

Clockwise from left Go for the Stradale look (like this one from Hawk) or full-on rally livery (Lister-Bell in this case): New Stratos remains a Ferrari 430-powered one-off.





THE UNREAL DEAL

They say imitation is the sincerest form of flattery. These are the cars that flatter the Stratos best

WORDS Brett Fraser

EVEN BEFORE STRATOS values climbed to their current £400,000 and more, the car's rarity created a market for good-quality replicas. Truth is, they were kit cars, but only in as much as you could put them together yourself from parts sourced from breaker's yards. Companies such as Hawk Cars, however, set about refining certain aspects of the Stratos, improving the fit and finish of the body panels and evolving the mechanical setup. Hawk even went so far as to commission new windscreens and have new wheels cast useful to owners of genuine cars, too.

Although Hawk will happily unite you with a Ferrari V6 to shove in the back of your replica, the company has also engineered its HF3000 and HF2000 models to accept an Alfa V6 (a popular choice) or a four-cylinder Lancia twin-cam. And rather than get dirt under your own fingernails, Hawk has an outside partner that can construct your car for you. Despite an unfavourable review on the Top Gear TV programme - which Hawk and the owner of

the car used insist was a misrepresentation -Hawks are held in high regard, as is reflected in the secondhand values (£40,000+) of wellmade examples.

Since 2010 Hawk has had a rival in the form of Lister Bell Automotive. Like Hawk, Lister Bell has invested time and money in developing the Stratos further, using modern materials, construction techniques and computer design and analysis programs, with an emphasis on improving the driving experience and not simply replicating it.

Alfa V6s of 2.0- and 3.0-litre capacities are the mainstays of Lister Bell's engine line-up, but there's also the option of 3.0- and 3.2-litre Ferrari Mondial V8 power. Lister Bell has also re-engineered the engine cradle of its SLR to accept a Toyota 3.5-litre V6, as found amidships in the Lotus Exige and Evora. In naturally aspirated guise the motor produces either 275bhp or 330bhp; with a supercharger those numbers rise to 350bhp and 400bhp – enough to make you glad Lister Bell also redesigned the suspension and offers brake upgrades.

Obviously neither the Lister Bell nor the Hawk are the real deal, but they look the part and, depending on the spec and who built them, offer a superior drive to the genuine item. And now that Stratos prices have gone, ahem, straospheric, for most of us they represent the only way we're ever going to get near the genuine experience.

While that pair endeavour to emulate the original, in 2005 Christian Hrabalek tried to reinvent the Stratos with his Fenomenon project. Prodrive developed a prototype powered by a V8 engine, but attempts to attract funding to progress to a limited run of cars ultimately came to nothing.

However, inspired by Hrabalek's vision, in 2010 Michael Stoschek, the wealthy owner of an automotive supplies company, and his son Maximilian announced plans for the New Stratos. Straschek commissioned Pininfarina to develop the car, which was based on a shortened Ferrari 430 Stradale, powered by a 532bhp 4.3-litre V8, and clothed in a carbonfibre body that paid modern homage to the spirit of the original (see Octane 121).

When the finished New Stratos was revealed to the press in 2013 it was rapturously received. 'We'll do a small production run,' proposed an excited Stoschek. 'Not on your nelly,' Ferrari harrumphed, even banning its suppliers from touching the project. And so the one-off New Stratos remains precisely that.



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When only the best will do

JD Classics can sell you a top-level classic car, restore it to perfection, maintain it, even race-prep and race-support it – all from world-class premises. Octane spends a day there





Far left, above and below

Ferraris (such as this 275GTB) are now JD Classics' most popular marque; the company has won at such events as The Quail and Pebble Beach and is a main sponsor of the Mille Miglia, where it provides the official competitor welcome lounge.



S A READER of this magazine you cannot have failed to notice the strong presence of JD Classics, the award-winning, world-class classic car dealer and specialist. Its advertisements and website illustrate the stunning quality of its cars as well as its concours levels of restoration on road going and rare racing cars.

But a visit to JD Classics' 100,000 square-feet, seven-showroom, six-workshops premises in Maldon is astonishing. Tucked away in the Essex countryside just outside London, the immaculate green buildings of JD Classics effectively hides one of – if not *the* – greatest motoring destinations in the world. Entering through the securely gated courtyard, your senses are literally assaulted by the sight of the main showroom within. It is enormous and shockingly impressive. On the gleaming, tiled showroom floor is an array of some of the most important and immaculate classic and performance cars you will see anywhere in the world, as well as a generous sprinkling of classic racing motorcycles and automobilia.

JD Classics has been built over the last 27 years through hard work, passion and commitment. Its founder, Derek Hood, started the business in the late '80s and has spent this time building an extraordinary team – surely one of the most impressive in the world – of 60 craftsmen, technicians and engineers together with the vehicle sourcing, sales and research teams. Everyone is proud to work at JD Classics

and this more than comes across when touring the extraordinary site.

'I have always had a passion for classic cars,' says Derek. 'My father introduced them to me and, following on from my racing scrambler motorcycles as a schoolboy, I started dabbling with classics. My first car was an opalescent maroon Jaguar Mk2. I bought it in a bit of a scruffy state – I love buying this sort of car because I can add value to them! – and spent my weekends restoring and detail cleaning the Jaguar. A neighbour saw it on my driveway and offered to buy it. I said it was not for sale but he offered me twice what I'd paid for it, so the deal was done.

The same thing happened with my next car, after a lot of hard work. I was offered twice \rightarrow

ADVERTORIAL FEATURE









Above and left JD Classics has spent 27 years developing and re-investing in its premises at Maldon, in the Essex countryside, and recently opened a showroom in London's Mayfair; the Ferrari Daytona is one of JD's investment tips.



Left and below

Cooper-Jaguar at Silverstone Classic; podium at the Monaco Historic GP, where JD won in 2012 and 2014.



'Unquestionably the authority in racing Jaguars, JD now sells more Ferraris than any other marque'

what I'd paid for that too, so I said to my wife Sarah, "I think there's something in this..."

The business then really started to grow thanks to his infectious enthusiasm, fastidiousness and attention to detail – his small but growing team picked up on this and it flourished. He focused them on the understanding that rare cars with provenance and history are the ones that offer the most enjoyment, entry to the best events as well as a solid return on investment. Of the 200 or so cars at JD Classics, every single one, whether concours or beautifully patinated, is special.

'We bought this greenfield site 16 years ago and started building. That's when I really started losing my hair,' laughs Derek. 'We were one of the first to move the game up to the top level with dedicated showrooms and workshops of this quality. Since then we've continually reinvested in the business and we have continued to expand into what you see today. It was a real struggle at first and, sure, there are rumours that JD has some sort of wealthy backer, but the business hasn't any outside funding. This has all been built on reinvesting.' In addition, JD owns all the superb stock and the business was one of the first specialists to offer a full F1-spec race truck and on-track technicians (often as many as 30 on location) as part of the support it offers its racing customers.

JD is a full service operation with in-house race shop, engine shop, machine shop, body shop, paint shop and trim shop. Doing everything in-house guarantees absolute quality control. During the tour of the vast premises the famous attention to detail is more than apparent. The workshops are immaculate and exceptionally well organised. The engine shop is particularly impressive; one of the team, an ex-Hart Formula 1 engineer, explains the intricacies of an XK engine as well as a Ferrari V12. 'We have invested about half a million pounds developing our engine capabilities,' say Derek, 'because the JD team is competitive and front-runners in Historic racing and our clients look to us to help them on the track – and more often than not they can be seen on the front of the grid!'

This year JD Classics was a main sponsor of the fabled Mille Miglia around Italy. Eleven cars were entered and 11 finished (15 last year) the tough 1000-mile endurance rally, which is testament to the company's skills, logistic capabilities and preparation. As well as the Mille Miglia, JD Classics campaigns racing cars at Le Mans Classic, Monaco Historic Grand Prix (won by the JD team for the last two events), Silverstone Classic, Nürburgring Oldtimer and Goodwood Revival.

While unquestionably the ultimate authority in racing Jaguars, JD now sells more Ferraris than any other marque – with a specialist focus on the 275, Lusso, Daytona and Dino models – more than 30 having been sold in the last year, including seven 275s. Indeed there are eight Daytonas for sale at the moment. JD is building up its Aston Martin sales and it looks like it will be approaching its Ferrari numbers in the next year or so. Other marques JD specialises in include AC, Bizzarini, Lamborghini, Maserati and Porsche.

JD has always been about sharing its knowledge and passion but it was refreshing to hear how the team at JD passed on the firm's market and investment insight to the customers – one of the relationship managers commented how he tracks his customers' investment returns suggesting that most do better than private equity firms! The top-tip investment looks to be the Ferrari Daytona.

'They have always been priced at 50% of 275s but they began to lag behind so I thought they were somewhat underpriced. They are fast, reliable grand tourers; expect good ones to command a million pounds soon,' says Derek.

As well as its expertise in Historic motor racing, JD Classics has a superb reputation for

top-level concours preparation. 'Five years ago a customer bought the earliest surviving Jaguar SS100 from us and decided to enter the Pebble Beach Concours d'Elegance. Now, you can't enter an event like that on a budget and he understood the man-hours that had to go into this undertaking. The car went on to win Best in Class at Pebble, which was a great result. The owner then sold the car at the Gooding auction a year later and it achieved a world record price. The customer was happy with his Pebble trophy and his return on investment,' laughs Derek.

'In 2012 JD restored and entered chassis number three, the ex-Clark Gable alloy Jaguar XK120 at Pebble and it, too, won Best in Class. We have attended Pebble Beach on five occasions and have won an award every time, as well as at The Quail, A Motorsports Gathering. And this year we are preparing a beautiful Aston Martin DB2 to take across to America,' he says.

Last year JD Classics opened its superb new showroom in Mount Row, Mayfair. It is delightful visiting JD's HQ in Maldon but a trip to the spectacular ten-car showroom in London is also a must – it's at the very heart of Mayfair opposite the Connaught Hotel and the team at JD has done a wonderful job of combining the depth and passion at JD's base with a contemporary feel. It is JD all over but has moved the boundaries along, yet again.

So what's the secret? Why has JD Classics achieved near-mythical status in the classic car world? Of course, there is no actual 'secret' other than JD Classics being exceptionally good at what it does. It deals in the very best motor cars, has the most skilled and passionate staff and continually reinvests in the business, driving its high standards ever higher.

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THE BEAST IS BACK

More than 100 years after it disappeared into obscurity, Fiat's monstrous S76 has been meticulously rebuilt by one obsessive enthusiast

Words Mark Dixon // Photography Matthew Howell (action), Stefan Marjoram (restoration)



OCTANE AUGUST 2015 95



TWENTY-EIGHT-POINT-FOUR litres. Four cylinders. That's all you need to know. Those two statistics sum up the bonkers nature of Fiat's S76 record-breaker, and explain why its reappearance on the motoring scene after an absence of over a century has caused such a stir. A video of it being fired up for the first time after its rebuild – sheets of flame jetting from the exhaust stubs – went viral on the 'net and, as one viewer commented: 'It sounds like a fireworks factory exploding.'

To be a passenger in the S76 is to be almost literally blown away by the experience. Whoever is in the lefthand seat bears the full brunt of the exhaust gases – it's like kneeling in front of an open oven door as they jet from the bonnet sides with tremendous force. The noise they make is also preternaturally loud. The fusillade from the S76's monstrous engine is just that: a cannonfire that seems to presage the bombardments on the Western Front, which were still years into the future when this car was laid down in 1911. It became known as The Beast of Turin, and with good reason.

DUNCAN PITTAWAY seems slightly bemused by the amount of interest that the S76 has generated. 'Maybe it's because I've been living with the project for such a long time,' he muses, 'but I never expected to have such a reaction. Until quite recently, no-one was really interested in cars like this.'

They are now, that's for sure. Even by the somewhat eccentric standards of vintage record-breakers, the S76 stands head and shoulders above the rest. Quite literally. It is not actually a large car, in every dimension other than height – but the depth of that massive engine skews the proportions so that it appears enormous.

If its appearance is impressive, that's as nothing compared with the aural and visual spectacle that's unleashed on start-up. This involves filling the priming cups attached to each cylinder with fuel from a squeezy bottle and jiggling the carburettor needle to make sure there's plenty of juice entering the inlet tract. Ideally, a mechanic does this – it's usually Duncan's great friend and right-hand man, the long-suffering Tucker – while the driver pulls a lever to decompress the cylinders. That lever is connected to the camshaft, which carries an extra set of decompression lobes, and the camshaft slides backwards to bring the lobes into play. Once the engine fires, it automatically returns to the running position.

The Beast, when it wakes, is truly terrifying. It shakes and rocks on its springs with barely contained nervous energy, fiery explosions alternating from the two exhaust ports in a violent barrage of all-enveloping sound. After one of his first-ever drives, Duncan was puzzled to see a series of marks left on the ground behind the car. Then he realised that the wheels were momentarily spinning with every piston stroke.

WHEN DUNCAN first got involved with the S76, back in 2002, he didn't know much about it. What he's learned since has made him evangelical about restoring its reputation. Ever since the 1920s, it seems, writers have been spreading ill-informed rumours about the car's genesis and its abilities. The truth, says Duncan, is very different. Far from being, as was often reported, some ill-judged lash-up with an airship engine, it was a hightech masterpiece, created with no expense spared by one of the greatest car companies in the world.

Bold claims? Certainly. But Fiat was on a high in 1911. It had become the largest car company in Italy and it was proving wildly successful in motor sport, where the 14-litre S74 Grand Prix car was winning races in both Europe and America. However, Germany had recently stolen headlines with the 200bhp, 21.5-litre Blitzen Benz, which in 1909 had set a speed record for the flying kilometre of almost 126mph. Fiat decided it was time to have a crack at some record-breaking, too, and gave its racing department, under the leadership of star driver Felice Nazzaro, carte blanche to produce a machine that would set new records for the flying mile and flying kilometre. The S76 was the result.

Two cars were built over the winter of 1910/11. While looking broadly similar, they had lots of detail differences. Duncan's S76 has engine number two but the car has been built in the style of car number one because Duncan is certain that his rolling chassis belonged to that car. It was car one that wowed spectators at Brooklands and elsewhere during 1911-13.

Car two was last heard of in 1919, when the obsolescent S76 was dragged out to Parco del Valentino in Turin and used for a publicity shoot with the then-new Fiat 501. Duncan reckons the S76 had become something of a freak by then, outdated almost as soon as it had been built, as interest in Europe focussed on the return of the French Grand Prix – the most important motor race in the world – in 1912, after an absence of three years. The French GP's limitation on engine capacity encouraged the design of high-revvers with multiple camshafts, the antithesis of the S76's slow-turning, single-overheadcam howitzer. The S76 had become, in Duncan's words, the Bearded Lady in a circus of agile acrobats.

But the Bearded Lady was still one hell of a performer. In 1913, during timed runs along the seafront at Ostend, she was clocked at 132.37mph over the flying kilometre, and her driver, Arthur Duray, claimed to have seen over 140mph on some runs. The S76 *should* have been acclaimed as the fastest car on Earth until the mid-1920s – but the Ostend times were not officially recognised by the French-regulated speed record authorities. More on that in a moment.

THE S76's star burned briefly, but it was bright. Shortly after construction of the two cars, Nazzaro left Fiat to set up his own company, and it fell to the 'boy' Pietro Bordino – then aged 23 – to accompany car one to Brooklands in the summer of 1911. That first outing wasn't a total triumph. Bordino could only use half-throttle because of the track's bumpy surface, and he was

Clockwise from top right Duncan Pittaway guns the S76 on one of its first outings since the rebuild; seats have been trimmed in old leather salvaged from a vintage sofa; Duncan primes the cylinders for starting with fuel from a squeezy bottle.







FIAT S76 RECORD-BREAKER

Upper three pictures, anti-clockwise from top right Fiat mechanics assembling engine no 1 – which had different intake and exhaust arrangements from no 2; car no 1 at speed on Saltburn Sands during the speed trials; Prince Soukhanov collecting the car, in 'road trim' with exhaust and chain guards.



Right A rare photo of car no 2, dragged out to publicise the new Tipo 501 in 1919. It was probably scrapped soon after this picture was taken.



Above and left

Arthur Duray at the wheel of Soukhanov's S76, which is wearing a temporary radiator fairing, during the Ostend speed record attempts in December 1913.



forced to stay low on the banked circuit because of barriers placed across it at the entrance to the railway straight. Even so, *The Autocar*'s HF Blake reported on 10 June 1911 that it made 'a noise like a gathering thunderstorm... As the monster thundered by, the very Earth trembled with air concussion'.

Undaunted by his Brooklands experience, Bordino then insisted on driving the Fiat on the road from Surrey to Saltburn sands in North Yorkshire, for the annual speed trials that were held on the beach. In the riding mechanic's seat was Jack Scales, who said afterwards that he saw 120mph on the jury-rigged speedometer – and remember, the Land Speed Record back then stood at just 126mph. 'When passing through towns and villages, the terrific noise of the car prompted pedestrians to turn and look as the car passed, only to have their hats blown off and hair singed by three yards of flame from the stub exhausts in the side of the bonnet,' he recalled.

The S76 made practice runs of about 125mph along the beach at Saltburn but the sand was saturated by overnight rain before the day of the trial, which seriously hampered fast running. Even so, Bordino set a new world flying mile record of 116.3mph – and then coolly set off in the evening to drive back to London, telling onlookers that he didn't need lights, because of the 'thunder and lightning which came from the exhausts!'

To put that 116.3mph figure into perspective, consider this: the next-fastest competitor was Percy Lambert in an Austin, who clocked 81.04mph. At Brooklands, on a sealed surface, that same Austin had recorded over 101mph. Extrapolate that kind of speed differential to the S76 and you have some idea of its potential.

It didn't matter. Fiat had achieved the flying mile world record, and events were about to metaphorically overtake the S76. In August 1911, Peugeot unveiled its hot new twin-cam L76, and the ACF announced that the French Grand Prix would be held again in 1912. The S76 was yesterday's news.

ALMOST. Thousands of miles away in Russia, a carloving aristocrat heard about the Saltburn trials and asked Fiat if he could buy the car. Prince Boris Soukhanov was an obsessive car enthusiast, whose stable already included a 60hp Mercedes, 100hp Gobron-Brillié and a Turcat-Méry. At his request, the S76 was converted to road use, which consisted of fitting an ugly chimneysized exhaust system and a pair of basic chain guards.

Soukhanov took delivery of his S76 in early 1912, but soon found that it was literally too fast for him to use on the road. So he decided to make an attempt on the flying kilometre speed record, which – unlike the flying mile – was still held by the 200hp Benz, and contracted racing ace Arthur Duray to drive it for him.

Soukhanov shipped the S76 to Brooklands in September 1913 but both he and Duray agreed that the circuit wasn't suitable. Instead, they took the car to Ostend, Belgium, where there was a seven-mile straight along the seafront. To improve its aerodynamics, the S76 was fitted with a tapered extension to its radiator.

But luck was against them. The weather conditions were awful for Duray's record attempts, made during six weeks at the end of 1913. In fact, he claimed afterwards that he'd had only two decent days in all that time. But, by the end, it was a tram that defeated him – or rather, it was the obstreperous director of the tramway that ran parallel with the road along the seafront. 'SOUKHANOV TOOK DELIVERY OF HIS S76 IN 1912, BUT FOUND IT WAS LITERALLY TOO FAST FOR USE ON THE ROAD'

Duray was not allowed to make a record attempt when a tram was running, so he had to wait for it to complete its 40-minute journey before setting out. The tram director wouldn't alter his timetable, and Duray was required to make two runs in the hour, over the same kilometre but in opposite directions, in order for an average speed to be considered for the record. In the end, the logistics were against him and, despite being officially timed at 132.37mph on one run, he failed to qualify.

That was the end of the Fiat's racing career. Soukhanov returned to Moscow and any thoughts of making another attempt on the flying kilometre record were abandoned as war clouds gathered in Europe. Seeing the way the wind was blowing, Soukhanov, like thousands of other wealthy Russians, quietly jumped ship and abandoned the motherland. It's likely that he headed east, to Asia, but we'll probably never know. After the Russian Revolution of 1917, Soukhanov and his compatriots simply didn't want to be found.

BUT WHAT about the S76? Duncan is convinced that the engine of car one was scrapped: 'Such a huge engine would have been viewed as nothing more than a boat anchor by the early '20s,' he explains. He also thinks that car two was cut up for scrap, because Fiat introduced a policy in 1920 of destroying all its obsolete racing cars to protect their designs.

Car one, however, was spirited out of Russia and its chassis used to build a 1920s special, possibly with a Continental engine from a Stutz. Duncan has a poorquality photo from 1921 or '22 that appears to show the S76 rebodied in a lower style, and with U-shaped crossmembers curving underneath to carry the engine. Those crossmembers were still riveted to the rolling chassis when he acquired it.

As so often happens, drink was involved with that. 'In 2003 I was on the re-run of the 1903 Paris-Madrid "Race of Death" with a load of other Edwardian car owners. We stopped for a meal in a little French town and conversation turned to what each of us was planning to do next. I said I really fancied restoring a bigengined Edwardian. The Fiat S76 was mentioned, at which point Mark Walker [restorer of the 1905 Darracq LSR car featured in *Octane* 87] drew a sketch of the S76 from memory on the back of a menu and wrote on it: "You have to build this car!" I still have the menu.'

The rolling chassis of the S76 was known to survive, terribly battered and bent but complete with axles, steering box, springs and pedals, having been found \rightarrow

1911 FIAT S76 ENGINE

28,354cc four-cylinder, SOHC, open-sided iron block with integral head and alloy crankcase, three valves per cylinder, Zenith carburettor, Bosch magneto and coil ignition, three plugs per cylinder POWER 300bhp @ 1000rpm (est) TORQUE 1700lb ft @ 1000rpm (est) TRANSMISSION Four-speed manual with differential ahead of gearbox, chain drive to rear axle. Multi-disc Hele-Shaw clutch STEERING Worm and wheel SUSPENSION Beam axles, semi-elliptic leaf springs, lever-arm dampers BRAKES Handbrake-operated drums on rear axle; foot-operated transmission brake WEIGHT 1300kg (est) PERFORMANCE Top speed c140mph



in a ravine in New South Wales, Australia, in the 1970s. It had passed through various hands since, but no-one had done anything with it, doubtless daunted by the enormity of the project. Duncan wasn't put off.

'I hadn't done my research and I assumed that the engine was the same kind that was used in airships, as claimed in everything written post-WW2, in which case there were bound to be one or two knocking around somewhere,' he laughs. 'It's lucky that I didn't know at the time that the Fiat airship engine was completely different from the S76's. The only thing they have in common is the bore and stroke dimensions – and the airship engines weren't made until 1915.'

Incredibly, however, it turned out that a genuine S76 engine had survived. It took years of patient negotiation before Duncan was given permission to view it in an old warehouse in Turin. Typically, it wasn't a straightforward trip. 'I had arranged to meet Mark Walker at Turin airport – and he was waiting in the Arrivals hall, dressed up in an *Italian Job* jumpsuit and crash helmet! I have a photo of him drinking through a straw poked through the grille over the helmet...

'We then decided we wanted a look at the old Lingotto test track, which is on the roof of what is now a posh hotel. Not surprisingly, they wouldn't let us up there so we bribed a waiter and took the back stairs. We had a poke around the roof, until a security guard appeared at the other end and we had to make a hasty escape.'

The discovery of the S76 engine was just as exciting, but for different reasons. 'Fiat has acres of buildings scattered all around Turin, and we were taken to one that was just full of old stuff. There were work benches with tools that looked as though they'd just been set down; old windtunnel models of aircraft from the 1950s and



'60s. And there, under a dust sheet, was the dismantled engine, largely complete apart from magneto and most of the fiendishly complex Fiat carburettor, but with its original Hele-Shaw clutch and even its original streamlined starting handle.'

Nevertheless, although Duncan had to replace the seized pistons and the con-rods, which showed signs of overheating at their little ends, he was able to restore all of the other original engine components, including the massive crank and flywheel, block, crankcase and all the valvegear. Gearbox aside, which was missing from the chassis and had to be remade from scratch, most of the mechanical components are original S76.

He had a further stroke of luck when Italian magneto specialist Leonardo Sordi not only found and rebuilt the S76's unique triple-spark ignition, but made for him a set of special mica plugs – again, unique to the S76. DUNCAN is very keen to emphasise that he's not touting his S76 as being a restoration of an original car: a lot of it was missing and had to be remade. But neither is it simply a recreation, as shown by Stefan Marjoram's superb documentation of the work (above and on the following two pages). Duncan has spent the last ten years sourcing and restoring all of the surviving original S76 components, while missing parts have been made exactly to the original factory drawings. The result is a 100% authentic Fiat S76, which is a lot more than can be said for some highly acclaimed but simpler restorations.

Take, for example, the paintwork. He agonised for months about finding just the right shade of red, one that wasn't too 'in your face' garish and yet not the darker plum colour sometimes seen on 1930s Alfas. In the end, his eureka moment was a chance encounter with a David Brown tractor at a vintage rally.

Above

Duncan went to enormous trouble to find exactly the right shade of red paint, which was described in period as 'scarlet'. A David Brown tractor shade, slightly matted, turned out to be absolutely perfect.



Clockwise from above The extreme height and comparative narrowness of the engine dictate the S76's proportions; the radiator is less than 16 inches wide; each cylinder has one inlet and two exhaust valves, and the camshaft is slid longitudinally by a lever in the cockpit so that extra lobes decompress the engine for starting.









Above and left

A new gearbox casing had to be cast, and all new gears machined – the differential is mounted ahead of the gears and above the driveline, to keep the wheelbase as short as possible; new pistons were made in aluminium, since it proved impossible to have them prototypically cast in iron.











Clockwise from left Most of the engine, including internals such as camshaft, crankshaft and valvetrain, is 1911 original; the bodywork had to be made completely from scratch and took years of painstaking work; blades on front dumb-irons were intended to improve streamlining; rolling chassis came complete with original foot pedals, axles and steering box.





Above

Duncan is still working on reducing the amount of oil smoke produced, although driver Arthur Duray reported the very same phenomenon when braking from high speed in 1913, as oil was sucked into the exhaust. But this is jumping the gun. First, the body had to be made. It was an incredibly demanding task, because the curvatures involved are fairly subtle but spread over a large surface area. Local machininist Bruce Friendship not only handled much of the engineering work on the S76 but proved himself a true artist in building body bucks, shaping panels and endlessly fettling the results to perfection; Stuart Roach – whose company has built Silver Arrow bodies for Audi, among other clients – took care of the bonnet, the louvres, the undertray and the distinctive aeroblades on the dumb-irons, which formed part of the S76's rudimentary streamlining.

Streamlining? Yes: the S76 may look elephantine in profile but it followed the latest thinking in aerodynamics. It has a surprisingly narrow cross-section, just 800mm (2ft 7.5in) at its widest point, and even the starting handle has a conical point facing forwards. But the S76's ungainly proportions partly explain why it was frequently ridiculed by later historians. Duncan is convinced that an ill-informed article by journalist WF Bradley in The Autocar, 13 March 1925, sealed its fate forever. Bradley's erroneous and disparaging claims were repeated down the decades, not least by the hugely respected Bill Boddy. Duncan was able to show Boddy his research, shortly before the latter's death in 2011. 'He was wildly excited, confirmed that Bradley was his source of information, and showed no surprise whatsoever about Bradley's inaccuracies!'

It's early days yet, but Duncan's belief in the muchmaligned Beast of Turin seems to have been vindicated. The steering is sweet and direct, he says – just one turn, lock to lock; the brakes work fine; the gearchange is easy and quick; and the ride is very comfortable, although the engine's limited ground clearance makes its sump plug vulnerable to being clouted by bumps. 'IT IS BEAUTIFULLY SMOOTH BETWEEN 150 AND 500RPM. ABOVE THAT, THE WHOLE CAR VIBRATES AND IT GETS ALARMING'

The most remarkable feature of that 28.4-litre engine, apart from the *sturm und drang* it creates, is just how few crankshaft revolutions are involved to produce such speed. 'Think of a modern car engine, and divide by ten,' says Duncan. 'Tickover is 80-90rpm, and it is beautifully smooth anywhere between 150 and 500rpm. Above that, the whole car starts to vibrate in harmony with the engine, and it gets a bit alarming. Max safe revs are about 1000-1100rpm, which equates to 130mph, and while I'm sure it would pull more, it wouldn't be very happy.'

LATER THIS SUMMER, Duncan plans to take the S76 back to Ostend, to the very road where Arthur Duray clocked more than 132mph over a century ago. Endless lines of motorhomes and holiday traffic mean there'll be no chance of besting that performance. But in winter, the time of year when Duray made his high-speed runs... Well, who knows. If anyone is up for a challenge like that, it's Duncan Pittaway.

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A PASSION

Porsche Classic Rest

1983 PORSCHE 911 TURBO 3.3

THE TEAM at Porsche Central Operations Reading entered the Porsche Classic Restoration Competition – which celebrated the 40th anniversary of the 911 Turbo – with an extremely rare limited-edition Porsche 911 Turbo 3.3 Martini, complete with livery package and special interior.

This privately owned car is believed to be one of only a handful left worldwide, and belongs to a long-standing customer of recommended repair centre Poole Accident Repair. Work was therefore carried out in consultation with the owner, and involved the Reading team stripping down the bodyshell, removing engine, gearbox, suspension, glass and interior trim.

Poole Accident Repair prepared and repainted the bodyshell before applying that all-important Martini livery. Meanwhile, the mechanical work was carried out by the technicians at Porsche Reading, who had the suspension shot-blasted, fitted new brakes and dampers, fixed some engine oil leaks and stripped the gearbox before fitting new synchromesh rings.

The interior remains completely original, though the Reading team deep-cleaned the carpets and leather before refitting all the trim in the newly painted body.

The work was completed during a period of six months, just in time for the Martini-liveried 911 to go on show with other competition entries at last November's NEC Classic Motor Show in Birmingham.

oration Competition

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MCLAREN F1 vs P1

ULTIMATE WARFARE

Two decades since McLaren's shock Le Mans win, Steve Sutcliffe pits the ultimate F1 against its new counterpart: the P1 GTR Photography Stuart Price

K40 MCL

HERE IS something quietly beguiling about the atmosphere of a deserted international race track, early morning, long before anyone else has arrived.

Like the masts that rattle forlornly at a yacht club on a windy weekday afternoon, the flagpoles at an empty track flutter away to themselves while no-one notices. Giant grandstands echo to the sound of an air-gun that's blasted a couple of times, just to make sure it will function later, when it matters. And all the pit garage doors remain resolutely shut.

Nelaren

Except for one, in front of which sits a silent red-and-yellow monster of a car, its engine off for the time being, its many onlookers speculating what kind of savage noise it might make when that engine is finally ignited. Seconds later the calm is broken, and the answer is provided loud and clear. After a twosecond whirr of its starter motor, the 6.1-litre V12 that nestles in the back of Nick Mason's impossibly beautiful McLaren F1 GTR bursts into life, and the crowd around the car – both physically and metaphorically – takes half a step back in pure shock.

The sound that fills the pitlane is extraordinary. I can feel it through my feet and in my chest. And for the next five minutes, as the car's fluids are slowly brought up to temperature, the noise dominates the whole of Silverstone Circuit.

Mason's car has a unique history in that it was never actually raced but was instead used as the main development prototype by the factory, on which any new parts were tried and tested. But nowadays it's one of the most valuable F1 GTRs of them all, partly because it is looked after by Dean Lanzante for Mason with zero expense spared.

In the flesh it is stunningly immaculate. Despite being 19 years old, having been built originally in 1996, it looks and feels brand new inside and out, a fact of which I become acutely aware as I aim myself clumsily towards the central driver's seat.

Once I'm ensconced inside it, the sight that greets me is reasonably intimidating. The digital dash that sits directly behind the surprisingly large suede-rimmed steering wheel is actually quite simple in its design and look, but to the right of the wheel is a bank of switches that would surely bamboozle even the brightest, youngest mind in contemporary \rightarrow



racing, let alone a relic like yours truly. I give up counting the switches after 37, so it comes as some relief when one of Lanzante's engineers leans in and says: 'Don't worry about any of those, it's just the gearbox oil warning light you need to look out for. And once that reaches 70 degrees she's good to go.'

So when that magic number appears in the screen, I depress the clutch pedal (the muscles in my left knee trembling slightly under the strain), engage first gear via the H-pattern shifter – mounted on the right – and gradually release the carbon clutch, no throttle being required as a result.

And ever so slowly the F1 GTR starts to move. It feels and sounds rabidly alive beneath my backside as I rumble out of the pitlane and out onto the circuit proper. The ride is firm though not ludicrously so, the steering heavy yet precise, the gearchange snap-snap instant, the brake pedal firm and bubbling with feel underfoot.

But it's the throttle response and the noise the engine emits – even down at 3000rpm in a high gear – that blows me away the most to begin with. It's almost surreal how violently the F1 GTR accelerates when I prod its accelerator in any of the first five gears. The sense of energy being unleashed is total, the noise that accompanies my progress deafening but in the most wonderful of ways, even with a crash helmet on.

And the way this car eats the main Hangar Straight at Silverstone the first time I open it up properly, well, it's as shocking as it is hilarious. Lanzante gears all the F1 GTRs he looks after to hit maximum revs at around 190mph in top gear and this, allied to the car's just-over-a-tonne kerbweight and the small matter of 620bhp, ensures that the acceleration of Nick Mason's car is still immense, even by modern standards.

But it's the size and intensity of the response to what you do with the throttle that defines the driving experience. The reaction is breathtaking, literally; the hit of acceleration that's available – even at 4000rpm up in sixth gear – completely addictive. Quite what this thing must feel like on the road when it's being driven with a bit of enthusiasm, when there are trees and pavements and other cars around you, I can scarcely imagine. Yet from time to time Mason *does* drive it on the road because it is entirely road legal; hence the reason he drove it round half of Italy last year alongside most of the rest of the world's population of F1s.

McLAREN'S HISTORIC Victory: 20 years ago



To this day, the F1 GTR's outright win at Le Mans in 1995 remains one of the most unexpected victories in frontline motor sport, and there were two reasons why it was so extraordinary. One, the car was on its debut at the 24-hour race, and no car ever wins first time out of the box at the world's most gruelling endurance motor race. Second, the actual car that won was not a factory entrant from Woking but was instead a privately run machine, driven by then F1 pilot JJ Lehto amongst others, and sponsored by a Japanese medical clinic whose speciality was, shall we say, enlargement of an organ that nestles somewhere below the beltline.





Back at Silverstone, the way it stops for and then turns-in to Stowe corner at the end of the straight isn't just as mind-altering as what it can do down the Hangar straight, but for a 19-year-old racing car that's also road legal and which has therefore been softened slightly to make it usable on the public road – it's still deeply impressive. It rolls a bit more on turn-in than it might have done back in the day, and as the loads build mid-corner you become increasingly aware that the bulk of this car's weight sits behind you, not necessarily waiting to bite but certainly containing sufficient inertia to define your trajectory should you do the wrong thing with the throttle, at the wrong point in a corner.

The front slicks are also quite well used, I notice, so the front end doesn't feel quite as crisp as it would with a nice fresh set of rubber on board. But in the end that didn't matter one iota. I'm not here to set fast lap times but to drive and relish one of the most extraordinary – and expensive – sports racing cars of recent times, and my experience of simply driving the F1 GTR on a proper circuit, albeit not that fast, is more than enough to make me understand what a complete and utter weapon it must have been two decades ago. And maybe the

most amazing realisation of all is that this is still very much the case, even today.

It's a bit of a wrestling match compared with a modern car, true, to the point where I can't believe how fit they must have been to muscle these things around Le Mans for 24 hours, come rain or fog, for one whole day and night. But fundamentally the F1 GTR is still a very rapid racing car, even in 2015. Quite how otherworldly it would have felt in the mid-1990s is hard to fathom, frankly.

THAT WAS THEN and this is now. And I have an appointment with the F1 GTR's successor, which none other than Bruno Senna has just climbed out of, beaming from ear to ear, and which is sitting in the pitlane percolating, its enormous slick tyres having been well and truly warmed by the nephew of you-know-who.

The P1 GTR is not – unlike its forebear – a full-house racing car as such. Instead think of it as the ultimate trackday machine, a car that's been created by McLaren to satisfy the desires of its most exclusive customers. You can't actually buy one unless you already own a regular P1, and you will never be able to drive your GTR on the road because, unlike Mason's

machine, the P1 GTR is not and never will be road legal. Which is a pity because, in the raw, it does look bloody wonderful.

For £1.98m you might wonder where you money goes when buying a McLaren P1 GTR, given that the road car costs a mere £1m. But the GTR is not your run-of-the-mill hypercar, because when you part with your two million quid you are not just buying a motor car. You are buying into the most exclusive driver training programme money can buy.

Each P1 GTR comes with a small team of engineers to help you fettle and understand the car, plus one ace McLaren driver who will teach you how to drive it at a series of venues such as Silverstone, Abu Dhabi, Bahrain, Spa and the Circuit of the Americas in Texas.

There will only ever be 45 P1 GTRs. The money buys the full trackday and driver training programme, and a fitness regime to go with it, for 18 months. Plus, of course, the small matter of the P1 GTR itself. During that time it's up to you whether you take your P1 GTR away, store it in your own garage and transport it to the various circuits. Or McLaren will take care of the car and its transportation to the circuits for you. So far, it's about 50:50, says McLaren.



1996 McLAREN F1 GTR

ENGINE 6064cc V12, DOHC per bank, 48-valve, electronic fuel injection and engine management POWER 627bhp @ 7400rpm TORQUE 479lb ft @ 4000-7000rpm TRANSMISSION Six-speed manual, rear-wheel drive STEERING Rack and pinion SUSPENSION Front and rear: double wishbones, coil springs, telescopic dampers, anti-roll bar BRAKES Vented discs WEIGHT 1062kg PERFORMANCE Top speed 231mph. 0-60mph 3.2sec



BRUNO SENNA ON P1 GTR



'YOU NEED TO get the car pointing straight as soon as possible and then use the power and traction to generate the best speed. We haven't set the car up to be all pointy,

because that's not what the customer would want, but the front end is still very good, and because there's so much torque you need to respect the throttle at the exit of corners.

'It's actually quite easy to drift the car, especially with the way the traction control is set up. That's good fun, yes, but if you do that the rear tyres will go away quite quickly and then the lap times fall away really fast.

'So you need to be committed in the braking areas, a little bit patient with the throttle mid-corner, and then, bang, you can nail it and fly down the next straight. But it does mean you need to be quite precise on corner entry and to respect the weight of the car, especially in a high-speed directionchange – because, at the end of the day, it does still weigh 1400kg.' MCLAREN F1 vs P1

'IT'S THE SIZE AND INTENSITY OF THE RESPONSE TO WHAT YOU DO WITH THE THROTTLE THAT DEFINES THE DRIVING EXPERIENCE'

K40 MCL

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2015 McLAREN P1 GTR ENGINE 3799cc twin-turbo V8 petrol/electric hybrid POWER 986bhp (total) TORQUE 737lb ft (total) TRANSMISSION Seven-speed dual-clutch, rear-wheel drive STEERING Rack and pinion, power-assisted SUSPENSION Front and rear: double wishbones, coil springs, telescopic dampers, anti-roll bar BRAKES Carbon discs WEIGHT 1440kg PERFORMANCE Top speed >200mph. 0-60mph <2.8sec







But it's what lies beneath the P1 GTR's dramatic new carbonfibre skin that matters most, of course, and some of the statistics that McLaren quotes about the hardware contained within are enough to make the hairs on your neck go stiff for a second or two.

The basic engine and hybrid system is the same as that of the regular P1, albeit fettled to produce even more power and torque than in road trim. So there's a 3.8-litre twin-turbo V8 mated to a dual-clutch seven-speed gearbox, within a carbonfibre tub nestling at the car's core. The GTR is rear-wheel drive and its rear wing is fixed, rather than hydraulically operated, to provide it with maximum downforce at all times.

Power from the twin-turbo hybrid V8 is 986bhp, with torque rated at 737lb ft – one thousand *pferdestärke* and one thousand Newton metres, in other words. The GTR also weighs 40kg less than the regular P1, despite featuring a hydraulic jacking system that enables the wheels to be changed in a jiffy, so in a straight line it's 'a lot faster' than the already 'quite brisk' roadgoing P1.

Its slick Pirelli tyres, especially those at the rear, have been exhaustively tested so that they don't melt within a few laps beneath all that torque. But there's also ABS and an adjustable traction control system because the car isn't meant to be intimidating (see what chief test driver Chris Goodwin says, right).

As I climb aboard the P1 GTR, the first thing that strikes me is how normal it seems inside after the F1 GTR. The driving position is much more conventional – you sit on the left because all P1s are left-hand drive – and the cabin seems much more like that of a modern roadgoing supercar, rather than a bespoke racing car. To be fair, this comes as a slight disappointment to begin with.

Were it my £2m P1 GTR I'd *want* it to feel intimidating and maybe even slightly overwhelming the first time I climbed inside it, mainly so that I could get used to it as the relationship blossomed. But in reality the P1 GTR is friendly and logical and intuitive inside, even if its steering wheel looks as if it's been pinched straight out of a jet fighter, and the side pods on the driver's seat are so vast they obliterate your view on either side.

Goodwin leans in and talks me briefly through the PI's controls. He tells me that the traction control settings are 'still quite fruity at the moment, so be careful with the throttle to begin with'. Then he presses a couple of

CHIEF TESTER'S NOTES



WANT to make a car that's intimidating or difficult to drive,' explains the GTR's chief development driver, Chris Goodwin, whose name appears

WE DIDN'T

proudly on the side of our test car.

'Really, what would be the point in scaring our customers with a car they couldn't get anywhere near?

We wanted to make a car that's really fast, of course, and we've done that alright. But we also wanted to create a car that our owners could enjoy pretty much immediately, no matter where their skill levels are at. And then hopefully over the programme they will get better, and learn to enjoy the car even more as the process evolves.'

All of which is good news for the 45 people (all P1 owners already) who have signed up to the GTR scheme for a cool £2 million each. Driver tuition included.



buttons and sets the gearchange mode to full manual. A man standing in front of the car gestures for me to go, so I click the right-hand paddle once towards me to select first gear and away we rumble. No clutch pedal to deal with this time because the gearbox is, of course, fully automated.

The ride is far softer than the F1's to begin with, the power steering much, much lighter. Ambling down the pitlane, its exhausts throbbing, the P1 GTR feels like a complete pussycat compared with its predecessor. And that's exactly how Goodwin and his engineers wanted it to feel: easy to interact with, approachable even.

For the first half-lap I drive it very gingerly indeed, gauging how light and accurate the steering feels, how soothing the ride is, how powerful yet feelsome the brakes are underfoot, and how little roll there is despite the seemingly quite calm suspension settings.

Compared with its predecessor the P1's throttle response also seems weirdly soft to begin with. A small amount of pressure on the pedal amounts to not a great deal of reaction from the engine, comparatively speaking, so when the back straight opens out I press a little harder in third gear, just to see, at which point the P1 GTR absolutely and completely takes off, with more than a hint of wheelspin to remind me that it does, in fact, have all that 986bhp and 737lb ft of torque.

The back straight comes and goes as if in a single heartbeat, and at the end of it I slam on the brakes far too early, and the GTR sheds speed faster than it has accrued it. This car is a complete madman in a straight line, no question, but, unlike my experience in the F1 GTR, it's actually the way it stops for and then carves its way through corners that leaves the deepest impression.

Braking for Stowe needs care, and space, because the P1 reaches the other side of 170mph at the end of the Hangar Straight. And it weighs more than 1400kg with me on board so, although its brakes are incredible, its aero grip mind-boggling, there are still some fundamental laws of physics that need to be obeyed to avoid a trip into the gravel trap.

Even so, the way it slices into the apex at Stowe and then just sticks is pretty spooky. And it's the same through all the other corners around the lap as well. I'd say it carries a good 10mph more speed than the F1 GTR through any corner, no matter how slow, and maybe 20-25mph through the quicker ones. Yet from behind the wheel it feels nowhere near as edgy or dramatic as the F1 GTR.

I won't say driving the P1 GTR is easy, because that would be ridiculous considering how much speed it can generate at any given moment in the space/time continuum. But after the F1 GTR it seems a whole lot less intimidating to drive, despite covering the ground that much faster and more efficiently than the oldtimer.

After another four laps I feel nowhere near as battered physically as I had been in the F1 GTR, but the sense of elation – no, the sense of complete and utter bewilderment – is stronger in one sense than it had been in the original; because, however fast and exhilarating you might imagine the P1 GTR to be, double it, add a thousand, and you still won't be anywhere near close. Genuinely, this car is that special to drive, that exciting: that fast.

But if I was offered another five laps of any circuit in either car, I know categorically which one I'd plump for. And it's not the one with 986bhp, even though the P1 GTR is, in its own contemporary kind of way, an absolutely phenomenal machine to drive. Even at McLaren, it seems, they don't make 'em quite like they used to.