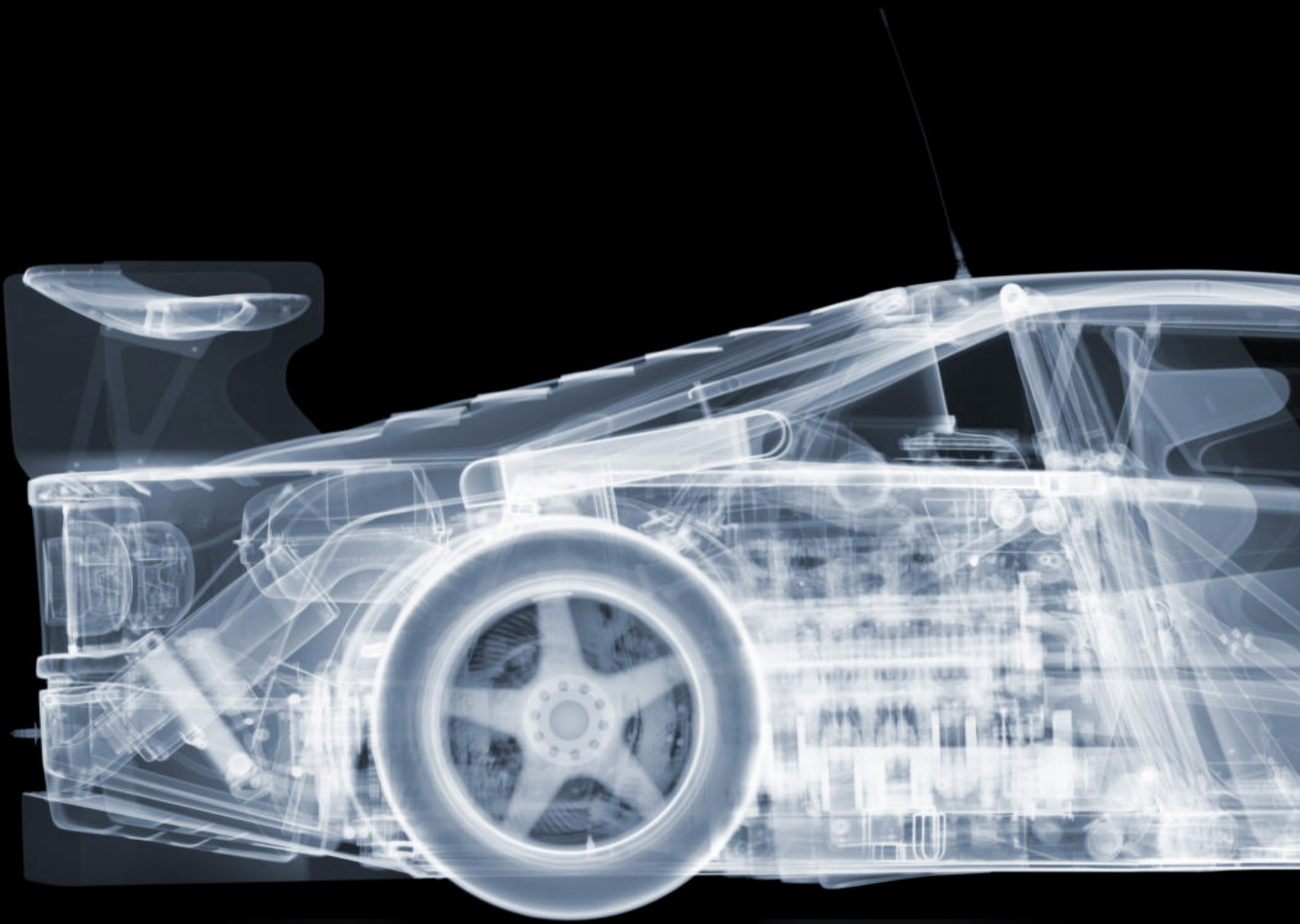




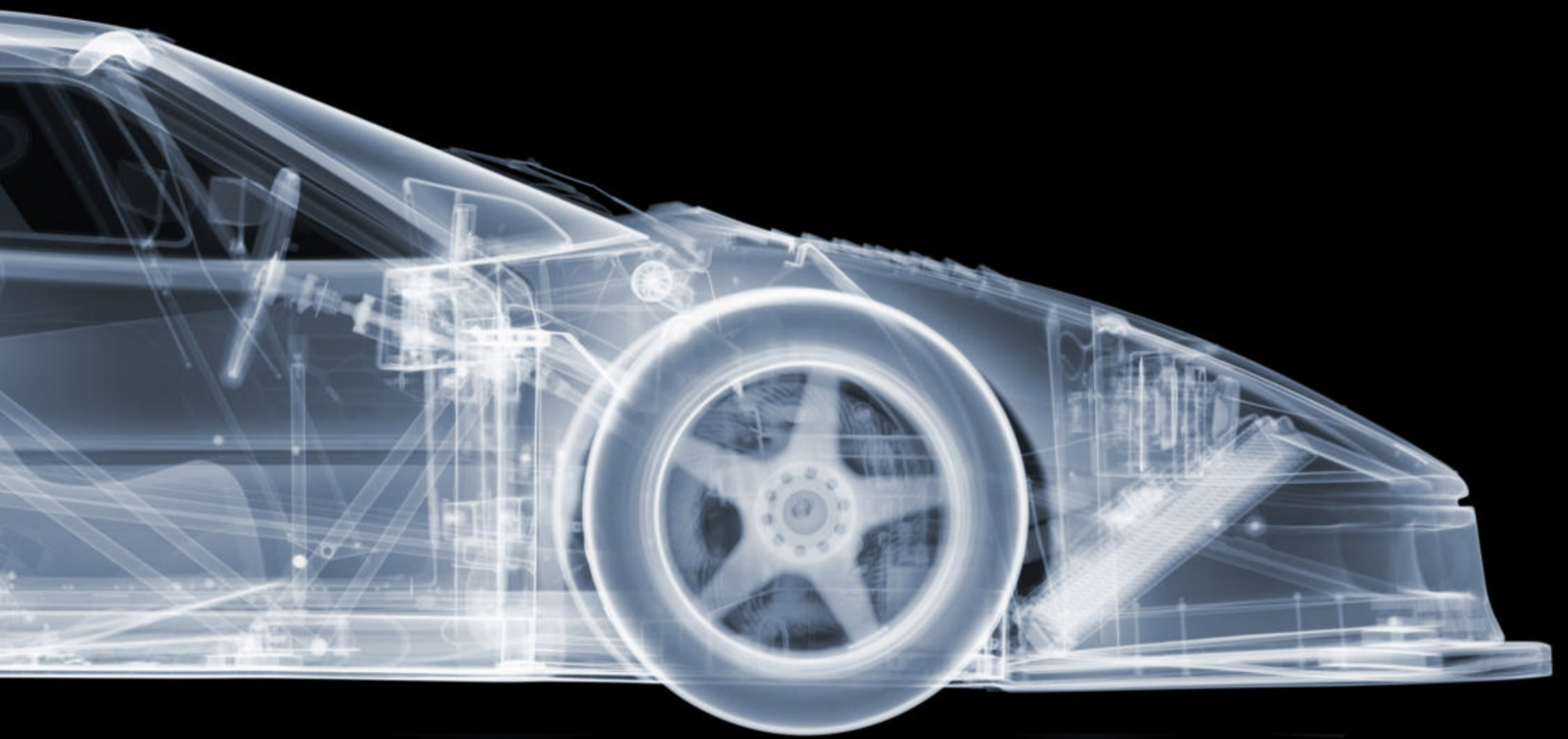


*1955 MERCEDES-BENZ 300SL GULLWING*









*1998 FERRARI F40 GTE*





# MARIO ANDRETTI

*SKILL AND DOGGED PERSEVERANCE LED THE MAN TO A FORMULA ONE TITLE, VICTORY AT THE INDIANAPOLIS 500 AND DAYTONA 500, FOUR INDYCAR CHAMPIONSHIPS, WINS AT PIKES PEAK HILLCLIMB, THE SEBRING 12-HOUR AND A PIT-LANE FULL OF SPRINT CAR RACES. IN ALL, MARIO ANDRETTI WON 111 RACES OVER FIVE DECADES ON TAR AND DIRT. HE IS KNOWN AS ONE OF THE GREAT DRIVERS, NOTABLY ONE OF THE MOST VERSATILE, OF ALL TIME.*

✦ WORDS **BRUCE MCMAHON**







**M**ario Andretti, suave and sophisticated American, is the motorsport legend who loves dark chocolate gelato.

Italian-born, the man also loves fine wine, opera and fast driving in all manner of machines – it's said he could make a bad car competitive and a competitive car a winner. His motto, 'if everything seems under control, you're just not going fast enough.'

Mario was born in 1940 in a northern region of Italy that became part of Communist Yugoslavia (later Croatia). So, the Andretti family moved south, living in a Tuscan refugee camp from 1948 to 1955, before immigrating to New York with little money and little English. But 15-year-old Mario and twin brother Aldo were already captive to motorsport.

'We became enamoured with it. That's where my dreams began, 14 years of age. We saw our first grand prix at Monza and then, imagine this is 1954, and about 20 years later I won there: won the Italian Grand Prix.'

In America, the teenage brothers were soon dirt track racing in a 1948 Hudson at the Nazareth Speedway near their new hometown in Pennsylvania. 'The first time I fired up a car, felt the engine shudder and the wheel come to life in my hands, I was hooked. It was a feeling I can't describe,' Mario said. 'I never had a plan B.'

The harder decision was giving full-time racing away some forty years later.

'It was a difficult decision, as you can

imagine, because I loved driving so much. I pushed the envelope as long as I thought it was prudent from the standpoint of being competitive. I had witnessed, you know, some of my counterparts, a couple of them just stayed in it too long. I didn't want to have a negative memory of the last part of my career. I wanted to be sure I could still be competitive when I gave up. And I think I accomplished that to some degree.

'I remember this because my wife [Dee Ann] used to remind me that I didn't even discuss it with her, she was left out; but I just wanted to make that decision on my own. When it became official, she says she thought that I'd be miserable and said she thought I still had at least another couple of years in me.' Mario laughed and said he has no regrets whatsoever and was fortunate enough to be able to pick some races after retirement: raced Le Mans three more times for instance, winning his class there in 1995 in a Porsche C34.

'I've been so fortunate to last out through the decades, through the '60s and '70s; especially, you know, when things were not as safe. I dodged so many bullets, I take nothing for granted, believe me – I know how lucky I've been.'

(Not so blessed was brother Aldo who had a major sprint car crash in 1969 that finalised his motorsport career. Aldo died in late 2020 from COVID-19.)

Mario Andretti raced sprint cars, Indy Cars, sports cars and Formula One cars over decades and across all continents – taking out the 1978 F1 championship with Colin Chapman's ground-effects Lotus,





ABOVE: Mario Andretti in Victory Lane after winning the 53rd Indianapolis 500 in 1969



which Mario helped develop over three seasons. He's the only driver to have won the Indy 500, the F1 crown and the Daytona 500; that 1967 NASCAR win was one of his more notable in a very loose Holman Moody Ford Fairlane and up against that category's regular champs.

But he never considered a favourite track. 'I tried never thinking I'm favouring this track versus another. Because if I went somewhere and thought "I really don't like this place," I'm beat before I get there. So, I tried to keep an open mind. But, at the end of the day, if you want to ask me what my favourite track is, I'll say "the one where I won a race" – because you have that special memory, it means the world. And that's the way I look at it.'

The 81-year-old said he's not the wistful sort and so there are no classics in his home garage, aside from his father's 1987 Ford Bronco: 'it's pristine, looks brand new and with only 40,000 miles on it.' Alongside it is a Lamborghini Aventador, an '01 Corvette, a Maserati GranSport sedan and a Mini Cooper. 'I'm not the nostalgic type, but with sports cars I love to treat myself over the years, you know. I've had Ferraris, Lamborghinis, but I'm always waiting for

the next one. The next one will be my best car because it'll be the newest, all the tricks and everything else, all the equipment. That's what I have, I usually have the latest in my garage.'

And while the champion said he could have had any of his special race cars for the asking – for instance, his F1 world championship Lotus or the Ferrari 312B in which he won his first F1 race at South Africa's Kyalami circuit in 1971 – he settled on 1994's Newman Haas Lola IndyCar, his last race machine.

He still enjoys road driving, and says he gets kicks from track work with the likes of IndyCar's two-seater and guest passengers. 'On one particular drive at Indianapolis, I drove the entire month, put on about 600 [965.6km] or 700

*I NEVER HAD A  
PLAN B. I DIDN'T  
KNOW HOW,  
BUT, SOMEHOW,  
I WAS GOING TO  
FIGURE IT OUT.*

miles [1126.54km]. After the race last year, we guaranteed 200mph [321km/h] average with a passenger, which is pretty good. A lot of it is cornering speed, you know, so passengers experience about 4.5G. A lot of people come away dizzy, but that's the idea. And yes, some of them lose their cookies.' Mario's need for speed is also sated by a shed full of high-speed watercrafts on his lake just north of his Pennsylvania home; included there is a world championship





**ABOVE:** Mario Andretti tests the Alfa-Romeo: Pictured at the Balocco racing track near Milan, after a test run in the new Alfa Romeo which Andretti drove in the World Championship in 1981.



---

IF  
EVERYTHING  
SEEMS  
UNDER  
CONTROL,  
YOU'RE  
JUST  
NOT  
GOING  
FAST  
ENOUGH

---







Alfa Romeo Molinari hydroplane. ‘It’s a 1975 vintage, but the thing is immaculate and a real flyer.’

He’s not quite sure why Italians have a reputation for speed: ‘Perhaps since the 1950s you had Ferrari with a worldwide fan base, Maserati, Alfa Romeo. These were the brands everyone understands, high-performance. Then there were the motorcycles – MV, Ducati – that have been at the forefront with [Giacomo] Agostini, 14 times world champion.

Look at Valentino Rossi. Then you have [Tazio] Nuvolari, [Alberto] Ascari.’

Mario chuckled and suggested that you can change passports, but not your blood. ‘Guess you have to try to emulate them, that’s how Aldo and

I became fascinated by the sport.’ (He loved Ascari’s cool and relaxed style at the wheel.)

Today, Mario is not sure whether motorsport is headed in the right direction.

‘I don’t want to age myself, but honestly when it comes to motorsport, I think the noise of the engines is half the spectacle, so you will never see me a fan of electric racing cars. End of story. I think the future is still bright for all the majors, they’re still

going strong and that’s what I’m going to be rooting for [for] the rest of my life. My son Michael has a Formula E team, good for him and all, but that’s not something I’m always supporting. But there’s room for everything, I suppose, and you have to keep an open mind. As long as it remains a category, that’s fine with me, but I wouldn’t want to see it taking over.’

Mario believes the one thing any sort of racer needs is desire. ‘If you truly have the desire to pursue that – just do it. There are always ways to go about it, to learn in different categories and test yourself. Just do it – don’t be discouraged. I didn’t become discouraged if I didn’t get help here or there.’ He noted that his father was in no position to help and,

at the same time, concerned about safety for Mario and Aldo. Mario understood that nothing worthwhile was ever easy, but says he was driven by that burning desire that overcame drawbacks.

‘When I fell in love with the sport, it looked so impossible. I never had a Plan B. I didn’t know how, but, somehow, I was going to figure it out. I think I fulfilled pretty much most of my ambitions in one way or another and I just count my blessings now.’

*WE BECAME  
ENAMOURED  
WITH IT. THAT’S  
WHERE MY  
DREAMS BEGAN,  
14 YEARS OF  
AGE.*





**ABOVE:** Mario Andretti and Colin Chapman. **BELOW:** Grand Prix Zandvoort; Mario Andretti in the lead with Ronnie Petterson following close behind.





R

# PORSCHE 906

★ WORDS DANIEL LACKEY

THE LONG WAY HOME

★ IMAGES [WWW.AARONBRIMHALL.COM](http://WWW.AARONBRIMHALL.COM)













**L**e Mans, a small town in Northern France where, annually since 1923, the brave and the bold have gathered to do battle in the 24 Hour Grand Prix d'Endurance. There are many tales of great rivalry, of heroes and underdogs, and of great loss and peril. Nineteen sixty-six will forever be remembered as the year that Ford crossed the line 1-2-3 to fill the podium, beating the great Ferrari. But behind all the hype there was another manufacturer who also scored a significant 1-2-3, a team that was well on its way to becoming the most dominant force in the history of sports car racing. Thanks to a recent Hollywood effort, even my mum knows that Ford GT40s crossed the line in 1st, 2nd and 3rd. Following in fourth, fifth and sixth and securing the 2-litre prototype class was Porsche with its brand new 906 sports racing car.

Because this wasn't an outright win and up to that time in Porsche's 15-year history at Le Mans the marque had yet to challenge for the top spot, it's easy to overlook the significance of this result. Ford was playing the short game, working hard and making an immense investment for just four seasons of racing. After its second Le Mans victory in 1967, the Ford factory pulled out, leaving the GT40 in the hands of privateers. Porsche, on the other hand, had much greater aspirations, carefully laying the foundations to become the greatest sports car manufacturer of all time. Porsche first entered a car at Le Mans in

1951 and apart from 1959, had won its class every year. While the world was watching Ford, the Porsche that finished fourth was constructing a cultural legacy.

In 1963, Porsche focused its sights on sports car domination, a year later unveiling the 904. Gone were pressed steel and aluminium panels, replaced by a very lightweight construction with a fibreglass body over a tubular steel chassis. It was a recipe that would carry the team through the 906, 910, 908 and to the inevitable victory of the 917. At the 1964 Le Mans 24 Hours the all-new 904 finished seventh and eighth outright and first and second in class. Two years later Porsche unveiled the 906.

Under the direction of 28-year-old Ferdinand Piech, the design of the 906 took another leap forward. The fibreglass body over tubular steel chassis concept was retained only this time the body was completely unstressed; the chassis was designed to bear all the load so the bodywork could be made as thin and lightweight as possible. As a result, the 906 weighed just 1280lb, 250 less than its predecessor.

It was important that the new 906 was a versatile racing car but Porsche was still focused on Le Mans success. Alongside the standard coupé bodywork, designer Eugen Kolb developed a long-tail version specifically for Le Mans with its long Mulanne straight, adding the designation LH for Langheck (long-tail). After the prototype, the first three production 906s to receive the LH bodywork were chassis















numbers 151, 152 and 153. All went to Le Mans.

Chassis number 906-153 was assigned to the driver pairing of Jo Siffert and Colin Davis. In practice, Siffert was quickest with a lap time of 3:51.0, resulting in a grid position of 22nd. In 23rd was Hans Herrmann and Herbert Linge in 906-151 and back in 31st was Udo Schütz and Peter de Klerk in 906-152. The short-tail 906 K of Günther Klass and Rolf Stommelen started 27th. Porsche entered a total of seven cars and after 24 hours, five crossed the line. A testament to Porsche's long-term investment in engineering, in a year when just two out of fourteen Ferraris finished, and only three out of thirteen Fords. The first of the four in-a-row Porsches to cross the line, wearing the number 30, was 906-153 of Jo Siffert and Colin Davis.

The long-tail 906 you see here, wearing the number 30, belongs to Cary Decker and although it is not the original 906 that followed the GT40s across the line at Le Mans in 1966, it is a faithful recreation which was built to play the role in that recent Hollywood production. In total, 88 cars of various kinds were built for the movie, including stationary prop cars, however, 27 of the 88 were fully functioning, accurate

re-creations, and included a handful of Porsches. In order that the cars were correct, the guy who built them insisted that the producers have an open chequebook and instead of getting paid for the job he asked that after filming he could just keep all the cars. I caught up with Cary to get the whole story.

They finish the movie and he basically gets a knock on the door saying, hey, we got 88 cars here, where do you want them? So, he piles them up in his garage. A

little overwhelmed, he reaches out to a couple buddies and says, keep it on the down-low but put feelers out for these cars and if anyone's interested, let them know which ones are prop cars, which ones are track-ready and that all of them were in the movie. Within about 72 hours, all 88 cars were

*I DROVE THAT  
CAR 800  
MILES  
IN THE  
MIDDLE  
OF  
SUMMER!*

sold.

So how did you end up buying the 906?

My father owns one of the largest collections of pre-1930s racing motorcycles and it just so happened that one of the guys reached out to my father who was coming over that evening to watch my son while my wife and I went out on a date. So, as I'm leaving our house he says, 'I think those cars from Ford vs Ferrari are available and if you are interested I think there are



---

*WHEN I GOT TO VEGAS I HIT TRAFFIC.  
IT WAS 107 (F) OUTSIDE AND INSIDE THE  
CAR IT WAS 130 DEGREES.*

---











a couple of Porsches.’ So I’m in the movie theatre with my wife furiously texting and within a week I was able to purchase it.

This all happened at the start of 2020. Cary travelled out to Southern California, from his home in Utah to pick up the 906. His grandparents live near LA so he drops the car there before attempting to arrange the transport home. Then COVID hits and everything locks down.

For about five months it sits at my Grandparents property as I had the hardest time trying to transport it from California to Utah, because transportation was down, or people couldn’t go in and out of California – all these issues. Finally, when things started opening up, I thought screw it, this thing was built as close as it can be to the original

so it must have blinkers, tail lights, brake lights and mirrors. I contacted a buddy here who owns a dealership and he gave me a transporter’s licence. I went out to California and I drove it back! I drove that car 800 miles in the middle of summer!

Nineteen-sixties racing cars are not known to have great ventilation and they certainly never had air-conditioning. What was the drive like?

It was scorching, the ventilation was awful, it was like a greenhouse, and there’s

just a sheet of metal about an eighth of an inch thick between me and the motor. When I got to Vegas I hit traffic. It was 107 (F) outside and inside the car it was 130 degrees. At one point I ended up throwing open both gullwing doors and riding like that down the freeway, I was down to my boxers, just sweating.

Despite the unbearable heat, Cary and the car made it back to Utah without issue, and having proved itself reliable the 906 now sees daily use. ‘The great thing is

that it looks like the \$2 million car, it drives like the car but it’s not the real one. And it’s street legal so I actually get to daily this thing.’

Cary has a deep appreciation for Porsche racing cars of the 1960s, his all-time favourite being the 908 coupé from 1968.

Porsche racers of this

era are mostly out of reach to mere mortals so when presented with the opportunity to buy the 906, albeit a recreation with its own great back story, he thought, this might be as close as I will ever get to owning that dream. I think we all would agree that the greatest part of this is that, through its starring role on the silver screen and daily driver duties, for many people this long-tail 906 will open a window into one of the richest decades of Porsche racing history. Long live the appreciation!

*IT'S STREET  
LEGAL  
SO I ACTUALLY  
GET TO  
DAILY THIS  
THING.*













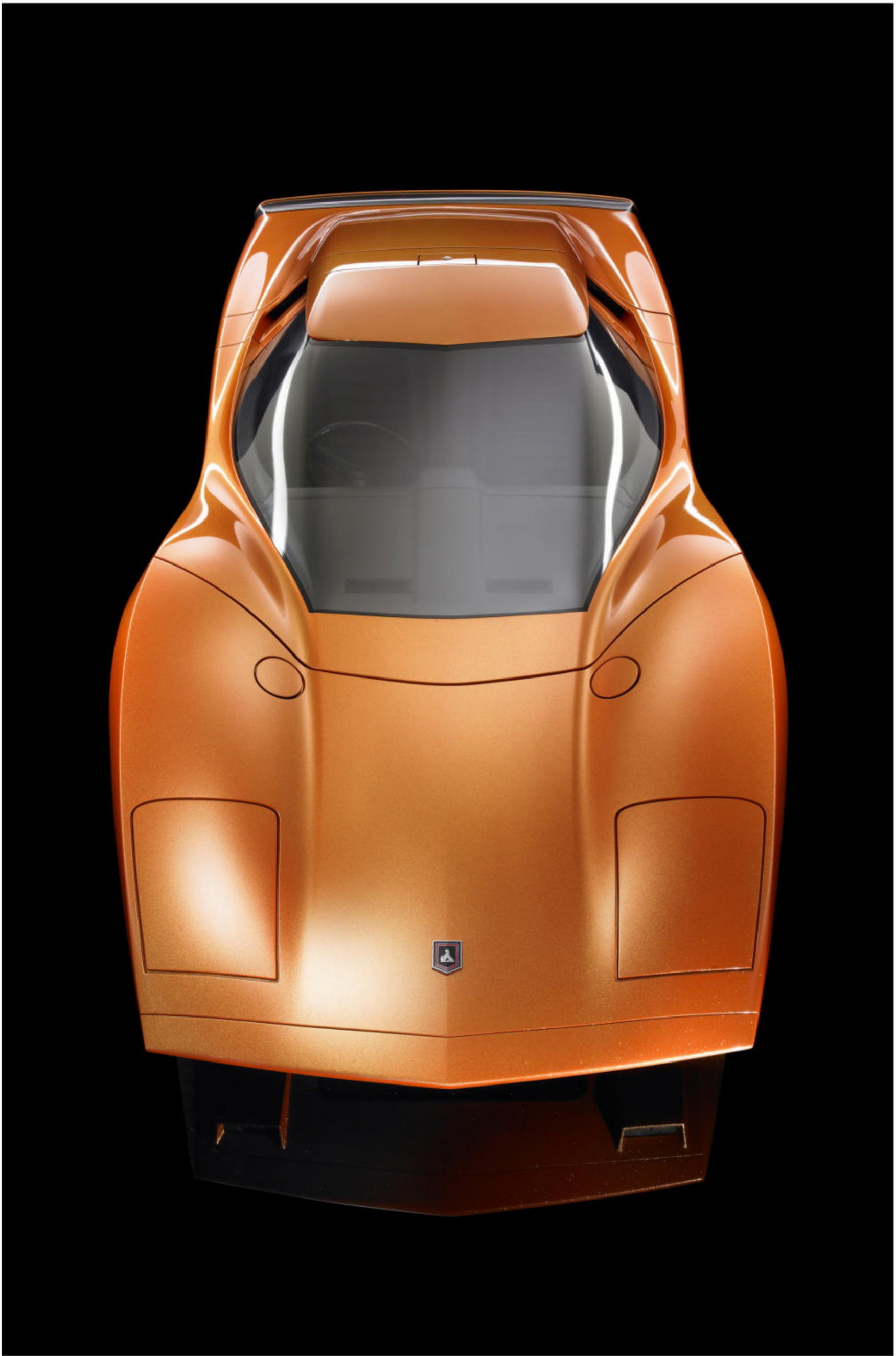




# HOLDEN HURRICANE

✦ WORDS **JOHN WRIGHT** ✦ PHOTOGRAPHY **GM AUSTRALIA**







**I**t is likely that the years from 1964 to 1969 were the most optimistic ever experienced by Holden's senior executives. The new Technical Centre at Fishermans Bend had been opened on 10 June 1964 with great fanfare: GMH believes no idea to be eternal. It has always been the objective of General Motors to build more and better things and constantly search for technological improvement.

The EH Holden Premier set a new standard of luxury and performance for Australian-manufactured cars. It was proving to be the most popular Holden to date. But, naturally, the suits at GMH were confident that the forthcoming HD model with its curved side glass and latest Detroit styling would fare even better.

The EJ's design had been revised in Detroit after Bill Mitchell's design team objected to Alf Payze's car. The EH and the HD were styled by the Americans and sent out to Australia in boxes for review. The decision to build the Technical Centre seems to have been related to the EJ fiasco. Certainly for the next decade or so, the design and engineering of Australia's Own Car was to be overseen by Americans dispatched to Australia — Bill Steinhagen, Joe Schemansky, Leo Pruneau.

It was in this context that the idea was conceived to develop a brilliant new prototype which would showcase the genius

residing within the walls of the Technical Centre. Although this car was never intended for production, it would have a halo effect on even the humblest Holden Standard sedan, utility or Station Sedan. This was the Holden Hurricane, coded RD 001 and the first fruit of GMH's Research and Development section. Its purpose was 'to study design trends, propulsion systems and other long-range developments'.

The Hurricane was the first in a Holden tradition of concept cars; others include the Torana GTR-X, Torana TT36 and EFIJY.

The first drawings of the Hurricane were likely to have been executed in the 1964-65 timeframe. By this stage, the 'New Generation' HK Holden design was in its infancy. GMH seemed to have comprehensively defeated the challenge to its market leadership posed by Ford Australia's Falcon and the lusty Chrysler Valiant. The local automotive world did indeed seem to be GMH's oyster.

Nevertheless, there was awareness within the organisation that some more educated motorists — who often expressed their views by buying British or continental European cars — regarded Holdens as fairly basic and unsophisticated, albeit reliable and durable. The Hurricane must in part have been conceived to show that the engineers and designers employed by General Motors' Australian subsidiary had a vision way beyond even the Holden EH

**LEFT:** The Hurricane in 1969 when Holden was known for the HK Kingswood. It might as well have cruised in from outer space!





Premier! Similar thinking would later inform the GTR-X, a sports coupe that was indeed intended to arrive in the showroom.

The Hurricane was the star of the 1969 Melbourne Motor Show. Holden's engineering director Bill Steinhagen said it was a research tool. About the only aspect of the mid-engined Hurricane that related directly to forthcoming production Holdens was a high-performance 260-horsepower edition of the 253 cubic-inch V8

engine scheduled to appear beneath the bonnet of the imminent HT Holden.

This engine sat behind the passenger compartment and further back again was a locally designed four-speed manual gearbox.

All-independent suspension – at a time when most Holdens still used semi-elliptic springs on the rear – was used with drag struts connecting each lower control arm to frame-mounted pivot brackets for positive front wheel control. At the





rear were swing axles with trailing links pivoted to the frame and double universal joints. Coils were fitted all round (foreshadowing the HQ Holden of 1971).

Disc brakes were used all-round, the front ones being described in MODERN MOTOR (May 1969) as 'fully enclosed oil-cooled multiple discs:

They operate on the principle of four fixed plates to which is bonded a brake facing surface and

three rotating discs sliding on a splined surface on the wheel hubs.

The whole unit is encased in an aluminium alloy housing attached to the steering knuckle.

The plates are actuated by means of a large diameter piston applied by hydraulic pressure through a master cylinder using hydraulic oil.

The kinetic energy of the vehicle is directly converted to heat in the oil, which is then dissipated through brake-cooling radiators









**LEFT:** Roof was ultra tricky in design and so it later proved in practice, trapping a couple of American executives at a Lang Lang drive day.









mounted in the nose of the car.

Much of the developmental work on these brakes has been carried out in Australia, although the idea is, we believe, American in origin.

Equally interesting are the ingress/egress arrangements. A power-operated perpex turret lifts upwards and forwards over the front guards via gas struts, while the seats and steering wheel are simultaneously raised, the seats also moving out laterally. The Hurricane's engine cannot be fired until the turret is locked in place and the driver has fastened the inertia-reel seat belt. There is an integral rollbar.

Rear vision is handled by a closed-circuit television monitor relaying its story to a monitor in the electronic digital-display instrument panel. There is integrated climate control air-conditioning and an auto-seek radio. Those levitating seats are described as 'astronaut-type'.

There is also a feature that seems almost unbelievably quaint these 52 years later, namely the 'Pathfinder' navigation system: magnets embedded in the road relay their signals to a computer inside the car.

The Hurricane stands just 39 inches tall, three inches lower than the Ford GT40. The fibreglass body is mounted on a steel box section perimeter frame with rubber-insulated mountings. The paintwork is a vibrant aluminium-flaked metallic orange. The fuel tank is foam-lined and there is a

fire-warning system.

Some months after revealing the remarkable and unique Hurricane, Holden announced an utterly realistic high-performance coupe that, management said, was possibly destined for production. It was as if one of the marketing suits had said, it's all very well showing the pie-in-the-sky experimental car, but let's offer our customers a chance to buy something really special.

This was the Torana GTR-X, offered to a selection of motoring journalists to drive at the Lang Lang Proving Ground late in the third quarter of 1970. In concept, it was perhaps closest to the Datsun 240Z, first shown in 1969.

Adventures after its first (1969) showing included having a pair of visiting US executives par-boiled inside it at Lang Lang when the roof mechanism failed (someone broke the Perspex with a hammer!); incredibly it vanished from GMH custody, spent years in a private collection and was later donated to an SA TAFE where (unbelievably!) apprentices practised their welding skills!

In 2006 Holden began a five-year program to restore the one and only Hurricane to its original condition. It returned to the public stage at the 2011 Motorclassica and now on display at the National Motor Museum in Birdwood, S.A. as part of their Holden Retrospective until December 2021.

**LEFT:** For all its futurism, the Hurricane did have some 1969 touches. Check the steering wheel and instrument graphics!



B O B L U T Z I S A  
C A R G U Y . T H E  
U L T I M A T E C A R  
G U Y , S A Y S O M E .

T H E S W I S S -  
B O R N A U T O  
E X E C U T I V E ,  
8 9 , S A Y S H E ' S  
' O F T E N W R O N G  
B U T N E V E R I N  
D O U B T ' .

✪ WORDS BRUCE MCMAHON







**A** credo that drove the man to legendary showroom wins – and some losses – at General Motors, BMW, Ford and Chrysler across five decades. His get-it-done résumé is littered with intriguing American cars from Chrysler’s Viper to Pontiac’s Solstice to the Ford Sierra and Chevrolet Volt – Bob Lutz knows how to turn heads with style and substance.

He's turned heads too with straight-shooting, and critically lauded, books on the North American auto industry – its flaws and follies and fall guys. There’s *Car Guys vs. Bean Counters: The Battle for the Soul of American Business*, with insights into how he helped GM overcome its inert navel-gazing of the early 2000s. There’s *Guts: The Seven Laws of Business That Made Chrysler The World's Hottest Car Company*, published back in 1998. And, in 2012, Lutz’s *Icons and Idiots: Straight Talk On Leadership* highlighted a host of characters he’d worked with – here he says that one-time Ford boss Red Poling was the ultimate bean-counter; and that while celebrated Chrysler CEO Lee Iacocca appeared brilliant and bold, he was often vulnerable and insecure behind the scenes.

Bob Lutz has been an inspiration to many, an

irritation to others. Yet it was a simple love of machinery that drove the man to the heights of the auto industry.

‘It’s been a lifetime of desire for nice cars and aeroplanes and the ability to make both dreams come true,’ Lutz said from his Michigan home. ‘To me, automobiles and planes were equally fascinating.’

He was born into an affluent family of car people in Switzerland. There his banker father had Bugattis, one uncle had a Talbot Lago coupe, another uncle went from an Alfa Romeo Zagato to a 4.5-litre Delahaye coupe – which racer Louis Chiron either didn’t want or couldn’t pay for. The young Lutz was surrounded by interesting cars; sometimes American, very frequently European makes. The lad was taken by the style, performance and overall sophistication; plus, the point that these were fast and powerful machines. ‘And, frankly, also the fact of them being unusual.’

Lutz cites a 3.5-litre Jaguar SS as the most unreliable of the fleet: he recollects heading out in the British car on Sunday drives in Switzerland and having to return home on the train. His first car was a 1948 Volkswagen Beetle, ‘If you've driven an early Beetle on wet cobblestones,



there's no amount of sudden oversteer you can't handle,' he later quipped.

Lutz, who'd travelled between Switzerland and North America with his family, graduated from a Swiss high school in the early 1950s. After graduation, he enlisted in the US Marines to become a fighter pilot, then serving as a jet attack aviator in the Korean and pre-Vietnam era from 1955 to 1959. He served as a reserve pilot until 1965; flying single-seat, single-engine jets, such as the McDonnell Banshee and Douglas Skyhawk – later in life he would own and fly his own fighter jets.

But the car game had called! And, in 1962, he joined GM in Europe – where he helped champion the Opel GT – followed by a three-year stint in BMW sales – where he helped develop BMW's Three Series. Then to Ford from 1974, before landing at Chrysler for 12 years, and then back to GM as vice chairman from 2001-2010. And while Bob was known for his

early work as a no-nonsense executive who rebelled against automotive-business-by-the-numbers, it was his work since the mid-1980s that defined the outspoken man.

On his watch at Chrysler, the Lutz's hits included the 1994 Dodge Ram, Chrysler's LH cars with cab-forward design, plus the brawling Dodge Viper. At GM, Lutz gave the market the sporting Pontiac Solstice, the Cadillac CTS-V, plus the 2009 Corvette ZR1 and, seeking an uber-lux hero, he also championed the stunning Cadillac

16 – a 2003 concept with a 13.6-litre, 745.7kW V16 under a long, sleek bonnet.

Less successful were his re-badged Australian Holden Monaros and Commodore sedans – the 2004 Pontiac GTO and 2005 Pontiac G8.

As GM's product development leader, he'd visited the Australian outpost a number of times and was much taken with Holden's rear-drive platform after borrowing a Holden-made Chevrolet Caprice SS under evaluation by Detroit engineers. Wife Denise re-enforced his critique after her weekend drive. And Lutz thought that

the Australian two-door, V8-engined Monaro would prove an instant cult classic as a reborn GTO – delivering the sort of performance that made the original Pontiac muscle car famous. He believed the Holden platform could be the basis for a line of Australian sports machines and sedans for the North American market. But the Monaro's style didn't gel with the Americans, and neither

the new GTO, nor the four-door Pontiac G8 sold strongly. It was a rare failure, for the man's critics suggest he could 'sell water to a drowning man.'

Yet there were any number of career highlights. 'I would say the most fun I ever had as an automotive executive was when I was first at Chrysler. It was sort of an unconventional operation. There was no hierarchical corporate structure because when I got there everybody was from somewhere else; there were former

*'IF YOU'VE  
DRIVEN AN  
EARLY BEETLE  
ON WET  
COBBLESTONES,  
THERE'S NO  
AMOUNT OF  
SUDDEN  
OVERSTEER  
YOU CAN'T  
HANDLE.'*





Ford guys, former GM guys, old Chrysler guys that hadn't been fired by [Lee] Iacocca. It was a terrific place for innovation, nobody would tell you "that's not the way we do things here". I found that very refreshing.' Bob Lutz and the cigar-chewing Iacocca had a tumultuous, if productive, relationship that may have cost Lutz the top job at Chrysler when Iacocca left and anointed GM's Bob Eaton to the big desk.

Today, the retired Bob Lutz' private collection is eclectic, from a couple of 650hp (484.71kW) Corvettes to a 1934 La Salle convertible – the first family car he can recall. There's an AC Cobra and a 1972 Intermechanica Italia with Ford 350 V8 and five-speed manual, which he

likes very much. He's sold off some older cars, those hard to drive and maintain, plus his Vipers when he moved back to GM. Bob didn't think it appropriate to be riding around in a Chrysler hot rod as a GM boss.

'There's also a number of Pontiac Solistics. I like to have cars that I had something to do with and I've had lots of favourites over the years. I always drove something good, at GM I liked to drive V-Series Cadillacs and always tried to have at least one Corvette. That was back in the days when everything was free – company cars.' These days Lutz is totally in love with his mid-engine C8 Corvette: 'the pinnacle,' he said, 'of automotive engineering for its world-class ride,





handling and dual-clutch transmission.’ And even while Lutz the executive was involved with early C8 design and planning, Lutz the retiree had to pay for this one.

‘It’s well worth the money, it’s that good. It’s such a quantum leap over any other Corvette that’s been on the road, there’s just no comparison. It’s fabulous. It glides over the road when you have the suspension set on touring. I’ve never even bothered to set it on track or competition – it’s just it handles so well in touring, why do anything else?’

‘It has a dual-clutch transmission, so you’re always hooked up. There’s never any lag, you can drive it fully automatic or you can use the

paddle shifters, which I don’t even bother to do much. It’s so good in automatic, always selects the right gear. I’m just totally in love with the car, fully the best-engineered car I’ve ever driven.’

But the man also has time for the electrification of the motoring world, the biggest single change he’s seen in the auto industry.

‘Nought to 100 in three seconds, 1000 horsepower [745.7kW] and bags of torque. What’s to complain about – you’ve got performance, refinement, silence and mechanical simplicity. I very much appreciate the silence and refinement. I guess when I was younger I wanted to make a lot of noise, as maturity set in that diminished somewhat,’ the icon said.





# GRAND PRIX NOIRE

WORDS **NATHAN DUFF**

THOMAS SCHORN

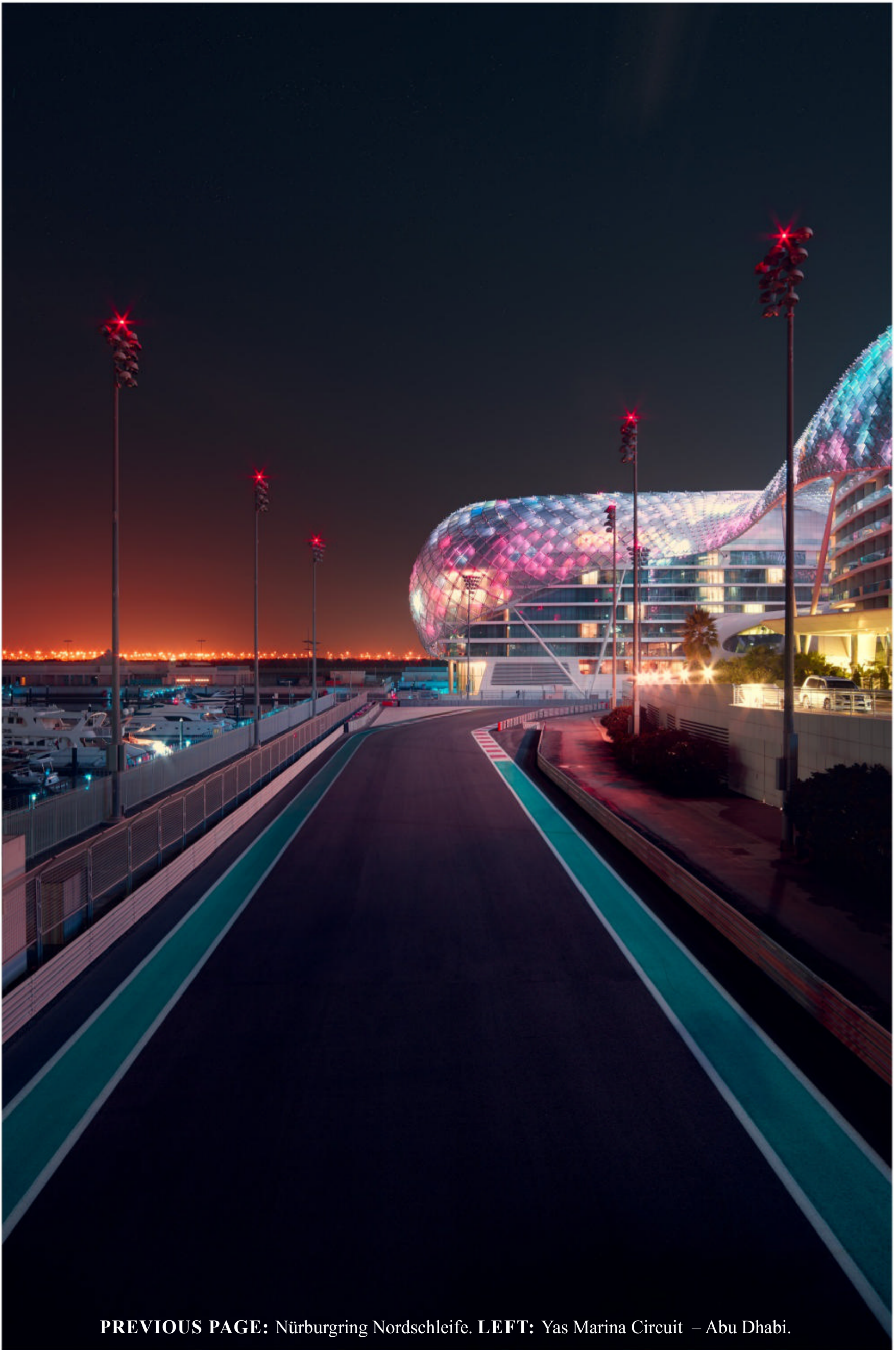
IMAGES **WWW.THOMASSCHORN.DE**











**PREVIOUS PAGE:** Nürburgring Nordschleife. **LEFT:** Yas Marina Circuit – Abu Dhabi.



As a motorsport enthusiast, Thomas has always been fascinated by racetracks; ‘the aura that emanates from them is simply unique.’ With the Grand Prix Noire series, Thomas set out to create a unique perspective of some of the world’s most famous racetracks. ‘I wanted to create an experience you wouldn’t normally have as a spectator.’

‘When you’re smelling petrol and hear that scream of the engine echo through the track – goose bumps – you know that you’re deeply in love. My first experience of this was a Ferrari 412 T1 at the Grand Prix of Spa Francorchamps in 1994. As a little nine-year-old boy that thing scared the hell out of me, but marked the start of a true and unbroken passion.’

Conversely, shooting images for this series has been more of a meditative experience for Thomas. ‘It’s the middle of the night, you’re alone, standing in a position that usually only race-drivers experience – silence ... that feeling is indescribable. To stand there still smelling the rubber and know that at this spot Senna, Lauda, Schumacher, Hamilton and all the others have written history is just amazing.’

His early obsession with cars was bound to find its way into his profession. Shortly after graduating from photographic studies in 2009, he started shooting advertising campaigns for some of the largest automotive manufacturers in Germany. ‘With the big car brands, you need to have a lot of experience, reputation and skill to be qualified to shoot car commercials.’ After a brief stint shooting still life, Thomas quickly transitioned to working for brands

like Porsche, Aston Martin, Volkswagen and Mercedes AMG.

‘Cars have a character and soul; and, depending on the light, environment and perspective, you can shape the image of a car. Bringing that to life through the camera is an aspect of my work that I find fascinating. It’s an irrational love: something you feel but can’t explain.’

Working as an advertising photographer, Thomas travels extensively to shoot campaigns all over the world. Sometimes it’s in close proximity to a racetrack. ‘I will extend my stay in the region beyond the regular campaign by a few days to continue working on the Grand Prix Noire series.’ Given his love and knowledge of motorsport, Thomas is familiar with most tracks and has a good idea on which section and what perspective he wants to capture for the series. But there have been some challenges along the way: ‘The Nürburgring was a difficult one to capture. It was winter at the time, which meant dealing with temperatures of up to minus ten degrees.’ While that may not sound too rough, exposure time for images at the Nürburgring was up to an hour long for each one. ‘It’s in the middle of nowhere and you have no ambient light at all. If you’re lucky, the moon helps out a bit ... a tiny bit.’

He confesses that the Grand Prix Noire series may never be complete, ‘there are so many great racetracks around the world that deserve to have their story told.’

You can see more of his work, including the full Grand Prix Noire series, at [www.thomasschorn.de](http://www.thomasschorn.de)





Yas Marina Circuit – Abu Dhabi







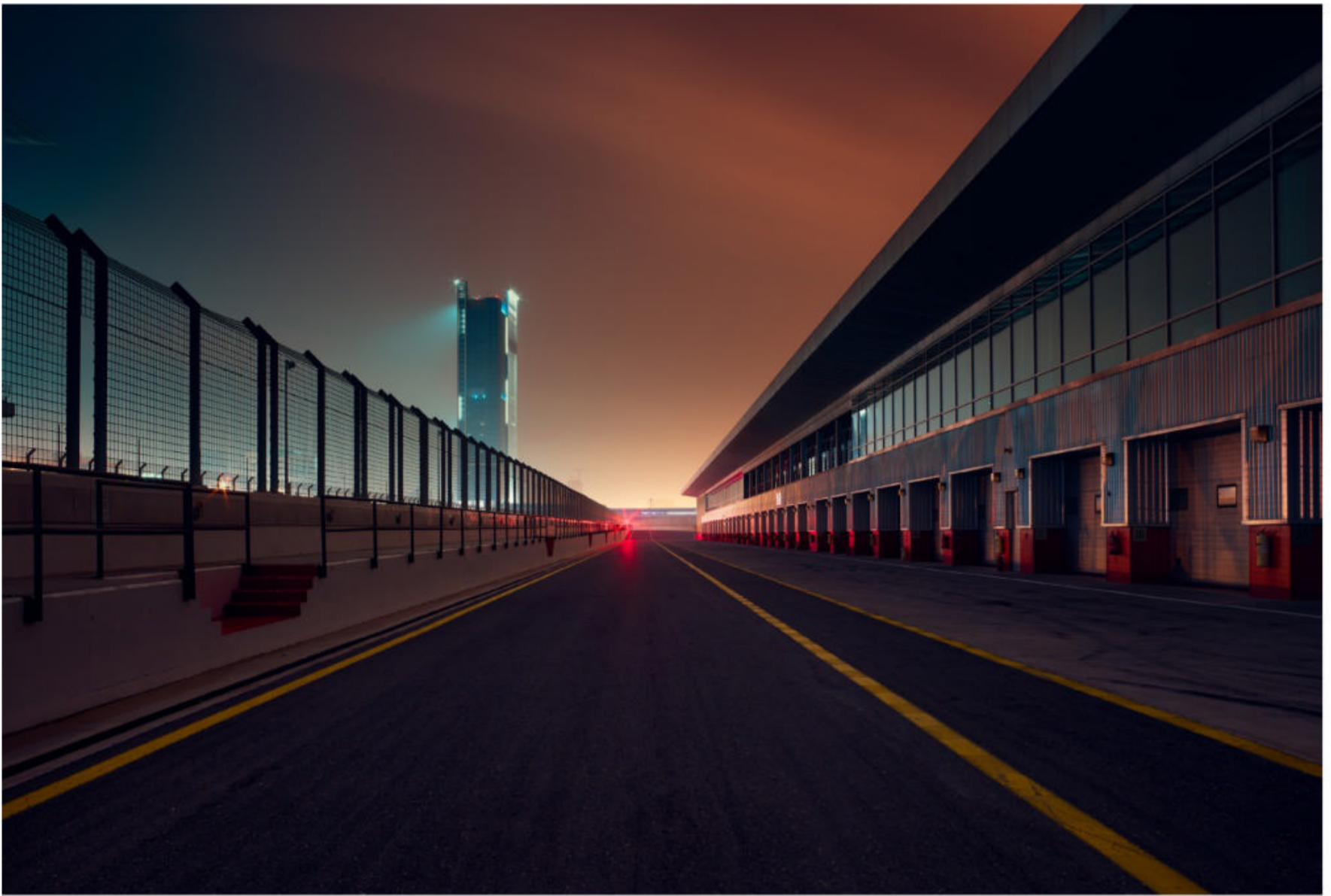


Valencia, Spain– Abandoned F1 Circuit









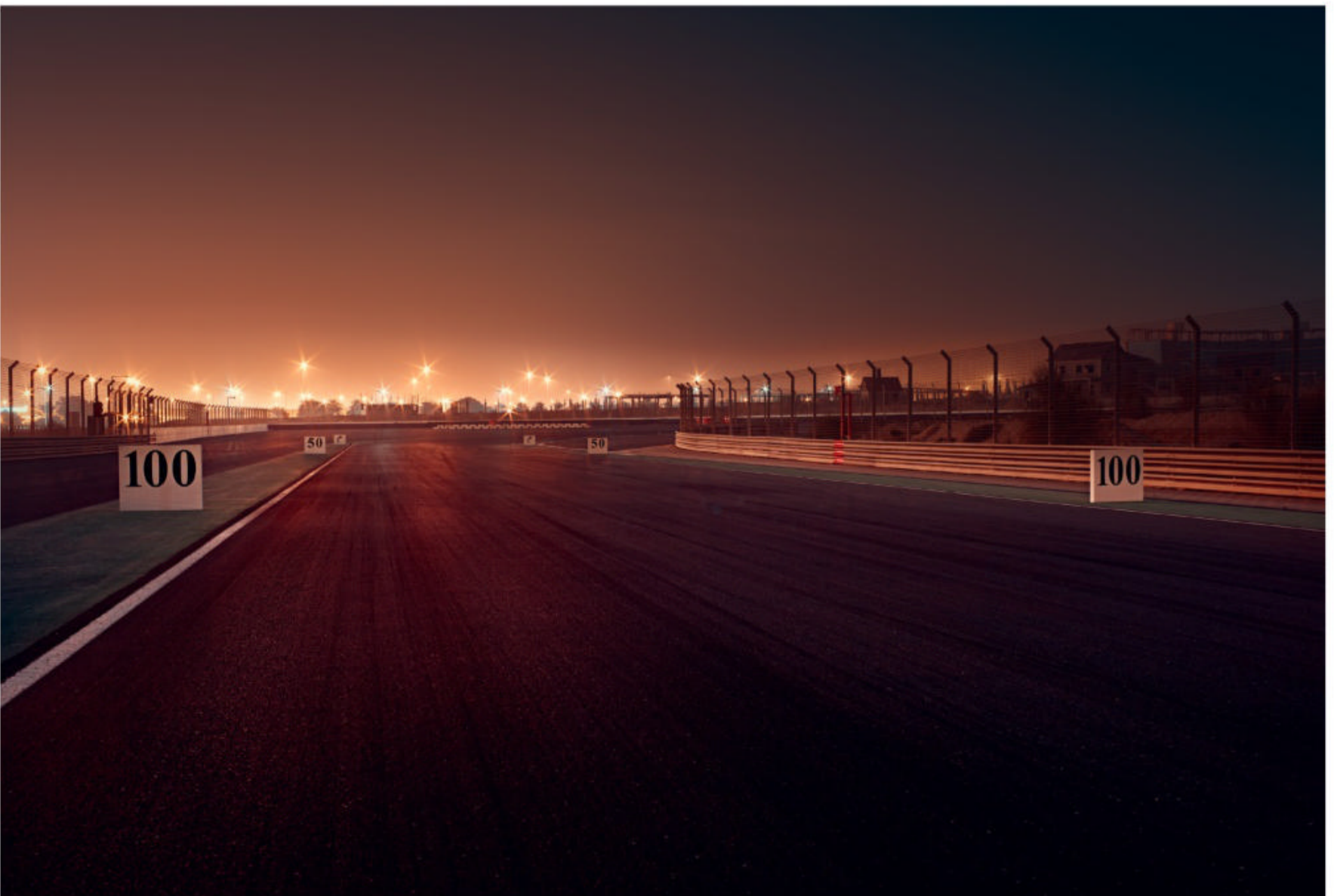
**ABOVE:**Dubai Autodrome. **BELOW:**Valencia, Spain – Abandoned F1 Circuit







**ABOVE & BELOW:** Dubai Autodrome





R

MERCEDES-BENZ

CLK GTR

WORDS JUSTIN JACKY

IMAGES ZACH BREHL













**I**t doesn't matter which car manufacturer you romanticise, most enthusiasts will agree that the 1990s was an absurd era for supercars. Honda had delivered us an attainable gem with the NSX, Jaguar released an instant icon with the XJ220, Ferrari produced the mouth-watering F50, and McLaren gave us one of the greatest cars ever made, the wondrous F1. While each of these beauties often found their ways to the racetrack (with varied success), they were still predominantly road cars at heart. The homologation specials, however, flipped the script on traditional processes by building cars with racing victories as a priority and pragmatic road use as somewhat of an afterthought. Porsche created an instant cult hit with the GT2, Lamborghini unleashed a monster in the Diablo GT, but one of the most race-focused homologation-hypercars ever to touch public roads is undoubtedly the Mercedes-Benz CLK GTR. To some early critics, it was another outlandishly expensive supercar, but over time it has written itself into motoring folklore.

The CLK GTR started life – as most homologation specials do – with a good dose of historical rivalry and a dash of ego. Mercedes-Benz was going through the motorsport equivalent of an identity crisis with the closure of DTM and ITCC

Touring Car Championships in 1996, and subsequently had a great deal of talent at its disposal, chomping at the bit. The BPR endurance series featuring the likes of Ferrari's F40LM, McLaren's F1 GTR, and Porsche's 911 GT1 seemed to align well in terms of market position, but Mercedes-Benz didn't have a car capable of rattling the cages of those racing heavyweights. Some conversations were had with AMG (still a separate company back then), and both parties agreed to develop a ground-up package for the new GT1 class in 1997.

Now, with prices of McLaren F1s these days mimicking the GDPs of developing countries, it might seem ridiculous purchasing an F1 GTR to use as a test mule, but that's exactly what Mercedes-Benz did. Swapping out the BMW V12 for AMG's allowed the engineers to cycle the new engine in what was then the leading chassis on the scene, whilst also tweaking some of the aerodynamics. Eventually, the carbon-fibre bodywork was modified to somewhat resemble the quad-headlight CLK road car, and in the space of 128 days, remarkably Mercedes-Benz had produced two functioning prototypes.

On the CLK GTR's race debut at the Hockenheimring, both cars suffered a rough start due to mechanical issues, with many critics thinking Mercedes-Benz had

LEFT: CLK GTR is not to be confused with the infamous CLR which became airborne at Le Mans...twice









---

*THE MERCEDES-BENZ CLK GTR SOON BECAME  
ONE OF THE MOST RESPECTED AND COLLECTED  
SUPERCARS EVER MADE*

---





**OBJECTIVE:** Try not to let costs escalate too far beyond the already colossal...





---

## *ENTHUSIASTS WILL AGREE THAT THE 1990S WAS AN ABSURD ERA FOR SUPERCARS*

---

tried to do too much, too soon. But by the time round four at the Nürburgring arrived, a third car was added to the team and the CLK GTR began silencing detractors the world over. The team went on to win 17 of its 22 races over the course of two years (including its descendent, the CLK LM), bringing home two team championships and two drivers' championships, making it one of the most successful cars of the modern era. In fact, such was the CLK's dominance over those two years, no manufacturer wanted to compete against Mercedes-Benz and subsequently, the GT1 class was scrapped altogether.

(Note: In 1999, Mercedes-Benz went to Le Mans with its LMGTP car, the CLR, with Mark Webber and Peter Dumbreck famously becoming airborne over the course of the event. Still to this day the CLK GTR wears the burden of this mistaken identity, as the car was completely different to the CLR.)

Before the champagne flowed too freely, the FIA hastily reminded Mercedes-Benz of its homologation obligation. Twenty-five cars had to be sold for public consumption for the records to stand, so towards the end of 1998 AMG began production. The car sold for a then-world record price tag of

US\$1,547,620, but with the age-old adage 'Race on Sunday, sell on Monday' working in its favour, Mercedes-Benz had no issues finding customers.

The concept was simple: keep the car as close to authentic as possible, while not letting costs escalate beyond an already colossal figure. Interior features such as leather, audio system, and air-conditioning were added to offer some form of comfort, and storage was added to each door. The main visible difference between the race and road version is the looped rear wing which integrated into the bodywork, as opposed to the 'bolt-on' version displayed on the GT1 car. Besides that, the CLK GTR's exterior maintained that hyper-sexualised CLK aesthetic that became an overnight icon, thanks to its consistent race victories and subsequent exposure.

The key difference between the two cars, surprisingly, lay under the bonnet. While the CLK GTR GT1 car ran a 6.0-litre V12, the road version's capacity was increased by Ilmor Engineering to a substantial 6.9. With more than 600bhp on tap, the CLK GTR could sprint to 100km/h in 3.8 seconds, thundering to a top speed of 344. However, achieving such impressive times required some craft, as the car's six-speed













**THIS PAGE:** In contrast to the exterior, interior seems almost understated. Note, typical 1990s steering wheel.





---

***WE'VE SEEN LOTS OF HOMOLOGATION SPECIALS  
OVER THE YEARS, MANY OF THEM EXTRAORDINARY,  
BUT NOTHING QUITE COMPARES TO THIS.***

---

paddle-shift transmission still needed a manual clutch, in contrast to modern dual-clutch set-ups.

As special as these upgrades were, five of the 20 coupes produced, took things to another level. The CLK GTR SuperSport was the brainchild of AMG co-founder, Hans-Werner Aufrecht, whose company HWA was heavily involved in motorsport. The SuperSports were fitted with a 7.3-litre AMG V12 (the same powerplant used by the Pagani Zonda) tuned to a monstrous 655bhp. With the extra power on tap, HWA developed a front splitter to improve aerodynamic stability at high speed, and although performance figures for the SuperSport are difficult to find, a rumoured top speed of 370km/h has been whispered.

For the remaining five cars to be produced, HWA was given the task of converting them to roadsters. Starting with a base CLK GTR, the roof was surgically removed, and the rear wing received a black 'bolt-on' style hardtop similar to the GT1 car.

The three-pointed star was enlarged and integrated in the grille (as opposed to the small badge featured on the coupe). Overall, the roadster's visual landscape was louder and more excitable than its

siblings, while the added weight from the rollbars (105kg), and reduced rigidity meant that the roadster was intended for a different clientele altogether. An additional sixth roadster was produced at the end of a very exclusive production line, rounding off 26 of the most collectable cars on the planet.

Through its three variants, the Mercedes-Benz CLK GTR soon became one of the most respected and collected supercars ever made. In many ways, it is the perfect encapsulation of the 1990s GT1 aesthetic, while seemingly able to age gracefully from one generation to the next. We've seen lots of homologation specials over the years, many of them extraordinary, but nothing quite compares to this. From a purely motorsport perspective, the car deserves to go down as one of the greats. But that competition-decimating performance on the track, coupled with the lunacy of evolving it into a road-going supercar, puts the CLK GTR in a class of its own.

*The two cars featured in this article belong to Mohammed Ben Sulayem. Mohammed is a former rally driver, FIA councillor, and is owner of the world's largest collections of supercars.*









---

*SUCH WAS THE CLK'S DOMINANCE OVER THOSE TWO YEARS, NO MANUFACTURER WANTED TO COMPETE AGAINST MERCEDES-BENZ AND SUBSEQUENTLY, THE GT1 CLASS WAS SCRAPPED ALTOGETHER.*

---









*A DEFENDER IN ICELAND*

✦ WORDS **EMMA WOODCOCK** ✦ PHOTOGRAPHY **WWW.CURTET.COM**





Not to be mistaken for Middle Earth, Iceland offers some of the most stunning vistas on the planet

Green-blue water tearing at jagged breaths of ice. Impassive clouds in a ceaseless sky. Cracked earth shouldering up, its whites and blacks broken only by question marks of vegetation and a single track that reaches off into the distance. Iceland is an elemental place, a part of the globe where travellers are forever mindful of their environment. The desolate landscape bewitches French photographer Patrick Curtet. After 10 business trips to the Scandinavian island, he pledged to make his eleventh a love letter to the landscape.

The shots on our pages don't fulfil a contract; they aren't shot to any greater plan. Two clear weeks, a Land Rover Defender and a local guide gave Patrick

the freedom to create images to his own satisfaction. There was no audience and even thoughts of his travel companion vanished as he drew each composition together. 'Taking pictures is a very intense emotional experience. Though I love to travel with other people, they need to do their own thing when I'm getting shots. It's something very personal. The process is almost mystical.'

Reaching out over uninhabited landscapes, his photographs grapple with the scale of this wild, volcanic place. 'I go deeper into Iceland with each visit and every time I'm blown away. There's something very particular about this huge country with very few people in it – you can feel alone there.' Patrick used that





space to listen to the world around him. ‘This time I wanted to really think, to see what the country would give to me instead of taking from the landscape.’ He embraced the bright nights of the Arctic summer and sometimes waited hours for the weather to develop, all in search of the perfect images.

‘We have to forget everything we know and get rid of the things we bring to a place as foreigners, so we can awaken our senses and let ourselves discover. That, for me, is the essence of travel.’ Over four decades and 73 different nations, Patrick has learned to reject the familiar and embrace novel experiences across the globe. ‘In the past, people crossed Africa and explored the poles without ever knowing what they would find.

That’s the feeling I want to recreate. I let the country decide where I go, not what other people recommend.’ In Iceland that meant travelling north and sleeping under canvas. ‘Tents might not be comfortable but you feel so much more of what happens in a place when you’re camping. It’s a part of a whole different process.’ A hunger for new perspectives also drove Patrick towards aerial photography. ‘I can’t soar like a bird but my drones let me experience what they can see. When I saw all of this, it made for a totally different trip. Every part of the environment started to take on so much more volume.’ The contrast is striking. Patrick’s ground-level photos are earthy and textural, the aerial images dreamlike.















---

*WE HAVE TO FORGET EVERYTHING WE KNOW AND  
GET RID OF THE THINGS WE BRING TO A PLACE AS  
FOREIGNERS, SO WE CAN AWAKEN OUR SENSES  
AND LET OURSELVES DISCOVER.*

---

The third dimension has been integral to telling this story and its personal impact. ‘All the drone shots place the Land Rover very small in the countryside and, for me, these images are the real reflection of Iceland. I felt so small when I was there and the Defender acted like our safe boat in the middle of the ocean. That’s the first response I had to the journey, and one that spanned most of my experience. Nothing else is more important than that feeling, and if you go away from it then you’ve got nothing.’

Patrick takes a different approach to his professional work – planning each shoot in exacting detail – but he still values his creative reactions above all else, helping him create unusually dynamic automotive images. ‘I give myself as much freedom as possible on set. I’ll be creative and impulsive, deviating from my plans, and it’s not a problem because it’s a choice.’ The results range from hair flowing across a SEAT hatchback to a Lexus SUV hiding

in a forest. ‘There’s a lot of thought and conviction involved. Everything I do is what I want, it’s complete, and I think that’s what makes my work consistent.’

‘Taking pictures is a state of mind,’ he continues. ‘For me, it’s like breathing. I look at the world every day, searching over thousands of pictures and adverts and films. Even books. It never ends. I’m interested in psychology, geography, politics... Photography is so much more than taking pictures. It’s about the human behind the camera, and who you are personally. The more I know about the world, the more curiosity I feel, the more it brings me inspiration.’

Motorbike racing was Patrick’s first muse, some three decades ago. An enthusiastic competitor in his own right, he started taking photos to support his brother’s journalistic studies and soon found himself talking to the editor of a French magazine. He was offered a six-month placement but stayed for the next four years, shooting road





**THIS PAGE:** Defender has the necessary go-almost-anywhere ability and its classic, rugged styling harmonises with the Icelandic landscape.













---

*THE MORE I KNOW ABOUT THE WORLD, THE  
MORE CURIOSITY I FEEL,  
THE MORE IT BRINGS ME INSPIRATION*

---

tests and races. A leap into commercial photography came next and Patrick set off around the world to cover motorcycle Grand Prix meetings and capture manufacturer advertising campaigns. As time went on, he also shifted speciality from two wheels to four.

Corporate travel couldn't satiate his need for adventure, so Patrick soon expanded into globe-trotting travel features. 'I took bikes and explored the landscapes of China, Africa and all of South America,' he smiles. 'I rode straight across Australia too. When I have the time, even now, I love to produce travel stories.' The same passion burns in the Icelandic collection. 'Those photos really show the experience we were living. With no client and no creative brief, I could just choose images because they reflected a great moment or illustrated an interesting detail.' And yet there's still a clear narrative of exploration. A gaggle of shots clutter glaciers with tent canvas and sleeping bags, while others bounce along

rough roads with the Land Rover.

'The Defender came about through chance,' he continues. 'We were offered the opportunity to travel with it and I thought its shape was ideal. It doesn't look too new and it's somehow fitting for a journey across Iceland.' Classic Land Rovers might lack the performance or refinement of their more modern counterparts, but Patrick never saw that as a disadvantage. 'Travel is not a question of speed but of movement. There has to be slow movement of the body and the mind alike. You don't need to go fast, you don't need to be comfortable, but you do need to travel.'

A quarter century after he first arrived in Paris, Patrick made his biggest journey of all and relocated with his family to the West Coast of the United States. 'I started thinking that I had perhaps 10 or 15 years left in my working life, and that I could follow that through in France or try something new.' Projects with American advertisers, fashion magazines and car manufacturers





‘I go deeper into Iceland with each visit and every time I’m blown away.  
There’s something very particular about this huge country with very few people in it – you can feel alone there.’











---

*YOU DON'T NEED TO GO FAST, YOU DON'T NEED  
TO BE COMFORTABLE, BUT YOU DO  
NEED TO TRAVEL.*

---

have developed his creative process in the years since. 'The teams are bigger, the ideas are bigger, the locations are bigger here. All the expectations for my work are higher, and that's very interesting from a professional perspective. Commercial work is art, but it's art with rules.'

'The move has given everybody a new story: it's an adventure, and I wanted my wife and kids to have that experience. Travelling to places outside my – and our – comfort zone is something that's very important to me.' Neon-drenched Los Angeles and the arid California landscape have taken his personal projects in new directions too, Patrick shooting muscle cars like they're on sixties film sets. 'I'm telling different stories that end in new places but the global approach is identical,' he adds. 'You always start at the same point. I like that.'

Then there are the moments when Patrick doesn't reach that first point at all. 'I love photography and how it can freeze the moment you're living, but occasionally

I'll see things when I'm travelling that I don't shoot. There are moments – maybe it's selfish – that I don't want to share.' For Patrick the temporary is just as important as the permanent. 'It's nice to see a scene and let it pass. Things go away naturally and that's the way of life.' He feels the same way about his Icelandic saga. The photos make a touching souvenir, and one he still loves to share, but he'd rather look for new adventures.

'I try to create, to be a chemist and an enthusiast who brings energy to people,' he explains, 'so the best story is always the next one. I have so many ideas and never enough time, plus everything I learn shows me something I don't know. Unknown futures, unknown people, unknown places. It's really not about the destination: travel is about discovering the unknown.' Iceland remains his favourite location, a unique, desolate rock with a Martian landscape. And he will return. There are just other roads Patrick Curtet needs to travel first.





Iceland remains his favourite location, a unique, desolate rock with a Martian landscape.







**BMW's M DIVISION** HAS BEEN  
CREATING SPECIALIST VERSIONS  
OF BMW CARS FOR OVER 50  
YEARS. THE COMBINATION OF  
A CULTURE OF ENGINEERING  
SUPERIORITY AND A PASSION FOR  
BLURRING THE LINES BETWEEN  
ROAD AND TRACK ENGINES HAS  
SEEN THIS REVERED DIVISION  
PRODUCE MANY OF THE GREATEST  
DRIVING MACHINES IN THIS HALF  
CENTURY.

✦ WORDS COLIN FABRI ✦ IMAGES ZACH BREHL







## E36 M3

---

Officially named the 'BMW Motorsport GmbH', it was established in 1972 as BMW's motor racing division. The first development project for the new division was the BMW 3.0 CSL, which stood for Coupe, Sports and Lightweight. This was essentially a racing project that required the development of a minimum of 1000 homologation specials to be sold for road use. The road car was a high-performance variant of the 3.0 CS and, with highly visible aerodynamic aids, became affectionally known as the Batmobile. Due to the success of this vehicle in both race and road applications, the BMW M division team was increased in size and went on in 1978 to introduce the first M-badged vehicle, the M1. BMW's M division has been involved in creating high-performance variants of nearly every model of BMW since its inception and is also credited with the development and production of the 106 hand-built 6.1-litre McLaren F1 road-car engines.

The E36 M3 slots into the M Division history as the ninth M-series car and the second M3, following on from the highly successful E30 M3 (1986-1991).

While there were 18,000 E30 M3s manufactured, the E36 M3 trumped this dramatically with a production run of 71,000 between 1992 and 1999.

The new generation M3 was a completely new platform designated E36, and, importantly, was also built-in right-hand-drive form; the E30 M3 was left-hand-drive only. The base platform of the E36 was significantly larger and heavier than the outgoing E30, requiring the M division engineers to dig deeper in order to develop it with the performance that the public expected. The E36 M3 version was first released in coupe form in 1992; in 1994 a convertible and sedan were added to the line-up. In 1995, a mild facelift was made to the range and engine capacity was increased.

The E36 M3 followed the earlier E30 lead with the use of multiple throttle-bodies – six in this case. In conjunction with variable valve timing, this engine had incredible airflow characteristics and, consequently, super-fast throttle response and high rev range. Where the first M3 was a highly tuned four-cylinder 2.3- or 2.5-litre engine, the new generation E36







# WHAT IS AVAXHOME?



# AVAXHOME-

the biggest Internet portal,  
providing you various content:  
brand new books, trending movies,  
fresh magazines, hot games,  
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



# AVXLIVE . ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>





employed a much torquier 3.0-litre straight six-cylinder engine.

Visually, the E36 M3 is similar to the non-M3 versions with only subtle upgrades. Most obvious are those stunning side mirrors that are modern, aerodynamic and add a pure sporting look. More subtle changes included a more aggressive front and rear bumper, side skirts and, of course, the M3 badges. Some markets and versions had boot lid spoilers, while others did not. Overall, the look was of a sportier

3-Series model, rather than the track racer look of the earlier E30. The interior had sports seats, revised tacho and speedometer, traction control and other small luxury features over and above a non-M3 version.

Apart from the subtle variation in look, the actual changes to the running gear of the M3 versus a standard car are comprehensive, combining to create a well sorted driver-focused vehicle. Changes were made with upgrades to performance parts for the engine, wheels,





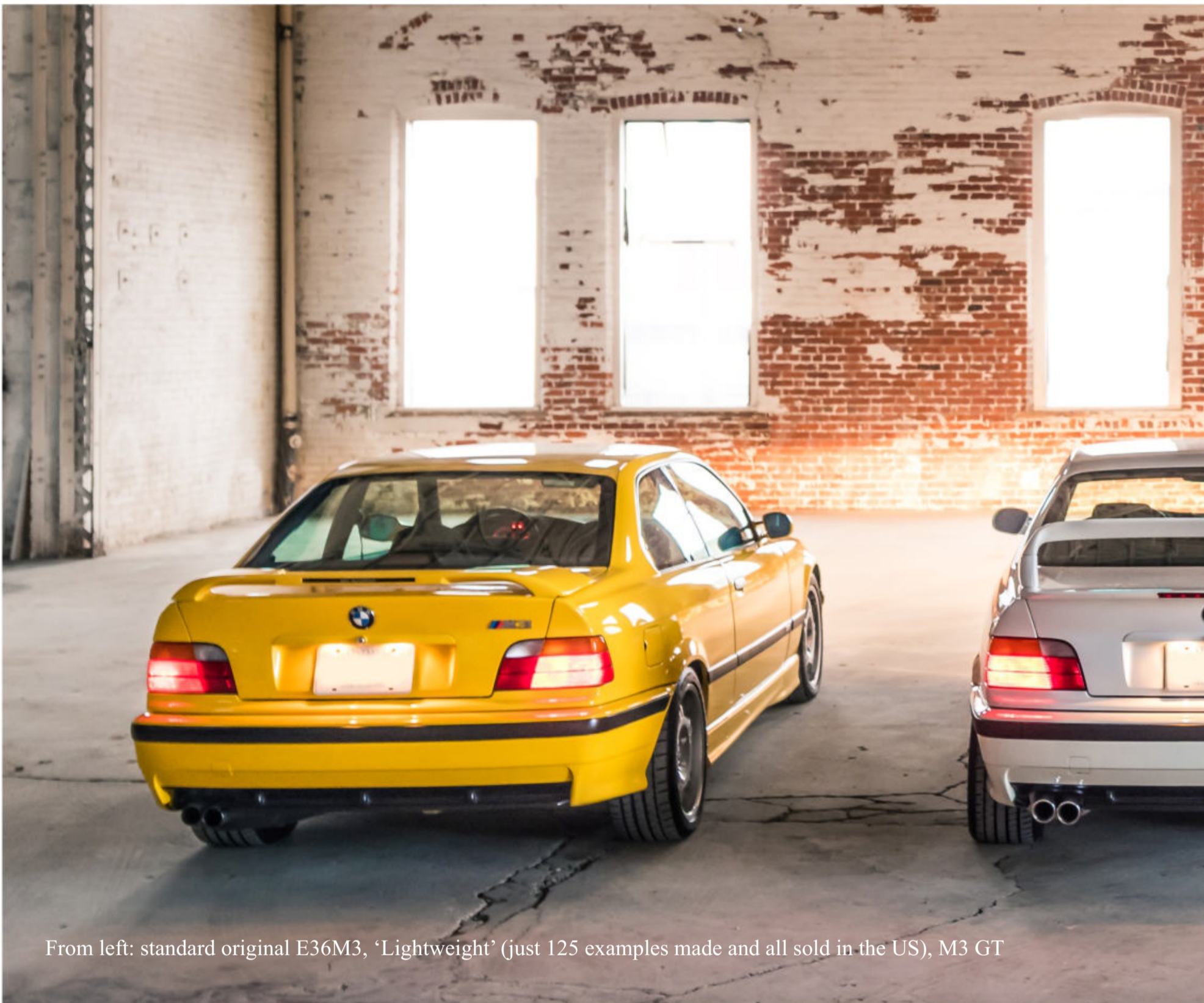
The E36 M3 was very different from its E30 predecessor which was essentially an homologation special.

suspension, brakes, transmission, driveshaft and differential. The manual transmission had a shorter gear action and closer ratios in the lower gears. A revised suspension decreased body roll and reduced ride height in order to provide a controlled, yet compliant ride – like only the Germans could pull off at that point in time.

Perhaps the M division felt hampered with the design of the new E36 M3, as they didn't get to pump up the guards and add wild wings

and the like – so they compensated with the engine. The six-cylinder engine is pure kilowatt engineering at its best. The straight six is a double overhead cam design with BMW's VANOS variable camshaft adjustment feature, which optimises the cam timing for high and low rpm and differing engine load. In conjunction with six individual throttle-bodies, the engine is turbine-like smooth and can rev well beyond 7000rpm before hitting the limiter. At the time of release, the M3





From left: standard original E36M3, 'Lightweight' (just 125 examples made and all sold in the US), M3 GT

engine in the E36 had the highest output per cubic litre of any normally aspirated engine: making almost 74.57kw per cubic litre. That's higher than the then current Ferrari 348 and Lamborghini Diablo. That's on a mass-produced engine with all the reliability and warranty of the base non-M engines!

The original E30 M3 was designed as a road-going track version to meet race homologation requirements. Instead, the E36 was designed to be a daily driveable performance car for a much

wider audience. This explains the multiple versions (coupe, sedan and convertible) and the more comfortable and sophisticated drive experience. However, it wouldn't be the M Division if there weren't some extra special versions, including the M3 GT, M3 Evolution, M3 Lightweight, Canadian Edition, M3-R and M3GTR, all of which were developed to suit differing applications. The majority of these were homologation versions aimed at specific classes of racing in different parts of the world.





For example, 15 M3-Rs were sold in Australia in order to race in the Australian Super Production series in 1994. These cars were lightened and given additional power via more aggressive camshafts and a cold-air induction setup. This R version of the E36 M3 was the most powerful ever sold to the public with an output of 240kW – exceeding the magic figure of 74.57kw per litre for a naturally aspirated engine.

In 1995, the E36 got a 236kW edition of the

classic straight six. Accompanying this engine upgrade was a six-speed manual gearbox. And, for the first time, a (six-speed) sequential manual gearbox (SMG) was offered. The SMG gearbox was essentially the same as the manual with steering mounted panels to select gears and an automated clutch system operated by an electro-hydraulic pump. Due to the increased kilowatts, acceleration times for the 3.2-litre decreased by around half a second for the zero to 100km/h sprint.







## M3 GT

---

The M3 GT was a limited edition of the M3 further enhancing the performance of the standard model. Only 356 units were built from 1995, all sporting British Racing Green paintwork and all using the left-hand drive coupe body as its base. The engine was the 3.0 litre straight 6 and as per all US spec cars had a single throttle body rather than the multiple throttle bodies of the rest of world cars. However, on this GT model, the US engine was upgraded with a higher compression ratio, higher lift cams, some higher rated oil pump and revised ECU software with changes to the Variable Cam timing settings. Power was 295 hp reached at a high 7000 rpm and 323 Nm of torque at 3900 rpm, good enough to dispatch the 0-60mph acceleration run comfortably

under 6 seconds. Apart from its stunning green paintwork, the GT model featured forged aluminium 17 inch wheels with low profile 40 series tyres. The interior is striking with Mexico green Nappa leather inserts on the sports seats and carbon interior trim pieces everywhere you look. This GT model also had some modest weight saving with the use of the aluminium door skins. The M3 GT was created as a homologation special to compete in the FAI GT and IMSA GT series, and from a road test it's clear the road car is aligned with this focus. Out on the track for a local weekend track event, the GT version benefits from stiffer springs and an engine bay strut brace providing excellent feel, body control and turn in.



**LEFT:** Superbly elegant (And classically BMW M) five-spoke alloys, strut brace and British Racing Green are GT highlights.







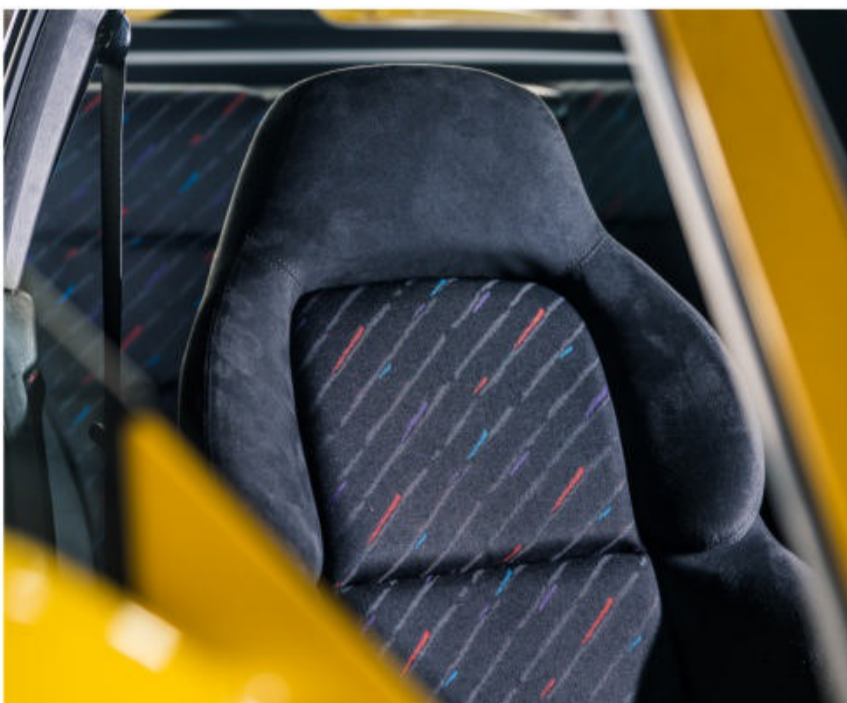
## EURO SPEC M3

---

The US market E36 M3 had a detuned engine compared to the Euro Spec and rest of the world's production. Although also a 3.0 litre engine, the US spec M3 had a different engine platform than primarily intended to keep the cost of the US model down. In contrast the Euro Spec model was the complete deal in the engine department, and made an additional 46 horsepower from its higher 'real M3' specification. Increased compression ratio, a stunning set of 6 individual throttle bodies and a continuously variable cam system, as opposed to a 2 stage one in the US spec, elevated the Euro Spec M3 models to true greatness with

gains felt both on the road and the track.

The Euro spec version was never sold in the US however a small run made it to Canada via an importation loophole. At the time, the Canadian Government allowed the importation of Norwegian Spec cars in low volumes. The product planning manager of BMW Canada ordered initially 45 of these Euro Spec M3's and successfully sold them to the Canadian public. The yellow coupe in this stunning collection is one of these original and rare Euro Spec versions complete with all of the engine performance and sports handling featured the M Division had envisioned.



**LEFT:** The original E36 M3, launched in 1992, had 210kW and a five-speed gearbox; 1995 Evolution boasted 236 and six-speeder.







## M3 LTW 'LIGHTWEIGHT'

---

The 'M3 Lightweight' US only version was an exercise in 'adding lightness', the term made famous by Lotus Cars founder Colin Chapman, and applied to all models of their cars ever produced. For the LTW version, luxury items such as air-conditioning, sunroof, radio, alarm system and cruise control were all deleted. In addition, a thinner carpet was used and less insulation added throughout the entire vehicle, as well as aluminium door skins all contributing to reducing the weight to around 2900 lb (1350 kgs), a weight saving of 200 lbs (91 kgs) from the base M3. The model also featured lightweight aluminium wheels and a lowered ride height via stiffened springs. The only performance change was to shorten

the differential ratio to improve acceleration. Exact numbers of this model are unclear however it is widely estimated at around 125. The cars were all painted in 'Alpine White' with the BMW Motorsport flag decals draping across the front left and rear right of the car. The rear spoiler is elevated with side extensions and the decals cover a reasonable amount of the car creating a unique look that is immediately identifiable.

The M3 Lightweight was produced for the US market as a purer form of the M3, a car clearly designed to be a more focused sportscar. This model could be driven to the track, for a blast around your favourite circuit, on the weekend and not rattle your teeth out on the drive home.



**LEFT:** Unique-to-US 'Lightweight' was finished in Alpine White, had a slightly lowered ride height compared with standard E36 M3 and weighed 91kg less.



## MCKINLEY THOMPSON JR.

The Ford Bronco is the product of legendary talent, but there's one legend in the story of the Bronco who not only helped create the first Ford 4x4 sports-utility vehicle design, he made history, becoming one of the first African American designers in the industry.

McKinley Thompson Jr., a Ford designer who helped pen the first-generation Bronco, was hired at Ford Motor Company after graduating from ArtCenter College of Design in Pasadena, California with a degree in transportation design in 1956.

His first assignment was at Ford's advanced design studio in Dearborn, working under George Walker, vice president of Ford design. Among his projects was a light-duty cab-forward truck, several concept sketches for the soon-to-be Ford Mustang and the legendary Ford GT40. Thompson also worked on the futuristic space-age Ford Gyron, a two-wheeled concept car that was on display at the Century of Progress exhibit at the Ford Rotunda in 1961.

'McKinley was a man who followed his dreams and wound up making history,' said Ford Bronco interior designer Christopher Young. 'He not only broke through the colour barrier in the world of automotive

design, he helped create some of the most iconic consumer products ever – from the Ford Mustang, Thunderbird and Bronco – designs that are not only timeless but have been studied by generations of designers.'

Among Thompson's more noteworthy projects was the Bronco sports-utility vehicle, an open-air 4x4 concept featuring a square, short body and high ground clearance with minimal front and rear overhangs for optimum off-road capability.

One of his designs, titled "Package Proposal #5 for Bronco," rendered July 24, 1963, influenced the design language that would become iconic attributes of the first-generation Bronco.

He had a keen interest in cars from the time he was young, and later recalled seeing a silver-gray DeSoto Airflow when he was around 12. 'It just so happened that the clouds opened up for the sunshine to come through,' he said in an interview documented by Henry Ford. 'It lit that car up like a searchlight. I was never so impressed with anything in all my life,' he said. 'I knew that's what I wanted to do – I wanted to be an automobile designer.'





RETROMOTIVE

# THE **RETROMOTIVE** MAGAZINE BUNDLES



**SLIP CASE**  
**+**  
**4 VOLUMES**



[www.retromotive.co](http://www.retromotive.co)





[WWW.RETROMOTIVE.CO](http://WWW.RETROMOTIVE.CO)