

Beauty MORE THAN BEAST

Porsche's Carrera GTS marked a return to sports car racing that would define its approach to motorsport for decades to follow. **Matthew Hayward** discovers a car as competitive as it was gorgeous

Photography Tim Scott





Has there ever been a more beautiful Porsche than this? There's a long-standing argument from some enthusiasts that the Porsche Carrera GTS is one of the best-looking cars ever to have come from the Stuttgart manufacturer, and it's easy to see why: this 44in-tall mid-engined coupé is sleek and curvy. It was built with a singular purpose, however – to win. You'd be forgiven for thinking the design had been outsourced to one of Turin's many styling houses, but no, it was the handiwork of the Porsche design department. Specifically, Ferdinand Alexander 'Butzi' Porsche, the grandson of company founder Ferdinand.

After a series of lightweight, mid-engined racers – the 550 and 718 – in the late 1950s, Porsche made the decision to pursue the world of Formula 1. Aiming to compete at the very top level of motorsport would mean that any distractions in the form of sports car racing would have to be put on ice. The company spent a huge amount of money

getting to a competitive level in F1, and with some good results, but at the end of the 1962 season Porsche announced that it would once again be re-focusing on other areas of the motorsport world. Ferry Porsche (Butzi's father) simply wanted the Porsche name back in sports car racing – it was his thinking that this was where its customers could best relate to the road cars, plus it would allow a return to Le Mans. Work quickly started on a new car aimed at the under-2.0-litre Group 3 class.

Butzi worked on the design and, without the opportunity for anyone to object or to meddle in the process, it soon became a reality. This was to be a new breed of mid-engined racer, one that would be powered by a tuned twin-plug version of the 911's all-new flat-six engine. Developing it on a tight timescale, Porsche relied heavily on the advancements it had made in F1, with much of the front suspension taken from the 804 racing car, an arrangement that consisted of unequal-length double wishbones. The rear got a unique trailing arm and reversed upper-wishbone set-up, and there were coilover spring-and-damper units



at each corner. Braking was by an ATE disc set-up, similar to the 356C's.

Homologation dictated that 100 production cars needed to be built, which would allow privateers to buy and compete in 904s around the world in various different events – even rallying. Although clearly aimed at racers, the new car would be sold in road-legal form. This requirement, however, meant that a traditional spaceframe chassis and aluminium body would be too costly and time-intensive to produce, and for these reasons a ladder-frame chassis was developed by Gerhard Schröder and his team. The body was moulded in glassfibre, production of which was outsourced to aeroplane (and microcar) manufacturer Heinkel, which made it cheaper and quicker to build, but also easier to repair. The body was bonded to the chassis, so the structure was significantly more rigid than a traditional spaceframe would permit. Although weights varied due to inconsistencies in the thickness of glassfibre used, the race-prepped cars tipped the scales at around 650kg.

The plan from the beginning had been to fit a race-tuned version of the 911's flat-six engine, but it wasn't ready in time for the 1964 season. In its place, Porsche carried over the highly tuned 'Fuhrmann' flat-four, an incredibly advanced all-alloy four-cam engine that was a staple of Porsche's competition cars, including the 550 Spyder, 356 Carreras and F2 single-seaters. Powering the 904 was a 2.0-litre development of the 1.5-litre unit found in the 1960 Abarth Carrera GTL, and this new S87/3 version had been further enhanced by Hans Mezger and his team to develop a healthy 180bhp in full race trim. Even the road cars, with a quieter exhaust, were rated at 155bhp. Drive was to the rear wheels via a five-speed full-synchromesh gearbox.

Although it was known internally as the Type 904, Porsche soon discovered (along with the 901 road car, which would quickly be changed to 911) that Peugeot's copyright claim to three-digit model names with a zero in the middle was no joke, and so the new car came to be marketed and badged as the Carrera GTS.

Making their racing debut at the Sebring 12 Hours in March 1964, a total of five 904s were entered by privateer teams. Briggs Cunningham drove his car with Lake Underwood to ninth place overall and a victory in the under-3000cc Prototype class, a result that would point to the successful future of this little coupé, and by April '64 enough had been built for it to be homologated as a GT.

Two Porsche factory team 904s – one driven by Colin Davis and Antonio Pucci, the other by Gianni Balzarini and Herbert Linge – headed to Sicily for the gruelling Targa Florio. Ten laps of this tight and winding 72km road circuit were tough on the bigger, heavier cars of rival teams, giving the 904s a natural advantage. Scuderia Ferrari had boycotted the event due to ongoing homologation issues with the FIA over the 250LM, and the leading privateer 250 GTO retired due to gearbox issues, leaving the podium wide open for the taking. The two four-cylinder factory Porsche 904s finished in outright first and second place.

Although it didn't have the power to compete in the top categories, the 904's fantastic handling balance, low weight,

'Ferry wanted the Porsche name back in sports car racing – where customers could best relate to the road cars'

Below and bottom

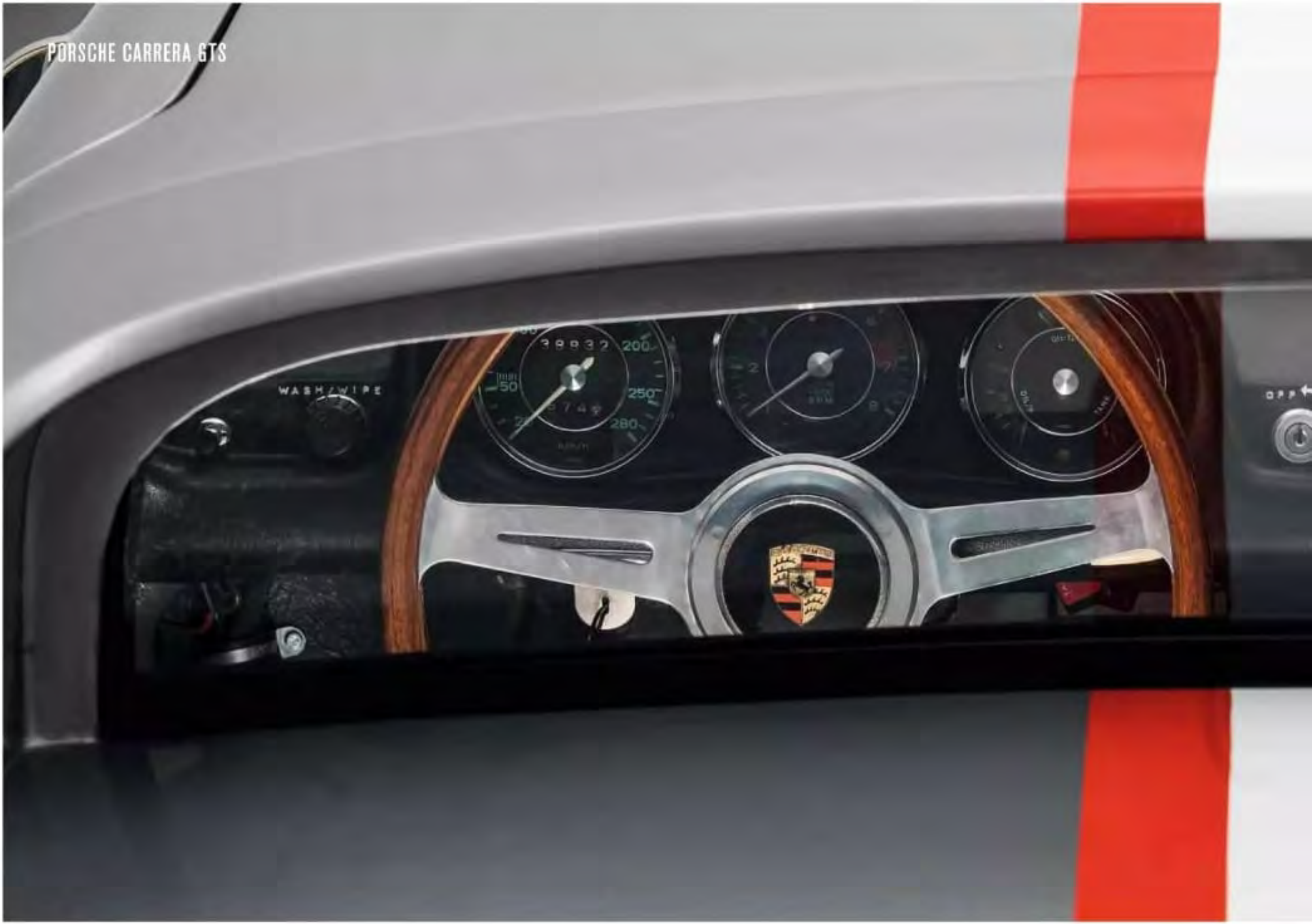
Works drivers Colin Davis and Antonio Pucci en route to victory in the 1964 Targa Florio; key to the 904's light weight was its glassfibre body, weighing just 100kg.



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Clockwise, from this image
Carrera GTS was race-bred
yet makes a brisk if loud road
car; slot-like rear window;
this example is powered
by the flat-six that was
originally intended.





‘Chassis number 83 is a very special survivor that is thought to be one of the most original in existence’



drivability and reliability often saw it punching above its weight. Even the venerable flat-four was more than capable of causing disruption, yet Porsche's plan had always been to squeeze the 240bhp flat-eight engine from the F1 car into the back of three factory prototypes and go Ferrari-hunting. A single example of this ultimate 904/8 had also been entered in the '64 Targa Florio, but mechanical troubles put it out of contention for the win.

Of course, all eyes were on the prize at Le Mans. The grid featured no fewer than seven 904s, five of which crossed the finish line, with the privateer car of Guy Ligier and Robert Buchet at the head of the pack in seventh overall, taking a victory in the 2.0-litre GT class. This was closely followed by another privateer 904, with the factory team 904 and two other privateer 904s a few laps back. It should be noted that the only other car competing in that class was the works MGB driven by Paddy Hopkirk! Porsche had also entered two 904/8s in this class, neither of which finished due to mechanical failure.

The following year, Porsche would re-double its efforts. For the 1965 season the 904 had finally been upgraded with the six-cylinder engine it should have had from the beginning. The factory officially built only seven six-cylinder 904/6s, of which two ran in the prototype class, along with a 904/8, slightly detuned in an attempt to allay fears over the recurring flywheel/clutch problems. There

was also a factory four-cylinder car in the 2.0 GT class – meaning Porsche had three different-engined variants in one race. Talk about hedging your bets! It was a sound strategy, though, with the 904/6 of Herbert Linge and Peter Nöcker finishing fourth, more than ten laps ahead of the trusty 904/4 of Gerhard Koch and Anton Fischhaber, representing two class victories in the Prototype and GT classes. Yet again, the 904/8 failed to finish.

Porsche returned to the Targa Florio that year, too, achieving a third place with the 904/6, as well as a second place with the heavily modified 904 Bergspyder – a much lighter open-topped racer based on the 904/8. The Bergspyder moved Porsche further away from the more customer-friendly 904 coupé, and signalled the start of a new direction for the company's motorsport activities. Having said that, the many privateer 904s continued racing competitively for several years.

The gorgeous car in these photographs is a prime example. Chassis number 83 is a very special survivor that is thought to be one of the most original in existence. Sold in France in 1964, it was in regular use between 1965 and '68, competing in the 12 Hours of Rheims, Tour de France Auto, Coupe des Alpes, Mont Ventoux Hill Climb, Rally Ardennes and Routes du Nord.

During a return trip to the factory for some repair work in 1965, chassis 83 was treated to a revised chassis and the



Opposite and above

Mid-engined profile is almost Ferrari-like in its delicacy, yet resolutely Porsche in its function-first approach; likewise the stark yet ordered cockpit.

much-improved later body. This meant a stronger 'shell over a further reinforced structure; these series 2 cars can be identified by the central fuel-filler on the bonnet and a better-defined Kamm-tail rear end. As was usually the case, the original four-cylinder engine and drivetrain were transplanted into the new body, and Porsche in effect christened the new body with the original identity.

Following its racing career, chassis 83 was bought by Porsche specialist Manfred Freisinger in 1971. It passed through a couple of owners in Germany over the next 35 years, and it's thought that it wasn't raced during this time. This meant that it was relatively well-preserved during the period when a lot of other 904s were raced, crashed and rebuilt on a budget. Restoring a 904 presents a few unique challenges due to the glassfibre bodywork and, as this car was in need of some work by the late 1990s, a sympathetic restoration was undertaken by Bergermann – a specialist in glassfibre – with input from 904 experts.

The car made its way to the UK in 2007, when it also started to appear in top-level international events such as the Goodwood Revival and Tour Auto. It was then exported to the USA and, while further work was carried out to make the car even better – including refinements to the brakes, suspension and gearbox – it was not used competitively while in the States. DK Engineering re-imported the car into the UK in 2014.





1964/1965 Porsche Carrera GTS 904/6

Engine 1991cc dry-sump flat-six, OHC per bank, dual ignition, two triple 46IDA Weber carburetors
Power 180bhp @ 7200rpm **Torque** 160lb ft @ 5500rpm **Transmission** Five-speed manual, rear-wheel drive
Steering Rack and pinion **Suspension** Front: double wishbones, coil-over-damper units, anti-roll bar.
Rear: upper wishbones, lower links, radius rods, coil-over-damper units, anti-roll bar
Brakes Discs, no servo **Weight** 675kg **Top speed** 160mph **0-60mph** 5.5sec




Like many of the 100 four-cylinder variants built for homologation, this car has since been upgraded with the fitment of the six-cylinder engine that Porsche had originally intended. A major benefit is, of course, the much-improved soundtrack (although the flat-four sounds brilliant), and it elevates the performance and usability by a substantial amount on both road and track. Chassis 83 was last sold by Taylor and Crawley in 2022, who offered the original matching-numbers flat-four mounted on an engine stand for posterity.

Octane's own Robert Coucher experienced the thrill of an original 904/6 at Donington Park in issue 157: 'Give the Webers a pump, hold the throttle down a tad and fire the flat-six. It's loud in here but the sound is thoroughbred – this is one of the best engines in the world. Its energy fizzles about the cabin but it always remains smooth.

'The 904/6 leaps off the mark, thanks to zero flywheel weight, and it feels like you're strapped directly to the engine, with no other weight to impede the fast-forward trajectory. The rack-and-pinion steering is ultra-light and direct. God, it feels screamingly quick, instantaneous, reactive, sharp, balanced and eager. When the butterflies in the

Webers open the Porsche literally comes alive. The 904/6 feels a lot better balanced and more manageable than an early 911 of the period and, indeed, could be a very entertaining if loud road car. The only control that's less than perfect is the gearchange, thanks to its long and tortuous linkage aft.'

Running at the top level of competition in 1964 and '65, the 904 had shone brightly but, as is usually the case for racing cars, its spell at the top was all too brief. Motorsport moves quickly, and the 904 was soon replaced by the far more advanced 906. This was the first car to be overseen by a young Ferdinand Piëch, and it would be a far more extreme, wind-tunnel-honed racer that was a very different animal indeed.

Many great-looking and even more successful Porsche sports racing cars were spawned thanks to the success of the 904 – a lineage that would lead to the legendary 917 and beyond. This pure and simple racer is beautiful, sure, but let's not forget that it also happens to be one of the most important stepping stones in Porsche's remarkable motorsport legacy. 

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