



A fairly straightforward operation thanks to the largely similar body shells, this transformation is helped by the fact that the smaller bumpers, engine lid with ducktail spoiler, longer bonnet, various bits of chrome trim and Fuchs alloy wheels are still available as either new or reproduction items.

The counter-trend that started way before the retro-look caught on is of course the tuner market, which upgrades 911 models to later specs. You only have to look at the ads in specialist publications to find offerings of body styling parts to turn an impact bumper 911 into a 964 look alike, or a 996 into a 997-look car. This speaks volumes for the adaptability of the basic 911 platform, and how it has evolved since the first model rolled out in 1964.

In the midst of all this however, there are a few 911 enthusiasts who eschew what others are doing and go their own way, building a unique machine to suit their personal needs in the process.

"I wanted a 964 that was lighter, faster and even more agile than the factory RS"

One such owner is Adrian Anwar, a Singapore-based entrepreneur who caught the 911 bug when his father acquired a 965 Turbo back in the '90s. There was a gap in his Porsche life when Adrian was based in the US, where he owned tuned VWs. However, his eye was always on the Porsche scene, and he became very aware of how different the American approach to tuning Porsches was from the European one.

After returning to Singapore, Adrian started looking around for a good used 964. In 2007, after two years of searching, meanwhile going solo with his own company, he finally found a good candidate in the form of a Carrera 4 in Guards Red. This became his first 911 and second Porsche after a Cay-

 $\mbox{man S}.$  It was also to be the basis of a long held dream.

The search had given Adrian plenty of time to think about what he wanted to do with the Carrera 4 after he found it. A big component in his vision was the track driving skills he had acquired at the Skip Barber Racing School at Laguna Seca.

Learning to handle an open wheel racecar properly on a track whet his appetite for a more highly focused road legal car that would not disgrace itself on a track day. "I wanted a 964 that was lighter, faster and even more agile than the factory RS," Adrian explained. "After trawling through magazines looking at what other owners and tuners had done to 964's, I decided that my inspi-

Classic proportions, custom alloy wheels and a passionate colour make this a truely unique Porsche





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ration would be the 964 Carrera Cup Car from 1991, with a few of my own tweaks on top."

## THE GOLDEN TOUCH

Finding a good Porsche mechanic to do the work in Singapore was the next hurdle, and a big ask in this small island state. Factory-trained mechanics may know their way around stock 911s, but have little or no experience with tuned cars.

Fortunately, Adrian recalled that a friend had introduced him to an English Porsche mechanic, Andy Tatlow, back in 2004. Andy is a road and race trained Porsche specialist who used to work for Autofarm in the UK. He was headhunted by Ruf Singapore in the mid-'90s, and subsequently went to work for the official Porsche distributor in Brunei before returning to Singapore to set up Flat Six Road & Race Engineering.

With his extensive knowledge of tuned and modified 911s in the UK, Andy understood exactly where Adrian was going, and threw in a few suggestions of his own as they created the spec for the car they have dubbed 964 Clubsport, which comes closest to describing what this road legal track day car is.

In a nutshell, the brief entailed lightening and stiffening the Carrera 4, giving it more power, and replacing the transmission to return it to reardrive only.

Step one saw the workshop team stripping the car back to its bare shell, seam-welding it to a level beyond Carrera RS level, skilfully replacing the electric sunroof with a steel panel, and applying a more vibrant hue. Adrian was keen on the shade of orange used on the 997 GT3, and this became the signature colour for this project.

The colour change was also a good excuse to remove all the sound deadening material from the interior as well as the stone chip protection and underbody sealant from the bottom of the car. This alone took around 50kg off the sprung weight.

Apart from removing much of the interior and all the soundproofing, paring weight from the Carrera 4 involved replacing the rear screen, and front and rear quarter lights with Perspex, and the door glass with thinner RS ones. Only the laminated front screen remained in place. The doors were gutted of their electrics and replaced with manual winders on replica RS door cards with their distinctive lightweight pulls.

Andy also spent around two weeks going through the Carrera's electrical wiring schematics to ascertain what could be removed from the factory wiring loom to save further weight. This resulted in a few kilos of wiring joining the growing pile of surplus bits.

When the car was corner balanced after final assembly, the scales indicated 1,150kg with the fuel tank three-quarters full. While this is still 150kg heavier than a 2.7 RS, it is a significant 320kg less than the Carrera 4 it started from.

## **TASTY BITS**

With a pair of lightweight Recaro Pole Position seats and the Momo Prototipo steering wheel taking centre stage, the interior is as Spartan as a racecars. In its role as a daily driver, a full roll-cage would make life too difficult, so a Heigo half-roll-cage was chosen as a compromise, and this further stiffens the shell. The Schroth race harnesses are a five-pointer for the driver and a four-pointer for the passenger.

Adrian had all of the gauges refurbished and recalibrated by Hollywood Speedometer in Los Angeles, California. The rev counter saw the most significant changes with the red line moved to 7,000rpm and the needle vertical at 6,500rpm.

Andy built a 3.8 litre motor that is quite far from stock. Carrillo rods marry the balanced stock crank to a set of 102mm JE pistons in matching LN Engineering Nikasil coated barrels.

The 'Nickies' are stronger and dissipate heat far better than the factory equivalents, and are bolted to CMW billet cylinder heads with titanium valves, springs and retainers. Allowing for the hot climate where the car is used, Andy set the compression ratio at a modest 10.5:1. The chosen cams are Doherty DC60, a fairly mild grind for a track car, but appropriate here with frequent street use in mind.

Getting enough fuel and air in and burnt gases out was the next challenge. A single-throttle-per-cylinder arrangement was a no-brainer, as was the choice of PMO 50mm individual throttle bodies, matched and gas-flowed to the intake ports.

Fuelling and spark falls to the be-







spoke programmed stand-alone Motec M600 ECU, linked to a knock box and exhaust gas, cylinder-head temperature and Lambda sensors. The spent gases exit rapidly through a complete Fabspeed RSR exhaust that provides a healthy baritone soundtrack.

Suspension is Bistein's Nurburgring set-up – silver shocks and green springs – with monoball top mounts front and rear, and a front strut brace. This tuned suspension was on the car when Adrian bought it, but Andy added new uniball equipped lower arms front and rear, 993 GT2 Evo alloy uprights and adjustable 964 RS adjustable camber plates from Smart Racing Products. The antiroll bars are stock 964 RS.

The uprated brakes are factory 993 Turbo callipers in front with cooling











aided by ducts in place of the factory fog lights. 964 3.6 Turbo are used at the rear with big four-pot callipers all round. The ABS system was modified to suit, and the set-up works perfectly, providing strong retardation and great pedal feel.

Classic factory 17-inch Cup alloys are wrapped in the excellent new Bridgestone RE001 tyres that have proven very effective on track while still providing a reasonable ride on the road.

The only other visual mods are a replica 964 Turbo S flatnose limited edition front splitter, specifically made for the narrow body car, and a factory 993 rear rooftop spoiler. The rear wing is a one-piece Carrera RS America replica. This was chosen as the black rubber lip on the factory original Carrera 3.2 spoiler tends to flatten out at high speed, losing its effect.

## **CLOCKWORK 'ORANGE'**

The expertly mapped Motec ECU ensures that the 3.8 litre flat-six fires up instantly when you turn the key. The induction noise from the single-throttle-per cylinder PMOs is not as great as I thought it would be given the absence of soundproofing. Even so, its lovely gurgling, sucking solo on top of the flat-six symphony gives the impression that the motor is breathing through a brace of big carburettors just like in the old days. Sweet.

The uprated clutch is noticeably heavier than stock and bites quite high up in the pedal travel, but once you are on the move you cease to notice its weight. Although the LHD Carrera RS had no power steering, RHD cars did. Cup cars were also unassisted to save weight. But as Adrian's car has to negotiate parking garages and other obstacles in the urban jungle, it was decided to leave the powered rack in place.

The extra torque of the 3.8 litre motor in a light car is very apparent from the word go. Low-end pickup is crisp and clean, and as the motor picks up a head of steam, you realise that it is deceptively fast because it is so smooth.

Past 3,500rpm, the engine note deepens, and the thrust from behind becomes palpably stronger and more linear. If you are in a medium or long bend, you can load up the chassis properly when the motor is on song. Then the whole car really comes alive and starts talking to you in a most rewarding manner. This car was built to go fast, and it and you will feel the closest connection and satisfaction when doing just that.

Six forward ratios were a major ask in Adrian's brief to aid cruising and fuel economy in daily driving, as well as providing an extra ratio for better acceleration.

Unfortunately, it is very hard to find a 993 gearbox from a salvage yard in Europe as they are highly sought after by kit car and special off-road racecar builders.

This industry hardly exists in the US however, which is how Adrian ended up sourcing a US-spec 'box. Unfortunately, the lower ratios are taller than the European version, which

blunts the cars performance.

The taller ratios mean that the motor is not really cooking with gas until the red needle on the recalibrated rev counter has swung past 3,500rpm. Once past this point, the motor really gets on cam and it becomes a different animal. "I am planning to get the custom gears with the right ratios from a specialist manufacturer," said Adrian.

With 355bhp at 6,400rpm and 424.4Nm of torque at 4,930rpm registering on a known rolling road, and just 1,150kg to propel, this car should then be able to stay with a current 997 GT3 Mk 1 in a straight line up to 250km/h.

## **CONCLUSION**

Adrian recently took his 964 Clubsport to a trackday at the Sepang F1 track in Malaysia. There, he was able to keep the motor in its powerband all the time and is very happy with its turn of speed.

"The chassis is amazing," he said. "We have managed to dial in just mild stabilising understeer, and there is a huge amount of grip at the back. When it does let go, it is very progressive and does not exhibit the snappy characteristics that the stock 964 Carrera 2 was known for when it was new.

As much as I like the lightweight retro-look 911s, it is nice to see enthusiasts like Adrian Anwar creating unique cars like this 964 Clubsport. With a vivid imagination, a lot of enthusiasm and a not inconsiderable amount of money, his tangerine dream has finally become a reality.







