

# RED ROCKET

Words: Jarkle  
Photos: Chris Wallbank

Pumaspeed have spent the last year painstakingly developing their 300bhp upgrade for the Mk7 Fiesta ST, and the results are nothing short of spectacular...

**T**he Mk7 Fiesta ST has carved itself out a reputation as being one of the best hot hatches out there, a fantastic showcase for Ford's engine technology and its ability to develop a mass production car that manages to be both supple and superb to drive on the limit. There's only one problem – power. OK so the standard car is certainly no slouch, with its 180bhp jumping to a much more respectable 197bhp when the overboost kicks in, but it's always been hard to escape the feeling that Ford didn't go far enough with the ST. The chassis is so precise and its brakes so responsive that we can't help but think the ST could've handled well over 200bhp without breaking a sweat, possibly even more with some suitable upgrades along the way.

Luckily the UK aftermarket tuning scene took the Mk7 ST to its heart almost instantly, and there have been a plethora of tuning packages available for a number of years now. These offer everything from mild increases in power and torque, to staggering jumps in performance that totally change the nature of the Fiesta itself and make you question the value in actually buying the larger, more expensive Focus.

The Mk7 you see here is the result of Pumaspeed, a tuning firm who will need little introduction to





## DRIVER SPEC

TONY MCQUIRE

**Job:** Pumaspeed head honcho**First Ford:** Mk2 Escort**Favourite Ford:** My Mk2 Focus RS (470bhp, low lag)**Toughest part of the build:**

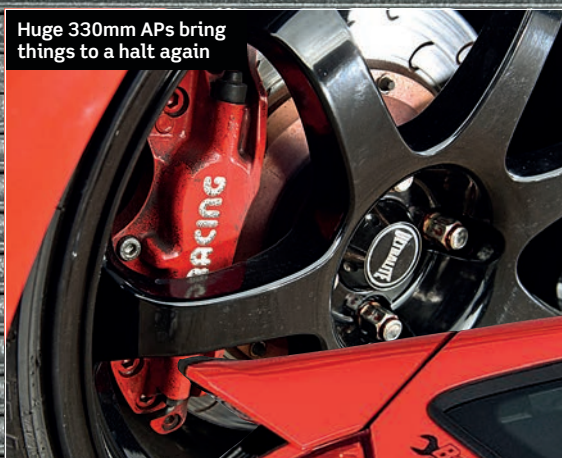
Developing the unique parts, like the 4th and 5th generation turbos and the MAXD calibration file.

**Best part of the build:** Watching my 18 year old son develop his skills in car building, then watching him keep up with a Nissan GT-R around Croft!





This demo car gets used in anger on a regular basis!



Huge 330mm APs bring things to a halt again



Track-spec towing eye shows where this car spends most of its time





The front half of the interior remains largely as Ford intended

anyone who's been around the tuned Ford scene for any length of time. The car itself is also fairly well known as it's their demo car, hence why it's been up Santa Pod's hallowed quarter-mile more times than we've had hot dinners and been thrown round some of the UK's most demanding circuits. We spoke to Simon and Tony at Pumaspeed to learn more about the car and how it's evolved over the last year.

"This car is actually the result of several different demo Fiestas and a year's worth of careful development," explains Simon. "We always had one eye on the magic 300bhp figure, but to get there we took the car through distinct different levels of tune."

Stage 1 gave 218bhp with a

mild remap and some induction work, while Stage 2 netted 243bhp and 362nm – and all retained the standard Ford turbo. The next level, jumping from Stage 2 to full-fat Stage 3, makes use of a more manly blower to produce the increased power figures. It also requires a fair few hardware upgrades too, though it's important to remember that the internals of the 1.6 EcoBoost remain totally untouched. The impressive power is achieved through careful mapping, turbo optimisation and accompanying fueling and cooling upgrades.

The car now runs one of Pumaspeed's own X-27 fifth generation hybrid turbos – a quick-spooling unit that boasts larger internals,

**"We always had one eye on the magic 300bhp figure"**

Milltek 'Race' exhaust makes a lovely noise!

Sparco buckets replace the standard seats





“The real power comes from that X-27 hybrid turbo, one of our ‘quickspool’ tubular manifolds, and the MAXD Stage 3R map”



R-Sport crossover pipe is a popular Pumaspeed product



Little details lift the appearance of the engine bay

a custom compressor wheel, and, significantly, still retains the standard sized housings. This means that though it's capable of flowing a much higher volume than the OE unit, it still fits perfectly within the confines of the Fiesta engine bay.

“The real power comes from that X-27 hybrid turbo, one of our ‘quickspool’ tubular manifolds, and the MAXD Stage 3R map – software that really manages to get the most from the Fiesta ST’s 1.6 engine,” Tony enthuses.

That this buzz-bomb of a hatchback now packs a 300bhp punch (can you imagine telling that to your average XR2 buyer circa 1987?) is impressive, but it's the fact that it's managed to handle over 100bhp more than it was designed to deal with without any real drama that truly

underlines just how capable the ST is. In fact the only aspect of the car's drivetrain that's needed a bit of a helping hand has been the clutch, which started to show signs of strain soon after the jump to stage 3 and has since been replaced with a Pumaspeed six-paddle unit instead.

Now the ST's chassis has long been praised as one of the best in its class, offering fantastic turn in, sharp response, and confidence-inspiring road holding, all traits that have been preserved and indeed built upon by the guys at Pumaspeed.

“The BC coilovers were actually one of the first things we fitted to the car back at the start, though as it's become more powerful and track-focused we've raised it up a bit, dialed in a touch of camber at the front and

## TECH SPEC

### FIESTA ST '300R'

#### ENGINE

1.6-litre EcoBoost, Pumaspeed X-27 '5th generation' hybrid turbo, MAXD 'Stage 3R' calibration map, ITG induction kit, R-Sport crossover pipe, Stage 4 Garrett-core intercooler, high-flow turbo elbow and hardpipe kit, Pumaspeed 'quickspool' tubular manifold, Milltek decat downpipe and Race cat-back exhaust system

#### POWER

300bhp (estimate)

#### TRANSMISSION

Original Fiesta ST Ford Durashift B6 gearbox, 3J NXG limited slip differential, Pumaspeed six-paddle race clutch, TTV lightweight racing flywheel

#### SUSPENSION

BC Racing coilovers, polyurethane bushes all round, Eibach ARBs front and rear, Breedts mounts

#### BRAKES

Front: AP Racing brake kit with 330mm discs and four-pot calipers, stainless steel braided brake lines, aftermarket pads  
Rear: Zero Sixty grooved and dimpled discs, Mintex M1144 pads

#### WHEELS & TYRES

7.5x17in Ultralight alloys with Yokohama Parada Spec 2 tyres

#### EXTERIOR

Fiesta ST in Race Red, various graphics, Triple-R front splitter, Zunsport front grille

#### INTERIOR

Sparco front bucket seats, semi-stripped interior, rear bench removed

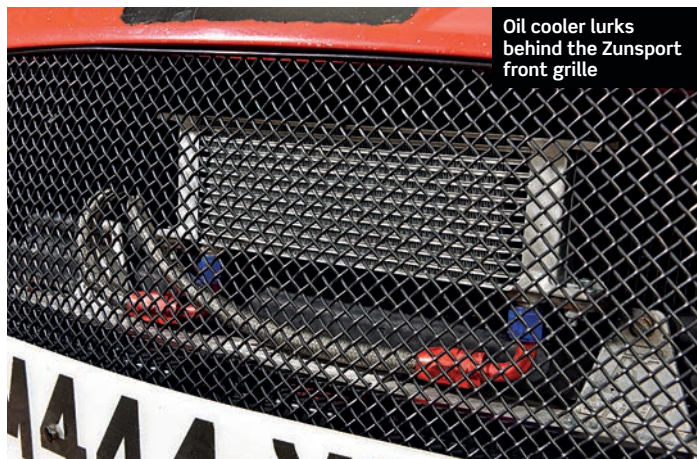








The rear half of the interior has been removed to save weight



Oil cooler lurks behind the Zunsport front grille



➤ fitted Eibach ARBs front and rear.” The rear end’s tendency to become a touch too light and ‘floaty’ was only exacerbated by the extra shove going through the front wheels, but this has been largely cured with polybushes all round – it’s now a much tighter car with very little body-roll. Throw in the bin lid-sized 330mm AP discs, Ultralight alloys with sticky semi-slicks and 3J LSD, and it isn’t surprising that this little Fiesta is a very accomplished giant killer, one that’s never happier than when it’s cutting down far more powerful cars out on track.

It’s light, too, with pretty much everything that’s not essential for the car to function having been removed from the interior, including the bulky rear bench. The OE front seats have been dropped in favour of supportive Sparco items, though the factory dash and associated gauges remain in place.

“It’s not been built for comfort and it’s become more and more like a full on track car as the build’s progressed,” explains Simon. “It’s covered a lot of miles over the last year though, a really hard working demo car.”

The exterior sticks to that

theme – it’s all about go, not show. OK so there are a fair few stickers dotted about and the pairing of a Zunsport grille and Triple-R splitter make the front end look a tad more aggressive, but on the whole it’s very much as Ford left it. That’s probably a good thing; the ST still looks very fresh and the styling is bang on, and an ugly aftermarket bodykit would simply detract from the overall appearance of the car.

This car just goes to show how much can be achieved by the aftermarket tuning world nowadays. Granted Pumaspeed had an excellent base car to work with from the start, but there’s no denying that the figures they’ve managed to extract are impressive, especially as doing so hasn’t compromised the car’s on-road drivability in the slightest. The beauty of this whole build is the fact that it’s first and foremost a demo car, meaning that it’s still not even close to being finished. More power is on the cards, though both Simon and Tony are tight lipped when it comes to specific figures, along with some forged internals and yet another iteration of the firm’s X-27 hybrid turbo. It looks like the world of aftermarket ST tuning is set to get a lot better yet! 🏁