

# 1000BHP THE MAGIC NUMBER

Forget the quarter-mile, the new thing for performance street cars in the States is the half-mile dash, all the better for delving into a supercar's top-speed potential. For this purpose, CSF's Ravi Dolwani has built a monster, 1000bhp 991 Turbo, which will run the half in 14secs and 186mph. Impressive

Words and photography: Matt Stone

**T**hat big magic number seems to be the claim of every Porsche tuner when cranking on a 991 Turbo S or GT2 RS – no matter the reality, every tuner somehow says they can deliver 1000 horsepower to the hapless customer, drooling for speed, with open checkbook in hand. Trust us, it takes more than a hot computer tune, a set of high flow air filters and a titanium exhaust system to get one of these engines to deliver verifiable, consistent, reliable power in that heady range.

Ravi Dolwani's fabulous half-mile racer comes commendably close to that, with a dyno verified 986 horsepower (at the wheels) on E85 Ethanol fuel, with the engine management computers set to full kill mode at 30 pounds of boost. Holy head gaskets! 91 octane pump gas yields a mere 647 horses at 18psi; amp it up to 100 octane racing gas, and you'll have to settle for 807 at the wheels horsepower. But why?

Half mile drag racing is a relatively new phenomenon in North America, having caught on in just the last four to five years. Of course drag racing was codified in America at a quarter of a mile back in the 1950s, and since then most professional and amateur drag racing tracks and series have been built around a 1320 foot track, timing light to light. Most racers agree that this measure tells a lot about a car's accelerative potential, and even though terminal velocities can run pretty high, the quarter doesn't show much about a full-bodied car's upper speed limits. So a group of enterprising enthusiasts began playing around with half mile runs, where a tuned up Corvette ZR1, Lamborghini, McLaren, Nissan GT-R, BMW M whatever, or a big banger Porsche, can really strut its higher speed stuff once past the quarter. There are now (at least) two organisations that promote sanctioned half mile speed contests on airport runways, certainly longer, flatter and much safer than any sort

of public road. A wide variety of hardware shows up to run these events, from relatively new stock high performance cars to homebuilt, fire-breathing dragons of all stripe – some now boasting 2000 or more horsepower. Plus CSF's Ravi Dolwani and this handsome 991 Turbo S.

Besides the major thrills that this car delivers in the half mile, Dolwani's primary purpose behind this build and racing programme is to test and demonstrate the effectiveness of his company's cooling products. As you likely know, CSF Radiators produces high quality, hand built aluminum radiators, oil coolers and intercoolers for Porsches, among a wide variety of OEM style replacement radiators and coolers for much more pedestrian machines, plus the RV and commercial trucking industries. So needless to say, this stealthy grey Turbo S packs every CSF product that'll fit in or on it, as well as a bunch of other stuff and handwork to make it a lethal half mile runner.





Dolwani purchased this 2014 example pre-owned with less than 30,000 miles on the clock just for this purpose. It wears its original colours inside and out, plus a full complement of luxury kit and a PDK transmission aboard. Arizona's Evolution Motorsports race built the motor with not only more power in mind, but in the name of bulletproof reliability, given Dolwani's plans for long half mile WOT pulls at maximum amounts of turbocharger boost. Evospec provided most of the internal bits, including forged pistons, very special beamed connecting rods, special head studs, and press-in iron liners, replacing the potentially damageable factory aluminium bores. Evospec also provided O-ringed head gaskets and their heaviest duty rod

bearings. Otherwise the engine was assembled using OEM gaskets and seals, plus all new OEM fuel injectors, and an oil separator. Tough guts indeed. The twin turbo system is almost entirely bespoke, again by Evolution Motorsports. The snails themselves are BorgWarner ball bearing turbos. The exhaust is also entirely bespoke, employing stainless steel 3-2-1 headers and a 2.5 inch muffler system for street driving, including a switch-valved mufflerless 2.5-inch piped "straight dump" system when racing or under high boost. The throttle body coupling is a GT2 RS piece. The fuel system has also been amped up for higher pressure and flow, via brushless electric in-tank fuel pumps, high flow filters; the factory DFI system remains

intact and functions with the stock ECU. SRM provides custom intake manifold spacers, a centre intake plenum, and high volume fuel rails. On top of the factory ECU, Syvecs provides its Turbo "plug n play" standalone ECU system with ISC tuning by Wayne Potts. The tune includes reprogramming for the PDK trans in the name of quicker, firmer shifts. The launch control is completely reprogrammed for straight-line use giving a 3500rpm launch with gearbox and clutch preservation in mind. All of the filters and fluids are OEM pieces or spec. The suspension system is loaded with uprated racy aftermarket bits, including an Ohlins coilover conversion, and GMG Motorsport thrust arm bushings. Those

Big Toyo boots offer just the right amount of grip and slip to give Ravi's 1000bhp 991 Turbo maximum thrust off the line

Tastefully does it in factory Agate Grey, with subtle deep metallic blue decals and lightweight Advan GT wheels

Nothing to see here. Shame because hidden is a 1000bhp monster, with bespoke internals, that still manages to be tractable and civilised

beautiful wheels were somewhat selected around the tyre sizes and availability; they being Advan GT Premium centre lock five spokers at 9.5x20in front and 12x20in aft, wrapped by aggressive Toyo rubber; Dolwani feels that while for road racing there are a number of top choices from Michelin, Pirelli, Toyo, Yokohama and the rest of the usual suspects, these Toyos are the ones that offer the all-wheel drive grip required for the quick, hard launches of half mile drag racing. If they don't spin just a bit, then you don't get the high rpm "pop" you need off the line, and conversely, if they just go up in smoke, elapsed time and V-max potential are wasted. The car wears its factory Agate Grey paint and black leather interior; with all of the sponsor and partner logos in a deep metallic blue vinyl, which augments the car's classy look, instead of a visual explosion of wildly coloured stickers seen on so many tuners and drag racers. The body bits are an artful combination of Sterling Auto Con custom pieces, as well as

GT2 RS and other bits; the front grilles are neatly shaved a bit to give more of a GT3 look. In order to add a bit of pop to the reserved grey paint and blue graphics are a variety of components tastefully finished in a bright yellow. Take special note of that bespoke, built by hand carbon spoiler/intake piece on the engine cover; its air intake

SPX carbon-fibre racing seats replaces the heavy stock units. These lightweight chairs are very comfortable, supportive without punishing, and even maintain an adjustable rake function. Naturally the car is roll caged and carries a Brey-Krause mounted fire extinguisher on board, and employs Schroth 5-point racing harnesses while the

**“ The build has removed 500 pounds from the Turbo S's stock weight ”**

Rules of the half mile club dictate a roll cage, fire extinguisher and full harnesses, as well as full race gear and a helmet

openings are functional, and the rest of the shape provides meaningful downforce with minimal drag. Beneath it sits an Eventuri carbon-fibre high flow air intake system, with dual cone style filters. The interior is anything but stripped; maintaining its factory dash and instrument panel, while a pair of very trick SPARCO

factory seat belts are retained for the occasional street use. Dolwani estimates that the build has removed about 500 pounds from the Turbo S's stock scale tally, most of that by removing the rear seats and swapping out the heavy, electric motor filled factory front chairs, plus the heavier stock exhaust system and mufflers.





This Maximum Strength Turbo S fires with little more drama than twisting the key on a new Cayman. The thin walled stainless, non-catalysed exhaust system barks crisply out of its quad pipes, and the engine thrums large and chuffy. On the road the CSF monster exhibits surprisingly good manners and drivability with a ride that's noticeably – but not punishingly – firmer

gear on board. Dolwani noting that he specifically sought out a PDK car when shopping for this Turbo S, as it's "the perfect trans for drag racing; you can't shift any faster than this, and any power loss during shifts is negligible." Unfortunately the local toney Newport Beach, California, road conditions didn't allow any high or top speed performance sampling, but even the

nav system or no, this is a serious race car. While most lower speed brackets require little in the way of built in safety measures, any car (in the half-mile series in which Dolwani runs) that runs faster than 180mph requires the car to be roll-caged, and carry an onboard fire extinguisher. The driver must be fully suited and booted in up to date racing gear with gloves and a full faced helmet.

So how fast is fast? To date Dolwani's best half mile run is a 14.69 second sprint (which used to be very impressive in the quarter, half mile not withstanding) and a terminal speed of 186.67mph. Some recent upgrades and a little more high level tuning have Dolwani confident of a 190mph run next time out, and it's likely that a 200mph pass lies somewhere on the horizon. Certainly a far, and well developed, cry from the performance of the earliest Porsche race cars, they packing something between 40 and 50 horsepower, and need time, room and patience to break 100mph. **PW**

**Stealth bomber! Ravi Dolwani's 991 Turbo doesn't draw attention, but then you should always watch out for the quiet ones!**

## “ To date, Dolwani's best half mile run is a 14.69 second sprint ”

and more responsive than stock. The reprogrammed PDK shifts beautifully, and most wouldn't know that its shifting habits have been breathed upon. And naturally no amount of street driving on a hot day will overwhelm all of the high tech CSF cooling

few throttle prods we experienced confirm there's serious brake and at-the-wheels horsepower here. And the car retains its full AWD capability.

Make no mistake, this is serious racing, and licence plates and entertainment and

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