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Upgrade Packages CP1 280 bhp- CP2 315bhp



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Kelsey Publishing Ltd. The Granary Downs Court Yalding Hill, Yalding, Kent ME18 6AL

EDITOR Jamie King ART EDITOR Mark Field SUB EDITOR Dan Williamson

CONTRIBUTORS Dan Williamson, Ade Brannan, Matt Richardson, Chris Wallbank, Jonathan Fletcher, Jason Dodd, Ian Allen, Liam Hart, Dave Varley, Dan Goodyer, Aron Vickers

#### ADVERTISEMENT SALES

ADVERTISING SALES Talk Media Sales 01732 445325, info@talkmediasales.co.uk

#### MANAGEMENT

CHIEF EXECUTIVE Steve Wright
CHIEF OPERATING OFFICER Phil Weeden MANAGING DIRECTOR Kevin McCormic SUBSCRIPTION MARKETING DIRECTOR Gill Lambert RETAIL DIRECTOR Steve Brown

PRINT PRODUCTION MANAGER Georgina Harris PRINT PRODUCTION CONTROLLERS Kelly Orriss and Hayley Brown

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#### **DISTRIBUTION IN NORTHERN IRELAND** AND THE REPUBLIC OF IRELAND

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## WELCOME

he motoring world received some sad news a few weeks ago: Ford announced it will cease production of the much-loved Fiesta model for good. After 47 vears of faithful service, the household hatchback will be no more.

Sadly, that also means an end for one of the greatest fast Fords ever built: the Fiesta ST. When Ford launched the Sports Technology brand with the Mondeo back in 1996, it was seen as a lukewarm sibling to the motorsportinspired RS models. But when that little red moniker appeared on the back of a Fiesta for the first time in 2004, all of that changed.

The first generation Fiesta ST went back to Ford's old-school roots of sticking a big, powerful engine in a small hatchback for sheer driving thrills. It not only re-imagined the ST brand, it redefined our expectations of

The Mk7 Fiesta ST that followed in 2013 took the same ethos, added a turbocharger, and turned things up to 11. It won almost as many

hearts as it did motoring awards, and will forever be remembered as one of the greatest hot hatches of all time.

The final Fiesta ST first appeared in 2018, and took development one step further. Fans were pleased to learn the Mk8 was just as easy to tune as its predecessors, and even more fun to drive.

But there will be no Mk9. The Fiesta ST's reign as king of the hot hatches is over.

To commemorate this very special little Ford, we've compiled this 100-page bookazine and stuffed it full of the greatest feature cars, expert buying advice, and specialist tuning tips to create a celebration of three generations and nearly 20 years of one of the finest fast Fords ever built.

The fearsome Fiesta ST may be gone, but it will never be forgotten. And this issue of Total Ford is our way of keeping that memory alive. Enjoy!

JAMIEKING EDITOR

n the modern age of big-power turbos, huge Brembos from the factory and more electronic aids than Apollo 13, some might lead you to believe a naturally-aspirated Fiesta ST150 is dead meat.

But If you've ever watched the Fiesta Championship or Fiesta Challenge race cars, you'll know that when they're built and driven correctly, these little buzz-boxes are seriously rapid – and what you see here is as close as you will get to a Fiesta Challenge car on the road.

AJ Stewart was massively inspired by the racers when turning his once-docile Fiesta into the hardcore animal it is today, and you can see the influence flowing throughout the build.

He bought the car in 2010, having previously owned various Mk4 and Mk5s - which were modified with 1.7 Puma engine swaps and tons

of go-faster parts – but this Fiesta has remained in his ownership longer than any other.

But why?

AJ explains, "The Mk6 was a natural progression for me, and I think the ultimate naturally-aspirated Fiesta. The others were good but the engines were a bit small, whereas the ST came with the 2.0-litre Duratec, along with a really good chassis. They're a great package as standard, but just need waking up a bit."

As is usually the case, his first mods were a performance exhaust and air filter, but things escalated quickly when he met and became friends with the guys at Jamsport.

"Because of their involvement with the racing

car on track exploded, and the whole focus of the build became more hardcore. We went deep," he laughs.

Uprated cams, a Cosworth inlet and various suspension kits came and went as AJ dipped his toe into learning the UK circuits and honing his driving skills, gradually working towards the ultimate specification he had in mind for the ST.

"The ethos was to build a clean, simple car in the clubsport style, and retain its naturallyaspirated character."



## MRANGRY It may be small, but this snarling, stripped-out Fiesta ST loves a big brawl on the street or circuit Words BEN BIRCH / Photos ADE BRANNAN S77 EMU

#### MK6 FIESTA ST

ENGINE 1999cc Duratec, Milltek 4-1 exhaust manifold, Milltek de-cat, Longlife custom exhaust system with 3in down-turned tailpipe, Cosworth 220-spec cams, Newman valve springs and retainers, K1 forged rods, Supertec pistons, ARP bolts throughout, Torques custom PCV breather system, APS oil cooler with braided lines, Cosworth high-pressure oil pump, Cosworth thermostat, JS Performance coolant hoses, Jenvey drive-by-wire throttle bodies, ECU Master EMU Black engine management system with Bluetooth adaptor, DC Innovations custom ECU holder, painted rocker cover and coolant cover, 395cc injectors, baffled sump plate

POWER 217bhp and 164lb.ft

TRANSMISSION Rebuilt Durashift five-speed gearbox, Quaife ATB LSD, Helix organic clutch, TTV lightweight flywheel, ARP flywheel bolts, Vibra-Technics torque mount

SUSPENSION Meister R Zeta CRD coilovers, Vibra-Technics mount kit. Powerflex bushes throughout, front and rear strut braces

**BRAKES** Front: Wilwood Midilite four-piston callipers, Hi-Spec calliper brackets, RTS Performance 300mm C-hook discs, EBC Yellowstuff pads, Torques custom braided lines; rear: standard callipers, RTS Performance C-hook discs, EBC Yellowstuff pads, HEL braided lines, Dot 5.1 fluid

WHEELS & TYRES Front: 7x15in ET38 Team Dynamics Pro Race 1.2; rear: 7x15in ET35 Team Dynamics Pro Race 1.2, 195/50R15 Michelin Pilot Sport 3/Nankang NS2R tyres

EXTERIOR Aerocatches bonnet pins, carbon mirrors, Triple R splitter, drilled front bumper, cold-air-feed fog-light ducts

INTERIOR Weld-in SHP Engineering rear roll cage, Corbeau Clubsport XL seats, OMP subframes and mounts, Turn One four-point harnesses, SiCo battery relocation, Quaife nylon gearknob, safety net, Stack oil pressure gauge in Airtec surround, Turn One steering wheel with Momo boss, Track Car Door Cards rear panels, Samsung tablet for ECU readout













The barking, rev-loving, naturally-aspirated engine sets the tone for the whole car - no frills, no complications, just good old, analogue fun. The centrepiece of the powerplant is a massive air filter covering a set of Jenvey throttle bodies, which not only sound delicious but endow the Fiesta with a huge increase in aggression, throttle response and, of course, horsepower.

AJ continues, "The throttle bodies were a huge game-changer; the car made 207bhp with them on the standard ECU, but the next game-changer was fitting an ECU Master engine management system."

Between Jamsport and RRR Engineering, the ECU was fitted and mapped with functional launch control and flat-shift, and gave an extra 10bhp alongside much better driveability. Luckily for AJ, he was able to finance it all



## "I ALWAYS HAVE TWO SETS OF WHEELS AND TYRES... YOU CAN FEEL A DRAMATIC DIFFERENCE BETWEEN THESE 15IN WHEELS AND BIGGER ONES; THE STEERING IS MORE RESPONSIVE AND THE CAR HANDLES MUCH BETTER"

by selling his old Cosworth inlet and single throttle body, along with various wheels he had accumulated over the years.

He remembers, "I bought the Cosworth inlet at £400 and sold it for more than three times that. The prices they're fetching is madness really, but I'm not complaining."

Talking of madness, the wheels he sold were his 33rd different set on the car.

"I'm now on my 34th," he laughs. "I always have two sets of wheels and tyres – one for the road and one for the track. I end up getting bored

and selling whichever set is sitting in the shed at the time."

Thankfully, the Team Dynamics are staying put, as they suit the junior BTCC car vibe perfectly, as well as being ultra-lightweight.

"You can feel a dramatic difference between these 15in wheels and bigger ones; the steering is more responsive and the car handles much better," enthuses AJ.

Fiesta race cars run 15s too, so the improved dynamics with a smaller wheel make sense; an added bonus being that track-day tyres are more readily available and cheaper than those in larger diameters.

The only issue with small wheels can be brake clearance, and with AJ adamant about having four-pot callipers, he had to search a fair bit before he found a solution. Wilwood has a knack of developing brake kits for tight spaces, in this case the slimline Midilite callipers offering the right profile to fit behind the spokes, and along with 300mm discs giving a massive improvement in bite and resistance against brake fade on track.

When it came to suspension, AI had tried out quite a few cheap brands over the years, many of which developed issues. So, with the rest of the car now being raised to a higher level, he bit the bullet and decided the suspension needed to be raised too – his days of scrimping on what is surely one of the most important areas were long gone.

AJ explains, "I've got a few mates into fast Renaults - Meganes, Clios, that sort of thing and in that scene BC Racing and Meister R are very well regarded."

In the end he plumped for Meister Rs, and more specifically the Zeta CRD kit, which is aimed at offering a compromise between road use and occasional track-day use.

With a Jamsport fast-road geometry setup, the Fiesta really does hang on through the corners without being too edgy, erring on the sensible side of camber and toe. It's a perfect balance for those of us who don't profess to be Senna incarnate, and means elaborate and expensive adjustable suspension components aren't required to have fun and go fast in safety.

This keep-it-simple approach has been applied to every modification on AJ's ST, which is why the overall result is such an absolute success. No silly bodykits adorn the exterior and no garish items ruin the interior. The only changes to the outside are purely functional, such as the drilled front bumper to funnel air into the throttle bodies, fog-light air ducts to cool

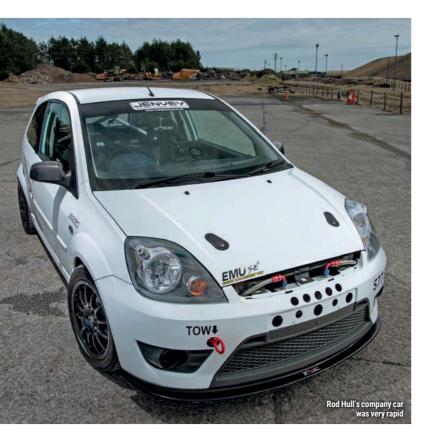
the brakes, bonnet pins to prevent a disaster on the main straight and an open front grille to accommodate an oil cooler.

AJ adds, "Oil temperatures were a bit high on track and oil changes were getting dirtier. I had taken the grille out to de-badge it, and after fitting the oil cooler I had some trouble refitting the grille - so I left it off, and quite like it, to be honest."

On the inside is the classic clubsport style. a blend of race car and road car, which always works. "Roll cages and buckets go so well with a carpeted front cockpit and interior trim. The car weighs just 1080kg with me in it, but I can still drive it to the Nürburgring in relative comfort," says AJ.

"I'VE HAD PEOPLE ON TRACK DAYS COME UP TO ME AFTERWARDS. **AND THEY ARE CONVINCED IT MUST BE SUPERCHARGED OR TURBOCHARGED, AND** THEY'RE SHOCKED WHEN I TELL THEM IT ISN'T"



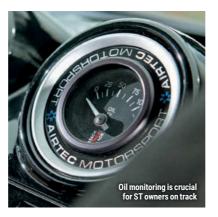












The Fiesta does okay at the Green Hell, but AJ admits the famous track is slightly too big for a little Fiesta.

He says, "Cadwell Park is my favourite circuit. It's the perfect place for the Fiesta as it's quite twisty, which levels the playing field a bit against cars with more power."

In fact, this naturally-aspirated, almost-15year-old Ford scalps Renaultsport Meganes and 350bhp Focuses - no mean feat, and goes to show how Fiestas can be turned into an amazing allround package.

"I love it. I've had people on track days come up to me afterwards, and they are convinced it must be supercharged or turbocharged, and they're shocked when I tell them it isn't," he says.

Thankfully, he has no plans to do so either, nor is he going to trade into an ST180.

"They're mega cars, but I love naturallyaspirated," says AJ. "I think for a track car N/A is better, and now I've got power with reliability, I won't do anything else other than enjoy it".

That definitely has the Total Ford seal of approval – we love the modern turbo stuff with all the fancy bells and whistles, but now and again it's heart-warming to see a proper analogue, no-nonsense older Ford still doing the business and embarrassing unsuspecting bigpower machines.

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#### BUYING GUIDE

## FIESTA ST150

Quickly becoming a forgotten fast Ford, the Mk6 Fiesta ST – aka ST150 – is delightful to drive, easy to tune and cheap to run. Here's how to buy the perfect package for everyday practicality and weekend track action

Words DAN WILLIAMSON / Photos FAST FORD ARCHIVES

#### WHY YOU WANT ONE...

- Heralded as the modern-day XR2, it's good, old-fashioned fast Ford fare of a big normallyaspirated engine in a lightweight body.
- Superb to drive and simple to tune, the Fiesta ST150 is a firm favourite for anyone looking for cut-price fast Ford thrills. You'll not bag a better hot-hatch bargain
- ST500s are already rocketing in value, but if you buy wisely you could bag a sensibly-priced ST150 and enjoy it at weekends while its value steadily rises

#### WHY YOU DON'T...

- ST150s are looking and feeling pretty old now. So don't buy an ST150 hoping to appear as cool as your mates in their latest-registration finance-mobiles.
- Niggling faults could mount up to frustrating levels - from an unstable idle and noisy PAS to rust scabs and broken seat handles.
- ST150s are massive fun but they're relatively unrefined; as an everyday driver they're small, noisy and remarkably thirsty.

#### **HOW MUCH TO PAY**

#### PROJECT: £750-£1500

There's a lot of junk around, but most is priced appropriately. Parts-cars can cost £500 but it's best to spend £1k upwards, even for a project, or you could be buying a money-pit.

#### GOOD: £1500-£3000

In reality, this should be your budget for an ST150. You'll find any colour, any age and any spec - good, bad and bubbly. Search hard, and you'll bag a mint Mk6 in private hands for well under £3000 - or even a ropey ST500

#### CONCOURS: £3000-£5000

Fast Fords are great investments, especially in low-mileage, low-owner, standard specification - and the ST150 is no different. So you'll need to dig deep for the best. Concours contenders may make more than £5k, and the nicest ST500s are advertised at five-figure sums - although they take a long time to find homes.

#### **IDENTITY**

Facelifted ST150s, introduced in October 2005, are worth a bit more cash: they're identified by their bulbous headlamps and updated rear light clusters (with twin reversing lamps); inside there's a soft-touch dashboard in dark grey, blue or red, plus shiny door handles and gearstick surround.

ST500s can double the price of a normal ST150, so check it's the real deal (built after April 2008), wearing all the right kit: Panther Black paintwork with silver decals, matching Panther Black 11-spoke 17in ST150 alloys, red-painted brake callipers, Ebony leather heated seats, carbon fibre-pattern trim (fascia and gearshift surround) and upgraded Sony audio system.

(not a cheap phone app), and it's vital to ensure the car's chassis number matches between the logbook. the VIN plate on the offside B-pillar, a stamping in the offside suspension turret, a tag on the nearside of the dashboard (visible when looking through the windscreen from outside) and what's stamped into the floorpan next to the driver's seat. Don't forget to take an OBDII code reader and plug it into the car's port to check the VIN on the ECU.

#### VITAL STATS

MADE BETWEEN 2004 to 2009

PRICE WHEN NEW £13.595

**POWER** 148bhp @ 6000rpm

TORQUE 140lb.ft @ 4500rpm

TOP SPEED 129mph 0-60MPH 7.9 seconds



#### INTERIOR

Don't expect too much. The Mk6 Fiesta was an economy model, and the cabin reflects it. Rattles, squeaks and groans are simply part of the ST150 soundtrack; most owners fit a louder exhaust and turn up the stereo, which seems to help.

The dashboard is most likely to be noisy, with broken clips and cheap brackets no longer lining up. Cold weather tends to make it worse. High-mileage examples often look shabby, but even lesser-used STs may contain scuffed plastics and look worn around the edges.

The upholstery isn't too bad, other than sagging, but the folding seat catches fail regularly, with loose cables or snapped connections underneath

Early ST150s had front seats in black leather with red or blue cloth centre sections, depending on exterior body colour, and featuring the new ST logo. Facelifted STs included colour-keyed seats, dashboards and door panels: Diamond White, Frozen White, Moondust Silver and Panther Black had a choice of Hot Copper, Blue Diamond, Ebony Haze or Sapphire Haze; Colorado Red received Hot Copper or Ebony Haze; Performance Blue could be accompanied by Blue Diamond, Ebony Haze or Sapphire Haze.

Trim isn't tricky to find at the moment, but give it a few years, and certain colours will become rare. Buy spares and stick them in the loft.

Full-leather heated seats were optional (standard on the pricey ST500), while some Mountune STs were treated to black leather/suede Recaros. Well worth searching for.

Look out for a Reflex Pack (extra airbags and rear centre headrest) or pre-facelift Interior Styling Pack, giving shiny trim and ST mats.

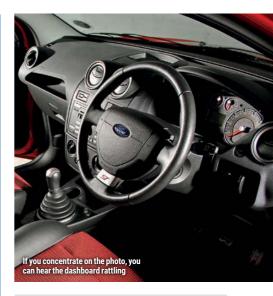
Check all the gadgets work property. A heated windscreen was standard, and elements are prone to failing; heated mirrors suffer the same fate (operated by the rear window heater switch). Fullyfunctioning air conditioning is a bonus.

Factory alarm systems can be erratic (needing a replacement module), glowing airbag lights are common (a loose connection under a front seat is the usual culprit), and alternators are sometimes problematic; check the battery light isn't on.

A trip computer was standard on the facelifted ST. Extra-cost options included Technology Pack, comprising automatic headlights (which may flick around, wearing out the motors), auto windscreen wipers (prone to failure) and power-folding mirrors (which break; when you lock the doors, make sure they don't keep clicking)

Other extras worth paying for include EATC climate control, Bluetooth with voice control, sat nav stereo and MP3 connectivity. Electronic Stability Program (ESP) isn't really necessary.





#### **HISTORY**

#### **APRIL 2002**

Sixth-generation Fiesta (Mk6) launched on new platform but with engines, transmissions and suspension types repeating the existing eversuccessful Fiesta formula. Production begins at Almussafes, Spain, followed by Cologne, Germany, and many other factories around the world. No high-performance version available.

#### **MARCH 2004**

Fiesta ST unveiled at Geneva motor show as Ford TeamRS's first production car.

#### 14 OCTOBER 2004

Fiesta ST launched in UK, with Mondeo-sourced 2.0-litre Duratec engine, producing 150PS (148bhp), prompting ST150 nickname. Standard equipment includes bodykit, multispoke 17in alloy wheels, half-leather upholstery, choice of fashionable paint schemes and optional GT40-type decals. Production takes place at Cologne, Germany.

#### **OCTOBER 2005**

Fiesta facelift arrives, with new headlamps, tail lights, bumpers, grille and bodyside mouldings. Revised ST interior includes soft-touch instrument panel with plastics in one of several contrasting colours, new upholstery, one-shotdown driver's window, and trip computer.

#### 1 MARCH 2008

Ford dealer-supplied, warranty-approved Mountune Performance packages become available for the ST150, with choice of 163bhp or 183bhp upgrades.

#### 10 JUNE 2008

Fiesta ST500 limited-edition arrives; 500 are produced, all for UK, featuring Panther Black paintwork with silver stripes, black wheels and carbon-fibre-pattern trim.

#### **AUGUST 2008**

Fiesta Mk6 discontinued; Mk7 production begins at Cologne. Final (Mk6) ST150s remain available in UK, resulting in 16,579 total sales.

#### **SUSPENSION AND BRAKES**

Handling is key to the ST150's appeal. If it's not sharp and agile, you're buying the wrong car.

A test over mixed roads is essential. Worn-out rubber bushes are the most likely culprit of a deadened driving experience, while knackered dampers and poor alignment will also adversely affect roadholding. Snapped coil springs are fairly common on the Mk6; they may clonk or rattle over bumpy surfaces, but aren't often obvious until you look underneath.

Listen for rumbling - jack up the car and give the rims a wobble to check for worn wheel bearings. Weird groaning noises coming from the front (especially when hot) point to the power-assisted steering (PAS) pump being on its last legs; the steering may well feel heavy too. Check the colour of the PAS fluid, which should be red; black liquid in the reservoir tells you it has overheated at some point in the past, which is common for hard-driven STs thanks to the tank being attached to the engine. Refreshing the fluid should help, but an ST150 being used on tracks ought to have a PAS tank relocation kit and/or an oil cooler fitted, both of which are suitably cheap to buy.

ST150 brakes work well - with ST170 callipers up front and rear discs. It's a lightweight car, so fastroad or track-day pads should be more than man enough for any task. But a hard-driven example will probably exhibit juddering through the brake pedal



or steering wheel, thanks to worn or contaminated discs and/or pads.

If they're constant vibrations, suspect damaged wheels (susceptible to buckling) or tyres.

Rear brakes can be prone to seizing, and it's typical to find the handbrake struggling to hold the car. Usually it's due to a stretched or dry handbrake cable in need of lubrication - the latter in particular if you hear squealing from the offside rear.

Fiesta Mk6 brake pipes are renowned for rusting, and can be fiddly to replace.



#### FIESTA MK6 ST150

ENGINE 1999cc Duratec DOHC, 16-valve four-cylinder with alloy cylinder block and head, electronic multi-point fuel injection, variable intake system and free-flowing exhaust

TRANSMISSION Durashift five-speed manual gearbox with shot-peened gears on first, second and third; short-throw shift; front-wheel drive; hydraulic clutch; final drive ratio: 3.824:1

**SUSPENSION** Front: independent suspension with MacPherson struts, uprated dampers, stiffened and lowered coil springs, anti-roll bar and subframe, revised knuckles for increased negative camber; short-ratio steering rack; rear: stiffened twist-beam suspension with uprated dampers, lowered/stiffened coil springs

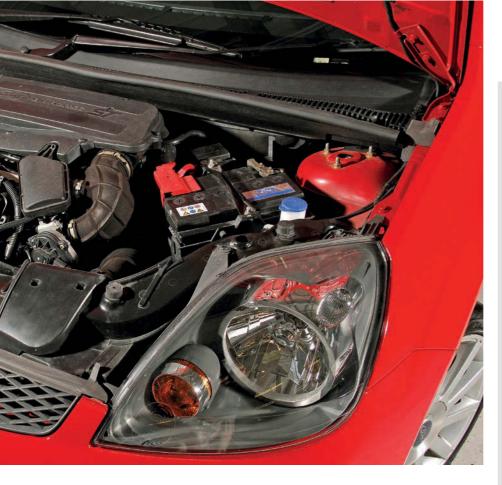
BRAKES Front: 258mm ventilated discs with Focus ST170 callipers; rear: 203mm solid discs; diagonally split system with servo assistance and ABS; ESP with Emergency Brake Assist

WHEELS & TYRES 7x17in 11-spoke alloy wheels and 205/40ZR17 tyres

EXTERIOR Fiesta Mk6 three-door body with colour-coded ST bodykit comprising front bumper with integral fog lights, side skirts and rear roof spoiler, heated windscreen, optional styling packs including stripes on sides and/or bonnet and roof. Pre-facelift colours: Diamond White, Frozen White, Colorado Red, Panther Black, Performance Blue or Moondust Silver

INTERIOR Part-leather ST-badged sports front seats, sports gearknob, leather-rimmed ST steering wheel, alloy pedals, ST scuff plates and silver-effect door pulls, optional Interior Styling Pack and Reflex Pack





#### **ENGINE**

Nothing to get excited about, the ST150's 2.0-litre Duratec was lifted from the Focus and Mondeo, meaning it's unstressed, ultra-reliable and capable of covering mega mileage. Its greatest weakness is a tendency to consume oil; glugging a litre every 1000 miles isn't uncommon, with potential problems resulting from

running low.

Inspect the exhaust for blue smoke at start-up or under load, suggesting worn-

out valve stem seals and knackered piston rings respectively.

Examine the service history, and check the dipstick to ensure the oil is fresh and toppedup. Listen for knocking from the bottom end due to an oil-starved, worn crankshaft and/or bearings - a pricey rebuild is the only solution.

Lighter tapping from the top of the engine is usually the inherently-noisy fuel injectors, but beware of a slack, rattling timing chain - especially from a worn/high-mileage example, which will need a rebuild.

Most Mk6 ST issues are much less to worry about. Poor economy is normal (especially when driven hard), and many owners report jerkiness, particularly from cold or during parking manoeuvres; keeping up the revs should help, but cleaning the throttle body may effect a cure.

Difficulty starting (needing several cranks to fire up), followed by very poor idling (with the revs jumping around) was especially common on pre-facelifts, and part-cured by a Ford ECU reflash. Updated software was also reckoned to solve an annoying rev hang between gearchanges.

The Duratec responds well to modifications, so don't be afraid to take on an uprated ST, especially if it comes with receipts from trustworthy tuners.

Keep a look out for an official dealer-supplied Mountune conversion. The MP165 featured an induction kit, remap, sports cat and exhaust; MP185 added high-lift cams and valve springs; the MR200 also gained an uprated intake manifold and 60mm throttle body.

#### WHAT DO I NEED TO KNOW?

#### **HOW MUCH DOES IT COST TO INSURE?**

Less than you'd think, even for young drivers. The basic ST150 sits in group 26, while the ST500 goes up to group 28. Online comparison sites are usually the cheapest routes to Fiesta insurance, even for cars equipped with dealer-fitted Mountune upgrades. Aftermarket modifications will almost certainly require the services of a specialist insurer.

#### WHERE DO I FIND ONE?

Mk6 ST prices vary wildly, so don't rule out any avenue: non-franchised dealers may stock lowmileage examples, but most are in the hands of private sellers - which means sifting through eBay, owners' club websites and Facebook groups for your preferred colour and spec.

#### **HOW MUCH DOES IT COST TO RUN?**

It depends... If you take it easy, the manufacturer's figure of 38mpg is achievable, especially on a run. But if you drive it like you should - for fun - don't be surprised to see an ST150 averaging less than 25mpg. Fortunately, components cost pennies, with second-hand parts available from Mk6s being broken, and most of the oily bits being everyday Ford stuff.

#### **WILL VALUES RISE OR FALL?**

Yes. Or maybe they'll never change. Values haven't budged since Fast Ford's ST150 buyer's guide in 2017, so you'll not lose money...

#### SHOULD I MODIFY IT?

Of course. The ST150 is begging to be modified, and the chassis can easily take more grunt. Go on: you'll not regret it.

#### TRANSMISSION

Generally reliable, even when abused or neglected, the ST150's gearbox is a regular IB5 five-speed, found in millions of Fords from 1995 onwards. Many will see well over 100,000 miles without a fault, yet a few reputedly blew up; this was far from common, and occurred on early low-mileage examples. Since then, it's applied mainly to heavily-modified cars - in which case, listen for whining, rumbling and growling. The standard differential can't cope with big power, and when it goes bang it can trash the entire gearbox.

The ST150 should feature a pleasant, precise shift. Notchiness is a concern, especially if accompanied by excessive noise. Synchromesh failure (and need for a new gearbox) causes crunching between gears (especially when changing from second to third). Otherwise, feeling tight from cold but sloppy or difficult to engage gears once warm is the sign of a stiff or knackered linkage (which may recover by simply lubricating with multi-purpose grease).

Juddering when pulling away is usually a quirk of the car (or ECU software), although you need to ensure the clutch isn't on its last legs - either slipping or biting too high on the pedal. Test for clutch slip by accelerating from low revs in third gear, ensuring the road speed increases conducive to engine revs.

Fear not if it's just a floppy pedal. It's extremely common to find a Mk6 where the master cylinder linkage has become detached. An official Ford fix to reattach the pedal involved adding a cheap modified clip to stop the cable from falling off. Facelift models had a longer pedal. Either way, it's not a deal-breaker.









#### **KEY POINTS**

#### **OVERALL CONDITION**

A Fiesta's overall condition will tell you more about how it's been looked after than any sales ad. Step back, inspect the paintwork, check the interior, examine the tyres and take your time before making a decision.

#### **ENGINE**

ST150s tend to consume oil, so beware of knocking from an oil-starved bottom end or blue smoke from the exhaust. Juddering and a poor idle are pretty normal.

#### **TRANSMISSION**

Beware of clutch slip, which can be pricey to put right. Run away from any ST150 with rumbling or whining from the transmission.

Mk6 Fiestas don't tend to rot badly, but there's potential to find corrosion in the wheelarches, doors, footwells, sills and inner arches. Check panel gaps and paintwork for accident damage.

#### **SUSPENSION**

Any ST150 should give you a buzz. A test drive is vital. If it's sloppy, clonking or unresponsive, find another car. There are plenty of Fiestas out there, if not necessarily your chosen spec.

#### **EXTERIOR**

Rust isn't a serious concern on the Mk6, but corrosion could be creeping its way around the car, and your gofaster project might become a rust-chasing exercise. Look for bubbles around the wheelarches, notably the rears where they attach to the side skirts. The sills may well be rotting, but it's unlikely you'll see unless you take off the skirts.

If possible, remove the wheelarch liners and shine a torch into the inner wings; muck and moisture gets trapped behind the foam insulation. Left alone, they'll form substantial holes - if they haven't already...

Doors tend to fill with water when the drain holes become blocked, leading to rust forming from inside out. Check the tailgate too, and ensure there's no water leaking into the boot.

Inside the cabin, inspect the front footwells, especially the passenger side; a poorly-sealing pollen filter lets rainwater leak into the car, eventually resulting in a rotten floor.

Tatty ST150s are pretty common, and several are hiding accident damage - so pay attention to poor panel gaps, dodgy paintwork, overspray inside door shuts and unusual creases underneath.

Body colour choices are down to personal preference, although Performance Blue and Frozen White are most desirable; they sometimes fetch a small premium.

Many ST150s were specified with the Exterior Styling Pack of side stripes and over-the-top bonnet/ roof/tailgate stickers. Rare sunroof-equipped STs received only the door decals.

#### CONTACTS

#### MOUNTUNE

www.mountunestore.co.uk

#### SCC PERFORMANCE

www.focusrsparts.co.uk

#### OC MOTORSPORT

www.oc-motorsport.co.uk

#### FIESTA ST OWNERS' CLUB www.fiestastoc.com

FORDFIESTAST.CO.UK

#### www.fordfiestast.co.uk

FIESTA CLUB OF GREAT BRITAIN www.fiestaclubgb.co.uk

#### FIESTA OWNERS' CLUB

www.fiestaownersclub.com





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MODIFYING GUIDE

## MK6 FIESTA ST

With a fantastic chassis and a highly tuneable engine, the Mk6 Fiesta ST offers affordable yet formidable fast Ford fun. Here's how to really exploit the ST150's performance

Words JAMIE / Photos FAST FORD ARCHIVES

he Mk6 Fiesta ST went back to fast Ford roots of sticking a big engine in a little car, stiffening up the chassis, and sending it down the road for some chuckable-yet-useable fun. It really was the XR2 reincarnated in 2000s form.

And, just like the XR2, the chassis underneath can easily cope with more power than the stock 2.0-litre Duratec's 150bhp (hence the ST150 tag). Also, just like the XR2, the engine itself can be coaxed to give significant improvements either in screaming naturally-aspirated guise

or gulping down wads of boost from a forcedinduction conversion. But, because technology improves over time, the rewards on offer from a well-tuned ST150 far outweigh anything Ford's earlier hot hatches could ever hope to muster.

Over the years we've seen plenty of fast-road conversions with around 200bhp combined with sensible chassis and braking upgrades.

In recent years, more ST owners have turned to adding boost to give some quite crazy power figures for a little Fiesta, initially with bolt-on supercharger kits, but latterly with full-blown

big-turbo installations.

And, of course, the Mk6 ST has always been a force to be reckoned with on track, and we've seen plenty of track and full-on race cars embarrass much more powerful machinery on the circuits thanks to an uncompromising and incredibly nimble chassis setup.

Or, like most people, you could combine your perfect blend of all of the above to create an ST that is really unique, fits your needs and reflects your personality perfectly. Here's our guide to modifying the Mk6 Fiesta ST.

#### INTERIOR

The stock half-leather ST seats are comfy and supportive enough for day-to-day use, but for enthusiastic driving and the odd track day you'll want something that can hold you in place a little better.

Mountune fitted a set of Recaro Sportster CS seats (the same as found in the Mk2 Focus RS) to the demo car back in the day (which Fast Ford nicked for a project ST) and they were perfect; comfy enough to use on long journeys, but more than supportive enough for fast-road thrills and a spot of track-day fun. These, with the rear seats deleted and maybe a half-cage, will give an excellent clubsport vibe that



many owners are looking for.

But they are expensive. And seemingly fitted to every modified Ford these days. So, for something a little different, one of the reclining bucket seats from specialists like Corbeau could be the answer. Especially as these allow the use of performance fourpoint harnesses when on track, or the factory threepoint seatbelt for comfort and practicality on the road. Dedicated track and race cars will look to lightweight carbon/Kevlar FIA-approved race seats and matching harnesses, which are often a little too impractical for a regularly driven road car.













#### **TRANSMISSION**

The Mk6 Fiesta ST came fitted with Ford's common IB5 gearbox. It may lack the sixth speed of more modern transmissions, but it's so short-geared you don't really need another. The stock IB5 might not be the slickest 'box Ford ever fitted, but it will cope with most you'll throw its way, especially if sticking with naturallyaspirated tuning.

The ST lacks a limited-slip differential, though. And while the IB5 'box is strong enough, the stock diff has been known to break. And when it breaks it usually disintegrates and takes out the entire gearbox. An uprated limited-slip diff like Quaife's ATB is an ideal solution for most road cars, but track and race cars might prefer a more aggressive plated-type from Gripper or 3J Driveline.

The standard clutch and flywheel are adequate for most power increases up to around 200bhp (providing they're in good health), but for anything more you'll need an upgrade. Helix offers various options: uprated organic for road use, or heavy-duty paddle clutch kits for track and race.

For boosted cars, a beefier gearbox like the MTX-75 is essential. It's not a straight swap, though, and will need modifications to the engine bay, along with a different clutch plate to suit the input shaft. You'll need that limited-slip differential now too.

#### **ENGINE**

The ST's 2.0-litre Duratec is a robust engine, and as long as you keep an eye on the oil levels regularly (it does like a drink) you can get stuck in straight away with the upgrades.

If you want to be sensible, the first upgrade should really be a power steering relocation kit; it won't gain you any power or improve performance but will stop the original setup spitting its PAS fluid all over the engine bay at high revs. And when you start tuning, you'll want higher revs. Some tuners recommend an oil cooler upgrade for similar reasons.

When the car was new, Mountune offered warranty-friendly performance packages in the shape of MP165 and MP185 tuning kits. Complete kits are no longer available, but some of the key components (such as the air filter kit) are.

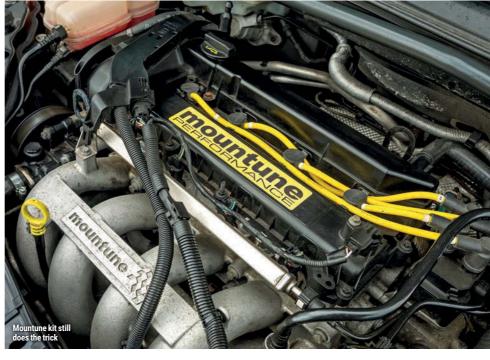
And that's your starting point when tuning the MK6 Fiesta ST: engine breathing. The original airbox is an awkward and unsightly beast, not to mention restrictive. Bin that in favour of a K&N 57i kit, ITG foam induction kit, or the Mountune cold air induction system, and you'll free up some grunt immediately, but more importantly, lay the foundations for things to come.

With fresh air coming in, then it's time to focus on getting the exhaust gases out. Cat-back systems give added audible appeal, but for more meaningful gains a sports cat from Scorpion, Piper or Milltek should be fitted

Add a suitable remap to the mix and you can expect to see around 165-to-170bhp - plus a much more enthusiastic driving experience – from these simple upgrades.

The next step is to fit a set of fast-road cams as Mountune did with the MP185 kit. A tried-and-tested profile is the Cosworth 200-spec camshaft kit; these can be fitted without the need to change valve springs, and will produce up to 200bhp with supporting mods. Other profiles from the likes of Newman Cams and Piper Cams are also available, as are double valve springs for cam kits with very high lift.

For cams like those, you'll be looking at building a high-spec naturally-aspirated engine, and the next restrictions are the inlet manifold and throttle body. Mountune fitted a unique inlet on its top-spec MR200 tuning upgrade for the ST, as did Cosworth with the 200 kit. The former is no longer available new, but replica Cosworth items are available from tuners like



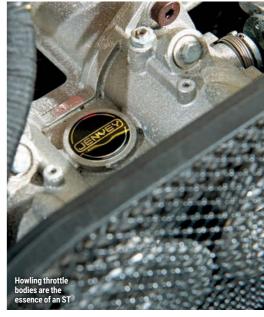
Jamsport and SiCo Developments, while Pumaspeed offers its own similar version.

With a suitable remap, this will take power to around 190/200bhp and is seen as the sweet spot for fast-road, authentic ST tuning. If you're looking to retain some degree of originality, get off here.

But if you're keen to continue the ride, you now face two distinct options: stick with naturally-aspirated tuning or add some boost by way of a supercharger or turbocharger conversion.

Sticking with naturally-aspirated tuning, a set of throttle bodies comes next. Many of these require a stand-alone ECU, but there are kits available that work with the ST's drive-by-wire throttle and can be made to work with a remap on the stock ECU. You'll see over 200bhp, but you're into the realms of diminishing returns and every extra horsepower will become more expensive and time-consuming to extract. That said, with 2.3-litre bottom end, ported and big-valve head, lairy cams and enormous throttle bodies, over 300bhp is possible. This is usually reserved for race cars where 2.0-litre naturally-aspirated regulations are taken to the extreme

An easier (and potentially cheaper) way to reach similar power levels - and beyond - in a road car would be to switch to forced induction.











#### SUSPENSION

Developed by Ford's TeamRS division at the Nürburgring, the Mk6 Fiesta ST has fantastic handling straight out of the box. It's fun, playful and communicative; exactly as a hot hatch should be. It does sit too high, though.

You're unlikely to see many STs with original springs these days, but if yours has then a set of lowering springs from Eibach are the answer; the lower stance not only looks better but it helps performance a little too. The best option is to couple the springs with matched updated dampers; Bilstein's B12 kit has long been a favourite of ours and works exceptionally well on the Mk6 ST.

So well, in fact, for a fast-road car there isn't any real need for coilovers – certainly not budget types that will hinder rather than help performance and ride quality. If you're a track fan you may find that the adjustable settings and stiffer spring rates of a set of a quality coilovers are helpful for perfecting



the handling package; ASTs are said to be the best for the Mk6 ST.

Polyurethane bush upgrades from SuperPro or Powerflex are wise investments to replace worn rubber units and stiffen the chassis. Add a performance rear anti-roll bar from Whiteline, and rear axle spacers at the same time, and you'll have a decent little setup that's capable of keeping up with



most things on track, and then outrunning them on the B-roads on the way home.

Dedicated track and race cars have the option of full roll cages, motorsport-spec rose-jointed suspension components to really stiffen things up, but these are often too much of a compromise for any road car. Air ride has been used to great effect on show cars too.





#### FORCED INDUCTION

While the ST's Duratec engine will make for an excellent, highrevving, throttle-bodied howler capable of delivering over 300bhp without a boost gauge in sight, getting there is neither cheap nor easy. But converting to forced induction is surprisingly simpler than it sounds.

Jamsport launched several bolt-on supercharger kits for the Mk6 ST using centrifugal Rotrex units. A stock Duratec will take 300bhp on standard internals, plus because of the linear nature of boost delivery based on engine speed, these conversions even worked perfectly well on the factory ECU. A supercharger would work on an otherwise stock ST, but best results come when cams, exhaust systems and inlets are added. Even more can be extracted when you throw in some uprated internals and a bigger blower.

Supercharger conversions retain the naturally-aspirated feeling behind the wheel, but for the biggest kick in the backside you can't beat a turbocharger. There are many different routes available, and it's all custom-build stuff so not really an off-the-shelf kind of upgrade. As such, your tuner can work with turbo choice, cam profiles, engine spec, and a whole host of other variables tailored to what you want. Big power is possible, and we've seen STs knocking on the door of 500bhp with well-specced turbo conversions.





#### **EXTERIOR**

The funky styling and chunky arches on the Mk6 Fiesta have something of a retro appeal these days. Despite the Mk6 Fiesta only being a teenager, car designs have changed so much through the 2010s and into the 2020s that the ST has a decidedly old-school feel to its aesthetics. There's no need to

improve on what Ford gave us, other than maybe removing any twin stripes if they were fitted, as they do look dated by modern standards. Lairy kits and massive rear wings are all available, of course, but a more subtle approach with a lowline kit and front splitter is preferred by many.



#### WHEELS AND TYRES

The stock 17in multi-spokes were funky when the ST was launched, but they do look a little dated today. And they're heavy. Very heavy.

In a test Fast Ford conducted a few years ago we weighed the stock alloys and tyres at a whopping 20.87kg each. In the same test, we weighed a similarly sized set of Team Dynamics Pro Race 1.2s with the same tyres, and they tipped the scales at 17.6kg. That's a 12kg reduction. And they say that 1kg of unsprung weight is worth 4kg of chassis weight, which means that's the same as removing a massive 48kg

So, the first thing is to ditch the stock alloys for



something lighter. Many cast alloys offer significant weight savings over stock, but forged alloys will give the biggest gains.

It's also the perfect opportunity to play around with offsets and increase width to fit a fatter tyre. Most road cars stick with 17s or drop to 16s, but most dedicated track and race cars go even smaller to 15in diameter wheels as this is said to give the best handling characteristics on the Mk6.

As for tyres, Toyo's R888R is a firm favourite for track use, but any quality tyre will do. Just don't fit budget rubber and undo all that excellent work on the chassis upgrades.

#### **BRAKES**

Don't be fooled by the seemingly small diameter of the 258mm front brakes; when combined with decent fast-road-compound brake pads, uprated discs, and braided lines they're perfectly adequate for fast road use. In fact, the Fiesta ST Championship used to run them, so they have been proven to work on track too.

There is a cheap and easy upgrade, though: fitting Focus ST170 300mm discs with Mk3 Mondeo callipers. This is a fantastic upgrade that makes a notable difference on a very small budget - they they work even better when uprated discs, pads and lines are used too.

Another in-house upgrade is to use the Brembo four-pot callipers from a Mk1 Focus RS. You'll need suitable brackets, but they'll clear the stock 17in rims when you add a set of wheel spacers. Perhaps the best option, though, is a proper aftermarket big brake kit. There's plenty of options from the usual suspects such as AP Racing, K-Sport and Hi-Spec, offering various diameters; and that's crucial because for a track car you'll want to drop an inch or two on wheel size to optimise handling.

At the rear, there's no need for anything fancy. Simple disc and pad upgrades are often more than you'll ever need, but if you want bigger discs, then fitting the ST170's carriers to the Fiesta callipers allows you to run 270mm rears within the stock wheels.



#### CONTACTS

#### OC MOTORSPORT

www.oc-motorsport.co.uk

#### **BURTON POWER**

www.burtonpower.com

#### MOUNTUNE

www.mountunestore.com

#### **JAMSPORT**

www.jamsportstore.co.uk

#### **PUMASPEED**

pumaspeed.co.uk

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## BOOSTED

ST180s: respect your elders. With 475bhp, this ST150 is a real weapon

Words BEN BIRCH / Photos ADE BRANNAN



W

hen you've been through every imaginable upgrade for your naturally-aspirated ST150 and it's still not fast enough, what's the

next step?

Many would part-exchange it for a Fiesta ST180 or Focus ST, while others might do the unforgivable and buy a Megane or something equally hideous. But a very tiny minority would persevere with their beloved Mk6 Fiesta and throw the kitchen sink at it in the quest for

ridiculous performance.

Adam Ford is that minority. And we mean that literally, because we can't think of anyone else who's gone this far with an ST150.

"I had a Mk6 Fiesta as my first car, and even though it was just a 1.25 I really clicked with it and liked the way it looked and drove. I guess that eventually led to where we are today," Adam reminisces.

As his passion for the Mk6 continued to grow, he developed an obsession with Frozen

White STs, mainly due to looking at pictures on Ford-based internet forums. And although the new ST180 was on the market by then, with its seductive tuning potential and one of the finest hot hatch chassis ever, Adam was hooked on the older-generation platform.

He says, "It looks rawer and driving it is a lot rawer. My brother has a 360bhp ST180 and it's an awesome thing, but my car feels like the last of the old-school analogue hot hatches."

With his dream white ST on the

ENGINE Forged 2.0 Duratec, Newman turbo-spec camshafts (260/380t), ARP main and head studs, K1 rods, Wiseco pistons, Supertech valves, King Racing bearings, Cosworth high-pressure oil pump, copper-shimmed head gasket, ARC sump baffle plate, modified sump for turbo oil return, TTV solid crank pulley, Cosworth inlet manifold, Ferriday 7mm thermal gasket, 60mm throttle body, air-con delete kit, Link G4+ Xtreme ECU, full custom engine wiring loom, Mac three-port boost solenoid, Vibra-Technics upper engine mounts, coil-on-plug conversion, custom coil mounting bracket, modified aluminium cam cover, modified OBP oil catch tank, oil breather lines in AN10 fittings, Airtec billet PCV baffle plate, Walbro 255lph uprated in-tank fuel pump, Sico billet fuel rail, Racinglines swirl pot, Bosch 044 in-tank swirl pot pump, all fuel hoses in AN6 fittings, Turbosmart FPR, 875cc Siemens injectors, Racinglines oil filter housing plate, 13-row Setrab oil cooler, Torques sandwich plate, AIM oil temp sensor, AIM oil pressure sensor, Airtec radiator, Airtec intercooler, custom stainless sidewinder exhaust manifold (V-band), screamer pipe, Turbosmart Gen-V 40mm comp gate wastegate, Turbosmart Gen-V race port, Garrett GTX2867R Gen2 turbo with Tial housing (V-band), full custom 3in exhaust, custom 2.5in aluminium solid boost pipes, Murray constant tension clamps, Vibrant air filter, oil feed hose in AN4 fittings, turbo water feed/return in AN6 fittings, JS Performance silicone hoses (radiator, auxiliary, boost pipe joiners), all vacuum lines in AN3 fittings, all hoses in Racinglines heat/fire sleeve where necessary

POWER 475bhp; 350lb.ft

TRANSMISSION Custom gearstick mount and risers, MTX-75 gearbox conversion, ARC MTX-75 upper and lower gearbox mounts, TTV Racing lightweight flywheel, TTV Racing five-paddle clutch, TTV Racing pressure plate, Kaaz plated differential, Pro-line braided clutch hose

SUSPENSION BC Racing coilovers, Whiteline rear anti-roll bar, custom front strut brace, power steering system relocated, modified OBP power steering reservoir, all power steering system converted to AN6

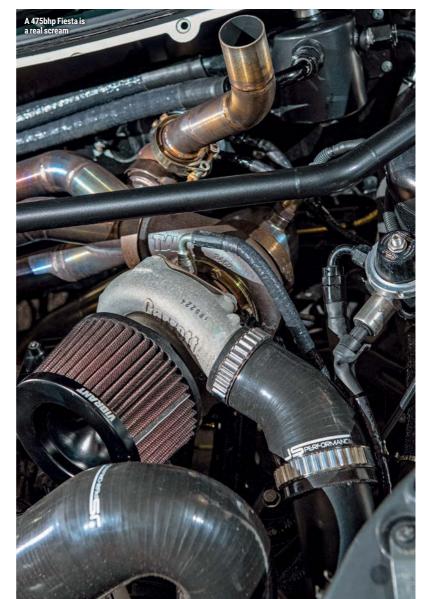
BRAKES Front: AP Racing four-pot callipers and 330mm discs: rear: 280mm upgrade: AP Racing bias valve, ABS delete kit, complete brake system in Hel braided hoses and stainless fittings, brake servo hose in AN8 fittings

WHEELS & TYRES 7x16in Pro Race 1.2 wheels and 195/45R16 Michelin Pilot Sport 3 tyres, TPI knurled wheel nuts, Anembo rear 20mm billet wheel spacers

EXTERIOR DMB gel badge overlays, DMB legal sticker number plate, vinyl-wrapped roof, mirrors and sun strip, painted plastics, TRC bonnet lip, TRC front splitters, TRC side skirt splitters, TRC rear diffuser, Team Heko wind deflectors, quick-release front bumper, light window tints on rear, bonnet AeroCatches, NB Styling bonnet struts, shortened aerial, all LED lights

INTERIOR OMP seat subframes, Corbeau bucket seats, OMP 3in harnesses, OMP 330mm Targa steering wheel, NRG short hub and quick-release boss, rear seats removed, interior partially stripped, flocked dash, battery relocated to the boot, Odyssey PC680 race battery, OBP battery bracket, AEM AFR gauge, SAP Design oil temperature and pressure gauge, Turbosmart boost gauge, AIM MXS digital dash, custom dash switch plate (anti-lag, launch, traction, map selection)











#### "I BEAT THE LIVING DAYLIGHTS OUT OF IT EVERY SINGLE DAY FOR A LONG TIME, THEN ONE DAY I WAS KICKING ITS HEAD IN AND IT DROPPED TO THREE CYLINDERS BEFORE COMPLETELY DYING. IT SOUNDED LIKE A SICK SUBARU"

driveway, it was treated immediately to a set of lowering springs, and quickly became a regular drainer of Adam's bank account.

"As soon as I had money, I'd buy parts for it. I didn't really have an end goal as there weren't many big ST builds out there, but I did know that I wanted to go faster," he laughs.

The first jump in power was to 165bhp, consisting of an induction kit and exhaust flexi pipe. Before long, this was raised to 185bhp with some aftermarket cams, and the ultimate naturally-aspirated incarnation was achieved with a proper Cosworth inlet manifold and Mountune map, giving the car a solid 200bhp.

But it was still not enough for Adam, as he shares a common story of butt-dyno desensitisation: "You could feel every stage, but I always got used to the power quickly. Plus the car was fitted with BC coilovers by then, so it was handling on rails and became very obvious it could handle much more power."

This perception of being underpowered is

probably the biggest and most common gripe with the ST150, but luckily there was a solution because after many years of playing with and racing them, Jamsport had developed a supercharger kit.

Adam says, "Jamie at Jamsport was known as one of the best tuners for the Ford ECU, and he did all the brackets for a neat Rotrex install, so I left the car with him and picked it up a few weeks later with an extra 130bhp."

This was a pure bolt-on conversion with no modifications to the standard engine itself, and Adam absolutely loved the end result.

He says, "I beat the living daylights out of it every single day for a long time, then one day I was kicking its head in as usual and it dropped to three cylinders before completely dying. It sounded like a very sick Subaru."

Rather than being upset, Adam viewed this as an opportunity to rebuild the engine with better components and get his next adrenaline hit.

He says, "It was time to forge the engine.









I thought 'if I'm forging it I might as well go big power'. It just goes like that, doesn't it."

One company was making a TD04 turbo kit at the time, but this would have given the Fiesta around the same power as his supercharger, so Adam started to look for a custom option with a bit more headroom.

"Word of mouth led me to Elliott at Unit 10 Performance," says Adam as he points to the purposeful-looking engine bay. "He has a great reputation for one-off fabrication, and he ended up hand-crafting the exhaust manifold, screamer, downpipe, boost pipes and pretty much everything needed to fit the GTX turbo."

In parallel, Mikey at Pumabuild was building the forged engine, mating it up to a much stronger MTX-75 gearbox and getting it into the engine bay before DWR Performance made a custom wiring loom for a Link ECU.

If that all sounds a bit easy, it's because it was. No real snags were hit, which is testament to all of the companies involved and their skill. The only pain was having to wait for parts to arrive from various manufacturers. In all, the car was off the road for 18 months, but boy was it worth the wait.

"I only wanted 350bhp, and after DWR mapped it we ended up with 475bhp and 350lb.ft of torque at 1.5-bar of boost. Third-gear pulls are just insane. It can scare me on the road, so that's why I decided to use it more as a track day car," Adam says.

The transformation from road rocket to









track weapon started with Adam spending days scraping off the sound deadening, not only shedding weight in the process but also revealing rally-car-reminiscent bright white paint throughout the interior. He continued the theme by chopping the dash to lose even more weight and ditching the heater. But it's still got a heated front screen, so even if he's freezing cold, Adam will still be able to see the apex.

A roll cage and bucket seats with harnesses completed the interior upgrades, and the mechanicals received a bit of rethinking too.

"I used to have a Quaife diff, which was okay for the road, but I was advised to go for a platedtype LSD for the track, and the improvement was as comparable as going from the open diff to the Quaife. You can really feel this Kaaz one working," Adam explains.

New AP Racing front callipers with 315mm discs were squeezed under the 16s, joined at the rear by 280mm ST170 discs, made achievable by using ST170 carriers with the standard ST150 callipers. Everything is all properly fitted and set up, the brake bias valve giving Adam the ability to adjust front and rear braking balance on the move. AN fittings and fluid lines run through the car and engine bay as neatly as you'd find in a touring car.

This motorsport-style attention to detail continues on the outside, with a quick-release front bumper and splitters dotted around courtesy of TRC. It's a no-nonsense exterior - a very serious-looking package to the trained eye but an innocent Fiesta to the untrained, which has brought a fair share of embarrassment to more expensive machinery.

Adam says, "I like it that way. I like surprising people. Anyone could beat me off the line, but once it's rolling it's pretty devastating."

As you can tell, this stage of the car's evolution really thrills Adam. He wants to change the suspension and get some adjustability into the chassis for track work, and there is also a small mention that if he sleeves the block and turns the boost up to 2.2bar, this thing could hit 550bhp. Yes, really...

But does that mean Adam's bored again, even with a 450bhp-per-ton ST?!

"Actually, no," he admits. "I've had it for over a year at this power level and I'm not bored yet, which given the amount of different phases it's been through is a miracle.

"I actually enjoyed my journey through all of the different tuning levels, but if someone asks me if turbocharging is the way to go with an ST150 from day one, I'd say go for it - one drive, and you'll be hooked."





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#### FEATURES:-

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The ST badge was never better than when applied to Ford's feisty Fiesta. As each generation proved, the sporty tearaway had become an all-time great hot hatch

Words DAN WILLIAMSON & JAMIE KING / Photos FORD UK & FAST FORD ARCHIVES

## MK6

#### MK6 FIESTA ST(150)

Until the Fiesta ST arrived in winter 2004. you could have been forgiven for thinking the brand stood for Subtly Tuned.

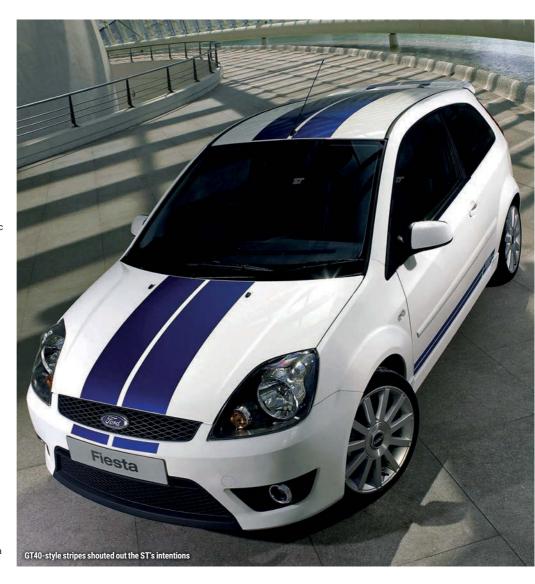
But not any more, because the baby ST blasted onto the hot-hatch scene with lively performance, chuckable handling and funky styling - including the option of bold GT40type stripes over the bonnet and roof.

The fiery new Fiesta was TeamRS's first production car, packing a 150PS/148bhp (earning an ST150 nickname) 2.0-litre Duratec engine with a variable intake and sports exhaust. It might not be much by modern ST standards, but the naturally-aspirated motor produced bags of torque, while its uprated five-speed gearbox - with lightened flywheel and quickshift - meant 0-to-60mph in 7.9 seconds and 129mph top speed.

The suspension was lowered and stiffened, the brakes were upgraded to allround discs (including ST170 front callipers), and it rolled on sexy 17in multi-spoke alloys. The ST's chunky bodykit included bumpers, skirts and roof spoiler, while the cabin received funky half-leather trim and sports steering wheel.

November 2005 brought a mild facelift, adding soft-feel dashboard, trip computer and goggle-eyed headlights. Then, in April 2008, the UK-only ST500 arrived as a run-out special edition, before the Fiesta Mk6 was axed in July.

But it would be another few years before the next Fiesta ST arrived, leaving the ST150 to hold the reins as the best small Ford. Entertaining to drive and so simple to tune (even Ford offered official Mountune packages), the Fiesta ST150 was everything a fast Ford should be.







### **FIESTA ST500**

Like the normal Fiesta ST, the Fiesta ST500  $\,$ currently lives under the shadow of its Focus big brother, but that shouldn't detract from this special-edition Fiesta.

The ST500 was limited to a run of 500, for British buyers only. It was also finished in Panther Black metallic paint with silver stripes - this time designed to echo the Mk1 Escort RS2000, with U-shaped bonnet graphics and matching side livery.

The Fiesta ST500 gained black 11-spoke 17in alloys covering red-painted brake callipers, plus carbon-fibre-effect interior trim, ebony heated leather seats and Sony sound system.

As with the standard Fiesta ST, the ST500 featured the tuned 148bhp 2.0-litre Duratec engine with sports exhaust, close-ratio gearbox, plus lowered and stiffened sports suspension.

As a run-out limited-edition model, the Fiesta ST500 was one of Ford's finest.





### VITAL STATS

MADE BETWEEN 2004 and 2009

**POWER** 148bhp @ 6000rpm

**TORQUE** 140lb.ft @ 4500rpm

TOP SPEED 129mph **0-60MPH** 7.9 seconds



### MK7

### MK7 FIESTA ST(180)

Simply terrific - the ST badge finally evolved into a brand to beat all others thanks to the Mk7 Fiesta, which managed to be not just the finest small Ford, but in ST guise the greatest car in its class.

Dubbed ST180 due to its 180bhp (182PS) powerplant, the 1.6-litre EcoBoost could actually boast 197bhp from a 15-second overboost under full throttle. Its disappointing-sounding 0-to-62mph time of 6.9 seconds told only half the story, because the ST180 also enhanced the Fiesta Mk7's supple chassis with lowered suspension, an uprated rear beam, sharper steering and a so-called torque vectoring system, which deftly mimicked a limited-slip differential. It was all about the fun.

The award-winning handling was the work of Ford TeamRS, who'd designed the ST to be a full-on driver's car. Yet it looked great too: there were sexy 17in alloys stuffed beneath its three-door bodywork, enhanced by spoilers, mesh grille and a selection of funky colour schemes - including Race Red, Spirit Blue and Molten Orange. Its cockpit was equally sporty, featuring Recaro seats and ST goodies.

At its launch in January 2013, there were two trim levels: basic ST-1 with plain upholstery, or ST-2 wearing part-leather trim. An ST-3 was added to the line-up in March 2014, gaining keyless entry, sat nav and cruise control.

July 2016 brought the 197bhp ST200, followed in September by UK availability of five-door ST-2s and ST-3s (previously offered in USA), plus ST200-spec suspension settings throughout the range.

Ultra-reliable, cheap to run and begging to be modified - capable of 300bhp-plus on stock internals - the ST180 is surely the perfect hot hatch.







### FIESTA ST M-SPORT EDITION

Not officially a Ford product, but one of the rarest and sportiest Fiestas ever built was the M-Sport Edition. Based on the entry-level ST-1 in either Frozen White or Spirit Blue (at a £245 premium), the M-Sport Edition sprinkled some WRC magic onto a road car. Power was increased to 197bhp (212bhp on overboost) via Mountune's fully-warrantied MP215 package, while a Quaife ATB diff meant all of that power could be fully utilised. The OZ 17in alloys, funky new WRC-style rear spoiler and custom M-Sport graphics gave it rally-car kerb appeal. Buyers could add even more spec too: Eibach lowering springs, Alcon big brakes, M-Sport induction kit, and a Chris Tullett Exhausts rear box were all on the options list. And, as nice touch, M-Sport's Malcolm Wilson personally signed each car, his signature found under the sunvisor.













### FIESTA ST200

To celebrate the Fiesta's 40th anniversary, Ford launched a special-edition ST200 model of the Fiesta ST in 2016. Initially planned as a limited run of 400, but later increased due to early demand (over 1000 were built), the ST200 took a top-spec ST-3 model and added unique Storm Grey paint and an exclusive set of different-colour alloys.

Based on the later Mk7 ST, the ST200 featured softer rear springs, softer anti-roll bars, stiffer rear beam and stiffer front springs compared with the first regular STs (which were, in fact, the same as all postautumn 2015 models).

The ST200 did benefit from increased performance over the regular ST, though, mainly thanks to a power increase from 180bhp to 197bhp (now 212bhp on overboost) by using a similar upgrade to Mountune's MP215 kit. It is possible to give a regular ST the same levels of kit and performance as the ST200, but that unique colour and limited production run means the final fast Mk7 will always be a sought-after fast Ford.

### VITAL STATS

MADE BETWEEN 2013 and 2018

**POWER** 180bhp @ 5700rpm (ST200: 197bhp)

**TORQUE** 177lb.ft @ 5000rpm (ST200: 214lb.ft)

TOP SPEED 137mph (ST200: 143mph)

0-62MPH 6.9 seconds (ST200: 6.7 seconds)



## MK8

### MK8 FIESTA ST(200)

Replacing a world-beating high-performer would never be easy, so when Ford announced the Mk7 ST would be superseded by a three-cylinder Fiesta, hothatch lovers were in panic.

But they had no need to worry, because the Mk8 ST of May 2018 didn't just equal its amazing ancestor, it managed to do everything even better.

While its EcoBoost engine had lost a cylinder and dropped 100cc, it produced more power and torque, meaning improved performance: 0-to-62mph in just 6.5 seconds.

Most importantly, the Mk8 remained top-rate fun and truly great to drive – being taut, agile and immensely grin-inducing; even the exhaust note rumbled and crackled like a rally weapon. The chassis featured funky self-adjusting dampers and so-called force-vectoring springs, quicker steering with bespoke knuckles, and uprated brakes.

From the driver's seat, it was noticeably better quality, and the latest gadgets included selectable drive modes (Normal, Sport and Track) and adjustable ESC stability control. The initial line-up included ST-1 with Recaro seats, SYNC3 and 17in alloys; ST-2 gaining rear privacy glass and heated Recaros with blue detailing; and ST-3 adding 18in rims, red callipers, leather trim, keyless entry, driver assistance pack and upgraded sound system.

There' was also an optional Performance Pack (later made standard on the ST-3), featuring a proper Quaife ATB limited-slip diff and launch control with dashboard display.

The ST was offered as a three- or five-door, although the ST-1 was soon deleted. A series of special editions (based only on the three-door), followed by a restyled front end arriving for 2022, said there was more to come from this sensational ST.

But not for much longer. After 46 years, Ford stopped making the three-door Fiesta in 2022. At the time of writing, you can still order a Fiesta ST as a five-door, which continues production for the time being. But with the big switch to all-electric looming, it won't be long before the Fiesta in general, and the ever-impressive ST models, will be no more.













### **FACELIFT 2022 MODEL**

Arriving in 2022, the facelifted Mk8 Fiesta ST (dubbed Mk8.5 by fans) featured a fresh exterior design that incorporated a more aggressive fascia appearance with honeycomb upper and lower grilles alongside large lower side vents.

The upper grille and side vents were now finished in distinctive Chrystaline Grey, and the aero-optimised lower lip spoiler, side skirts, rear hatch spoiler and rear diffuser were finished in body colour. And those colour charts included a new entry: Mean Green, the eye-catching signature colour previously seen on the Puma ST.

Standard 17in or optional 18in alloy wheels featured a dark Magnetite finish, while on the inside new Performance Seats replaced the previous Recaros: Ford said the new seats had been developed specifically to provide even greater support for drivers during high-performance driving and comfort on the road. An integrated headrest and 14-way adjustment helped drivers find their ultimate driving position, with distinctive red contrast stitching and Sensico trim for a premium feel

Also in the cabin, a flat-bottomed sports steering wheel and a matt carbon-effect finish with red detailing added further sporty character.

Peak torque increased to 320Nm (236lb.ft) to match the Puma ST, but peak power, performance figures, and the rest of the spec remained the same as the previous model.













performance models like the Mk3 Focus RS, the regular Fiesta ST was supplemented by a series of special editions.

First was the Performance Edition in 2019, costing £26,285; finished in Deep Orange, the model added the Quaife ATB previously available as an option, adjustable coilover suspension and new ten-spoke 18in lightweight alloy wheels. Production was limited to just 600 cars.

The Performance Edition was followed by the ST Edition in 2020, costing slightly more at £27,080. The car wore the same performance upgrades as the orange ST but was now finished in Azura Blue, with production limited even further to just 300 cars.





### VITAL STATS

MADE BETWEEN 2018 onwards

**POWER** 197bhp @ 6000rpm

**TORQUE** 214lb.ft @ 1600-4000rpm (236lb.ft on facelift models)

TOP SPEED 143mph

0-62MPH 6.5 seconds



e're eternally thankful there are people who are willing to push boundaries when it comes to tuning. It's undoubtedly helped to support Ford's legendary brand for many years, and we're glad to see it's still occurring.

The owner of this Fiesta is Craig Howard, and he's one of those inspirational people willing to

go that bit further; with the help of Sitech Racing he's turned his ST180 into the most powerful in the UK. Boasting over 500bhp, this pocket rocket runs a setup unlike any other to ensure it's equally at home on the road, racetrack or drag strip.

This isn't the first time Craig has appeared in a magazine, as you may remember his car from

his Fast Ford feature back in April 2021. To bring us up to speed, Craig bought the car in 2019 as a completely standard example and wasted no time making relatively small changes, such as an exhaust, induction kit and a remap. But over the next two years it was transformed into a monster, pushing over 400bhp through the standard engine.



Even then, Craig was chasing a 500bhp figure using the same engine combo, but that didn't quite go to plan.

He groans, "Since my last feature the 405hp engine on the stock internals blew up in spectacular fashion. The old engine let go after around 8000 miles, sending a rod through the front and back of the block. You could literally

see through it, and the metal pinging under the chassis sounded like I had won the jackpot on a fruit machine."

Pushing over 400bhp from relatively simple modifications was a hugely impressive feat and highlighted there was much more to come with stronger internals, which shaped the direction for the new build.

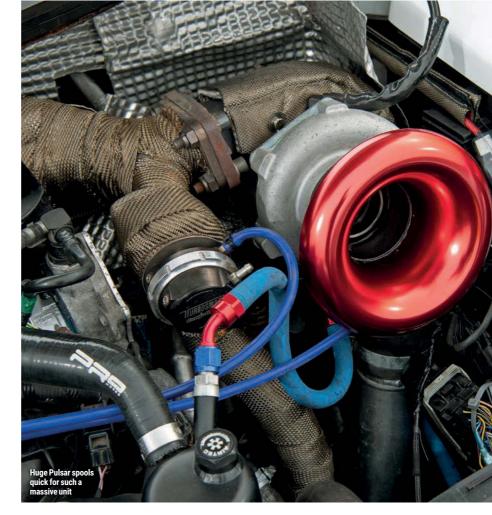
Craig explains, "I was amazed so few modifications made such a big difference to the power and feel of the car that it made me think where I could get this to, and ultimately wanting to build the most powerful ST180 in the country."

With a clear goal in mind, the new engine would raise the bar for EcoBoost tuning,

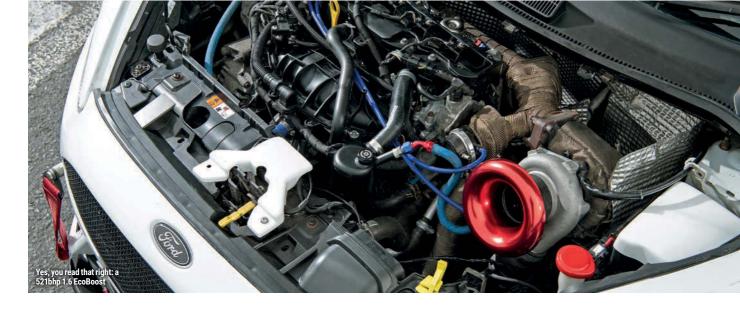
### MK7 FIESTA ST















### "IT HITS HARDER ALL THE WAY TO 8000RPM. I HAVE HAD SOME MEGA-POWERED CARS IN MY LIFE, BUT THIS IS LIKE NOTHING ELSE. YOU **REALLY MUST HAVE YOUR WITS ABOUT YOU** WHEN YOU STAB THE ACCELERATOR"

and boldly venturing where no one had been before meant it was important to approach the task in the right way. That meant carefully selecting the right specification, choosing the best parts for the job and having a trusted team on board.

Craig says, "Everything has been done by Sitech Racing. It's down to them and their direction that made it possible. I have full trust in what they advised, and they developed and fabricated various custom parts for the build. The development and hours they put into the project, together with their knowledge and skill. are unreal."

The new build centres around a 1.6-litre linered block fitted with a girdle for improved strength, along with custom pistons, steel rods and a heavily reworked head. With a huge Pulsar PTX3071 turbo to deliver the boost, and plenty of tricks for cooling and heat management, the result so far is an insane 521bhp and 342lb.ft of torque, meaning Craig

firmly accomplished his aim.

He beams, "It was a big target to aim for, and I wasn't going to stop until we did it. We are really pushing the boundaries here and these are new limits, but Simon and Nik developed the car meticulously, looking at what did and didn't work to ensure the car got to this point without any problems."

Since the old engine's demise, it's taken just seven months to get it to where it is. Yet Craig reports there's still more to come, as it's constantly developing. That largely relates to the ECU calibration, as one of the biggest changes to the car was the management. It now runs a Syvecs setup, which allows easier control over the engine.

It was well worth it, according to Craig: "It's been a game changer as it's customisable in every aspect. The anti-lag, launch control and flat shift are epic; it's really unlocked the car's full potential. There is so much that you can do with it, but it takes time to get the very best

### MK7 FIESTA ST

ENGINE 1596cc EcoBoost, Ductile-linered block with Darton Sleeves liners, Sitech Racing block girdle, Sitech Racing forged pistons, K1 steel rods, King Bearings, lightened crankshaft, ARP head bolts, Sitech Racing ported and flowed cylinder head, Sitech Racing valves and titanium valve springs, Sitech Racing Insanity Race cams, Syvecs S8 GDI ECU, Pulsar PTX3071 turbo, Levels Racing titanium turbo blanket, sidewinder-style exhaust manifold, titanium heat-wrapped, Turbosmart external wastegate, Funk Motorsport wastegate blanket, custom screamer pipe (titanium heat-wrapped), 4-bar MAP sensor, Sitech Racing custom fuel pump, Bosch injectors, 3in turbo hard pipe kit, braided oil lines, baffled sump, Pro Alloy competition intercooler, Laird Performance Outlaw Yakuza 3in exhaust, Laird Performance Outlaw de-cat, Auto Specialists oil catch can, JWR torque mount, VibraTechnics engine mounts

POWER 521bhp and 342lb.ft

TRANSMISSION Fiesta ST Getrag Ford Durashift B6 six-speed, dual-mass flywheel, Competition Clutch Stage 3 organic clutch, SiCo Developments short-shift

SUSPENSION BC Racing BR Series coilovers with uprated 10kg front and 8kg rear springs, fitted with polyurethane bushes throughout

BRAKES Front: Fiesta ST callipers with 278x23mm discs, PBS Pro Race pads and Goodridge brake lines; rear: Fiesta ST callipers with 253x10mm discs, PBS Pro Race pads and Goodridge brake lines, Motul 660RBF Fluid

WHEELS & TYRES Road: 7x15in Speedline 2118 wheels, 4x108, ET38 with 195/50/15 Nankang NS2-R tyres; track: 7x15in Team Dynamics 1.2, 4x108, ET35 with 195/50/15 Yokohama A048

**EXTERIOR** Sitech Racing wrap by Evolution Customs, Zunsport grille, TRC splitter, side skirts and rear spats, Maxton Design diffuser, MGC rear wing, TRS tow strap

INTERIOR OMP TRS-E bucket seats, TRS six-point harnesses, OMP detachable steering wheel, Syvecs Toucan display, M-Tech Engineering/Sitech Racing gearknob, BAF Motorsport K-Brace, Turbosmart vent boost gauge, JC Clubsport false floor

results and the car has been built with obtaining a few records in mind."

The ECU has also helped make the car more usable and is part of the reason why, despite the large gains since the last build, it still remains very driveable.

Craig confirms, "It's night and day different with the new setup. The response for such a big turbo was a concern but it spools just as quick as the last setup and hits harder all the way to 8000rpm. I have had some mega-powered cars in my life, but this is like nothing else. You really must have your wits about you when you stab the accelerator."

In his last feature Craig revealed his plans for the future, which included venturing out on track days and improving the suspension, all of which he's ticked off. Now fitted with a set of coilovers, the exterior has also seen a makeover, having gone from a simple sleeper to a bolder look, thanks largely to the wrap.

He says, "I managed to get a few track days in at Knockhill and at Ford Fair last year, and it goes great on track. The car has also changed a lot in the way it looks, as it's now cared for and sponsored by Sitech Racing."

There are only a few changes in mind for the current build, including a custom plenum to allow more flow, along with a larger throttle body from a Focus RS. There's also talk of adding water meth injection as a cooling aid, but that's all relatively minor considering the larger plans on the horizon for the next phase of the build.

"Now I have achieved what I wanted, I have a really wild idea in mind for next year, which includes a bigger-displacement engine, four-wheel drive and a four-figure brake horsepower figure, but that's all you are getting for now," he reveals.

We know Craig is one of those people who likes to push boundaries, so when he tells us something like that, we can be sure to see him again in the pages of a magazine.

























### BUYING GUIDE

## FIESTA ST180

Move aside, GTi: Ford's Fiesta Mk7 ST180 is the finest small hatch in history, tearing up racetracks and B-roads with terrific performance, brilliant reliability, an affordable price and immense tuneability. Here's how to buy the perfect pocket rocket

Words DAN WILLIAMSON / Photos FAST FORD ARCHIVES

### WHY YOU WANT ONE...

- You want fun, yeah? There's simply nothing else in this price bracket that will give you grins like an ST180, waving a back wheel at French contenders left trailing behind.
- Reliability and durability are almost flawless whether you're on track days or shopping trips, the Mk7 ST won't let you down.
- Tuning an ST180 is so easy and safe that it's an embarrassment to other EcoBoost engines. Figures of 400bhp aren't unheard of on standard internals.

### WHY YOU DON'T...

- Ride quality is a typical criticism, but what do you expect in a car that handles this well? Besides, top-quality lowering springs tend to improve comfort.
- ST180's image is slightly tarnished by youngsters in Fiestas popping and banging outside McDonald's.
- Bad modifications can take their toll on the 1.6 EcoBoost; some unscrupulous tuners will install overly-aggressive maps, resulting in severe engine trouble.

### **HOW MUCH TO PAY**

### PROJECT: £3500 TO £6000

Repaired write-offs are cheapest, but you might find a tidy high-miler (100k-plus) with a private seller or an abused ex-lease car at the top end of budget. It's a buyer's market.

### GOOD: £6000 TO £12,000

Average 14/15-plate Fiestas with 40-50.000 miles are up for £8-10,000, with high-mileage cars creeping down proportionately; a 16/17-plate may be £10-12k (or less if welltravelled).as will well-modified machines of the same age - perfect if you trust the tuner.

### CONCOURS: £12,000 TO £15,000

ST200s are at the top of this bracket, with five-doors and most sub-30,000-milers making strong money, but beware of silly mark-ups. Genuine M-Sport editions (only 21 exist) are still making figures of £20,000-plus.

### **IDENTITY**

ST180s are adored by sticky-fingered scum, so your first job is to ensure the car you're buying isn't nicked. Invest in a proper history check (not the cheapest phone app you can find), ensuring it covers stolen cars, write-offs and outstanding finance - all ultra-relevant when it comes to any ST.

Take an OBDII code reader, and check the VIN on the logbook matches the car's ECU. It should correspond with a tag at the left-hand-side of the dashboard (visible through the windscreen), stamped into the floor between the driver's seat and pedals (under the mat), and on a sticker on the driver's-side B-pillar: it should clearly display whether it's an ST-1, ST-2, ST-3 or ST200 (which will read ST LIMITED EDN.). It will also include details of the car's paint colour and interior trim.

digits of its VIN. You'll find it on the V5 and also stamped into the engine block at the gearbox side, just in front of the starter motor. If it doesn't tally, there could be a legitimate reason - such as engine failure - but ask questions.

An OBDII relocation kit is a great start, while an aftermarket alarm and separate immobiliser will give you peace of mind.

### VITAL STATS

MADE BETWEEN 2013 and 2017

PRICE WHEN NEW £16.995 (ST-1)

**POWER** 180bhp @ 5700rpm (ST200: 197bhp)

TOROUE 177lb.ft @ 4000rpm (ST200: 214lb.ft)

TOP SPEED 139mph (ST200: 143mph)

**0-60MPH** 6.9 seconds (ST200: 6.7 seconds)



### INTERIOR

You don't expect any little Ford to be a premium product, so forgive the ST180 if its cabin feels flimsy. Listen for rattles from the dashboard and instruments, clattering from the door cards, and the A- and B-pillar trims sounding like they're falling off; fix them back into place with foam pads. Squeaking from the clutch pedal is cured with WD-40. Front seats that won't tip forward have probably had the cable pop off internally, but a replacement cable may be needed.

The trim is pretty hard-wearing, and tatty upholstery or worn-out seats are signs to avoid. Basic ST-1s had plain charcoal-coloured Recaros, with regular air conditioning, DAB radio and a heated windscreen. ST-2s added heated partial-leather seats (Molten Orange highlights were available with Panther Black, Frozen White or Molten Orange bodywork), Power Start button, privacy glass and LED DRLs. The ST-3 gained cruise control, climate control, keyless entry, auto headlights, rain-sensitive wipers, Powerfold mirrors and sat nav. An ST-2 with Convenience Pack should have keyless entry and Powerfold mirrors. A Style Pack should have illuminated scuff plates.

All ST200s were based on ST-3 Style Pack specification but added charcoal Recaros with silver detailing, seat belts with silver stitching, and fasciamounted ST200 badge. It also included rear parking sensors, reversing camera and central rear headrest, which were optional on lesser STs.

DAB radios in early (pre-2014) cars were known for



failure, requiring complete replacement. The SYNC system is also prone to playing up and failing to pair via Bluetooth, which is often cured by a software update or a fuse-out reboot. Some owners even discover it works better after reading the manual..

Test all the gadgets work property, especially the heated seats, sat nav and funky functions offered via the display menu, such as ambient lighting and rain-sensitive wipers. Press all the window switches, heater controls and locks to ensure they're operational. They could be pricey to put right.

All Mk7s tend to leak rainwater into the boot, notably from the tailgate hinges or back lights. Check for puddles of water in the spare wheel well, and make sure the tailgate release button still works.



### **HISTORY**

### JULY 2008

Fiesta Mk7 launched, with production beginning at Cologne, Germany, in August and UK deliveries beginning in October. Zetec S is lukewarm sporting option.

### SEPTEMBER 2011

Fiesta ST debuts at Frankfurt motor show, boasting so-called torque vectoring system, tested at the Nürburgring and engineered to emulate a limited-slip differential.

### **NOVEMBER 2012**

Facelifted Fiesta Mk7 (aka Mk7.5) introduced, with redesigned bonnet and headlamps, trapezoidal grille and revised tail lights.

### **JANUARY 2013**

Fiesta ST launched, nicknamed ST180 thanks to 180bhp 1.6-litre EcoBoost engine. Specification includes uprated suspension, modified steering. 17in alloys, ST bodykit. Three-door bodywork only, but American-market (Mexican-built) STs have five-door body. Trim levels are ST-1 with plain upholstery; ST-2 with part-leather trim and LED daytime-running lights.

### **FEBRUARY 2013**

Fiesta ST production begins at Cologne, Germany.

### **JULY 2013**

Ford offers official Mountune 197bhp upgrade via 120 Ford dealers, priced £599 and covered by factory warranty.

### **APRIL 2014**

Fiesta ST-3 joins range, adding sat nav, cruise control, automatic headlights and rain-sensing wipers. All STs receive revised alloy pedals.

### **SEPTEMBER 2015**

LED rear lights now fitted to all Fiesta

### JIII Y 2016

Fiesta ST200 special edition released, produced in run of 1003 for UK. Based on ST-3 but with 197bhp, 236lb.ft, lowered final drive ratio (4.06:1), Storm Grey paintwork, matt black alloys. All Fiesta STs receive revised suspension

### **SEPTEMBER 2016**

Five-door ST-2s and ST-3s on sale in UK.

Fiesta Mk7 discontinued and replaced by Mk8, with a new Fiesta ST arriving in 2018. Total of Mk7 ST UK registrations: 30.625.

### **ENGINE**

Ignore all the EcoBoom nonsense you hear about - the ST180's 1.6-litre version is virtually bombproof. Collins Performance says forged internals are needed for 350bhp-plus, although some folk take their chances with 400bhp on a stock motor

Engine failure is rare but not impossible. Some ST180s (especially modified) have had worn crankshaft bearings; listen for knocking at 3-4000rpm under load, especially when warm. Repair means a whole new bottom end.

Abuse from cold or poor servicing may be to blame, and EcoBoosts hate being run low on oil. Ensure the servicing has been kept up-to-date, with oil changes every 12,500 miles and a cambelt swap at 125,000 miles; the water pump should be renewed at the same time because they sometimes leak and allow the engine to overheat.

Some ST180s have also overheated showing symptoms of cracked head or head gasket failure - due to sticking thermostat valves or shattered pipework between the header tank and head or turbo. On early STs, the pipework was plastic and could break easily, allowing coolant to escape and damage the engine, with little or no warning. Ford issued a recall in March 2017 for STs built prior to 20 December 2014 to receive updated rubber pipework and a new header tank with level sensor (as found in the Mk8 ST). Most affected Mk7s now have this setup, but check before buying. Even new header tanks can split around the cap, causing overheating; luckily, a new tank is only £40.

Beware of poor performance and heavy fuel consumption, which has a variety of causes. Often it's the high-pressure fuel pump bucket, which may be rattling. It's cheap to fix, but if not replaced could also lead to worn camshafts; look out for black smoke from the exhaust. The fuel pressure should be 170-to-200-bar, but tired or high-mileage cars can drop to 80.

Poor running could also be from a cracked sound symposer or failed MAP sensor; a diagnostic code suggests an airflow correlation fault, and people try boost pipes, MAFs and so on, but it's usually the lower of the two MAPs - pricey from Ford but Collins supplies £30 Bosch equivalents.

If running flat and making a loud induction roar, the cause could be a flipped fuel vapour valve; it's a cheap standard Fiesta part.

Modified STs can be awesome, but overlyaggressive maps can shorten the engine's life. Beware of tuned cars unless you see receipts from respected tuners. You might like popping and banging maps, but they can damage the catalytic converter if poorly executed - not to mention your neighbours' patience...

Collins advises keeping the original spark plugs unless mapped for different gaps. Aftermarket dump valves generally don't perform well on the ST180 (the stock electronic valve works perfectly, although it can become weak and leak) and many induction kits have mis-sized airflow sensor housings, which cause the car to run lean or rich.

Be cautious of STs that have been modified and returned to standard - check for a de-cat.











### **TRANSMISSION**

Six-speed Getrag B6 gearbox is ultra-tough, and will cope with loads of abuse. Even the standard AP clutch will take 340bhp without complaint, although several (stock) have failed at random.

Some early Mk7s experienced clutch or gearbox failure that was rectified under warranty, but keep your ears open for whining under load at low revs, which goes away when coasting. Listen, too, for clicking from CV joints or leaky driveshaft gaiters and grinding noises in neutral - pointing to releasebearing problems

Several big-power STs have required gearbox replacement when a plastic bearing cup has disintegrated and worn out the 'box; the symptoms are excessive transmission noise and/or gear selection difficulties

The standard gearshift is a bit vague, but it's cured with a quickshift kit. Consider it a bonus if the car has been upgraded with a limited-slip differential (excellent for track days), but check the clutch and flywheel were replaced at the same time - ideally an ST200 clutch and quicker-accelerating 4.06:1 final drive, if you have the cash.

### WHAT DO I NEED TO KNOW?

### **HOW MUCH DOES IT COST TO INSURE?**

Less than you might expect. Despite the ST's strong performance and staggeringly high risk of being stolen, it's in insurance group 30, regardless of trim level. That means you should get a good deal from online comparison sites unless your ST is modified - in which case you'll need to seek out a specialist broker.

### WHERE DO I FIND ONE?

Anywhere... STs are with franchised/nonfranchised dealers, car supermarkets, auctions, and private sellers. So look online and also check out the owners' clubs, especially if you fancy a ready-modified Fiesta.

### **HOW MUCH DOES IT COST TO RUN?**

Not a lot. Reliability is excellent, parts prices are pretty cheap, and fuel economy can be brilliant up to 50mpg on a steady run, but low 20s if you're having fun.

### **WILL VALUES RISE OR FALL?**

They're falling, albeit not dramatically, and no more than you'd expect for a second-hand car. They'll probably start to increase in 20 years...

### SHOULD I MODIFY IT?

Yes, absolutely. Do it immediately. Minor tweaks can induce a massive grin factor, while major power upgrades are possible on the standard engine internals and transmission.

### FIESTA MK7 ST180

ENGINE 1596cc turbocharged four-cylinder 16-valve DOHC EcoBoost, 10.1:1 compression ratio, cast-iron crankshaft, die-cast aluminium pistons, forged steel conrods, twin-independent variable cam timing (Ti-VCT), timing belt drive, BorgWarner KP39 turbocharger, high-pressure direct fuel injection, 52mm throttle body, Bosch engine management, 55mm exhaust with twin-exit tailpipe

TRANSMISSION Front-wheel drive with Getrag Ford Durashift B6 six-speed manual gearbox, dualmass flywheel and 228mm clutch; 3.824:1 final drive ratio (ST200: 4.01:1)

SUSPENSION Front: MacPherson struts, L-shaped lower wishbones, uprated dampers, 15mm lowered coil springs, revised steering knuckles, 19mm anti-roll bar (21mm from July 2016); rear: revised 7.5mm torsion beam (27 per cent stiffer from July 2016), uprated telescopic dampers, 15mm lowered coil springs; electronic stability control (ESC), enhanced torque vectoring control (eTVC), recalibrated electronic power-assisted steering with quicker ratio (13.69:1; 2.32 turns lock to lock) and shorter steering arms

BRAKES Front: 278x23mm ventilated discs; rear: 253x10mm discs; enlarged master cylinder, ABS with electronic brake force distribution (EBD) and Emergency Brake Assist (EBA). Optional Style Pack added red callipers

WHEELS & TYRES 7.5x17in five-spoke alloys (ET 47.5mm) and 205/40x17 tyres. Rado Grey finish optional with Style Pack until 2015, then Rock Metallic thereafter. Optional space-saver steel spare wheel

EXTERIOR Fiesta three-door hatchback (or five-door from September 2016) with ST bodykit including front bumper with fog lights, side skirts, rear bumper and rear spoiler, plus gloss-black mesh upper grille, rear privacy glass (ST-2/ST-3), day running lights (ST-1), LED day running lights (ST-2/ST-3), heated door mirrors, Powerfold door mirrors (ST-3), heated windscreen, rain-sensitive windscreen wipers (ST-3). Optional rear privacy glass (ST-1), rain-sensitive windscreen wipers (ST-2), rear parking sensors (ST-2/ST-3), Style Pack, ST Convenience Pack (ST-2). Available in Frozen White, Race Red, Panther Black (-16), Shadow Black (16-on), Spirit Blue or Molten Orange: ST200: Storm Grev

INTERIOR Recaro front seats: Airfield in Silverstone Grey and Lux Soft in Charcoal Black fabric (ST-1) or Protection in Smoke Storm/Molten Orange and partial Torino leather in Charcoal Black/Lux Soft in Smoke Storm or Molten Orange (ST-2/ST-3), heated front seats (ST-2/ST-3), ST leather-trimmed steering wheel, ST gearknob, alloy pedals, ST scuff plates, air conditioning (ST-1/ ST-2), climate control (ST-3), cruise control (ST-3), auto-dimming rear-view mirror (ST-3), Power Start button (ST-2/ST-3), keyless entry (ST-3), DAB radio/ CD player and six speakers (ST-1), Sony DAB radio/ CD with 4.2in TFT display and eight speakers (ST-2), Sony DAB radio/CD/navigation system with 5in TFT display and eight speakers (ST-3). Optional rear headrests, adjustable boot floor, climate control (ST-2), cruise control (ST-2), keyless entry (ST-2), audio options (ST-1/ST-2), reverse camera (ST-2/3). Style Pack includes illuminated sill scuff plates

### **KEY POINTS**

### **ENGINE**

Knocking or growling could be major bearing failure, and overheating leads to a damaged head. Poor running might be due to dodgy modifications, faulty fuel pump bucket or failed MAP.

### **TRANSMISSION**

Generally strong, but whining or difficult gear selection may mean a new gearbox is needed. Check for clutch slip or clicking from CV joints.

### **IDENTITY**

Check the spec. Check the history. Check the VIN. Check the logbook. Check for outstanding finance. Check there are two keys. Check the seller isn't using some dodgy Facebook account...

It's a buyer's market, so shop hard for the right colour/spec/condition combination. If it's popping and banging, suspect it's been used hard - and barter accordingly.

### **BODY**

Beware of accident damage, even if there's no other sign of the car being a write-off. Ensure the panel gaps are aligned, there are no creases underneath, poor paintwork, overspray or rusty rear arches.



Any ST180 should feel razor-sharp; if not, look elsewhere. Its factory suspension - with uprated dampers, 15mm lowered height, modified steering knuckles and quicker PAS - is often criticised for being harsh, although smart people realise it's a trade-off for such superb handling.

ST180s built from July 2016 gained beefier front anti-roll bar and stiffer rear beam, which is reckoned to improve comfort with no detriment to driveability. Good-quality lowering springs tend to give a better ride, but excessive lowering upsets the balance. Spacers (10mm front, 15mm rear) are also worthwhile.

Look out for snapped coil springs sometimes the front, but often the pigtails at the back. The foam rear upper spring isolators also fail, which are cheap and easy to change; upgrades offer a fit-and-forget solution.

Polyurethane bushes are a recommended upgrade for the ST, especially for the rear beam bushes, which on some cars are showing fatigue.

On the test drive, listen for clonking from the front, and feel for wheel bounce or jerkiness when you let out the clutch. The subframe-to-gearbox mount wears quickly, and the offside engine mount might clonk under load -especially on thrashed cars. Uprated mounts are the cure.



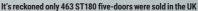
ST180 stoppers are fine for the road but have to work hard on track, so many owners fit high-performance pads or Brembos from a Renaultsport Clio (with brackets).

Look for uneven rear disc wear, typically caused by a calliper sticking on its slider. The fix is a new carrier (£144) or slider pin kit from eBay (£15), but greasing the pins at every service stops them from seizing.

Red callipers came with the Style Pack, alongside darker grey wheels than the stock silver; early Style Pack had Rado Grey; Rock Metallic was on the Style Pack from 2015, with Flash Grey as standard in 2016. ST200s had matt black spokes with polished rims. Metal (2014-2016) tyre valves leak, so check they've not been run when flat.









### **EXTERIOR**

Rust isn't yet an issue on the ST180, but it's surely only a matter of time before the rear wheelarches, sills and door edges start to bubble up. We'd also check for corrosion within the inner wheelarches, just in case.

Door seals have a tendency to drop off; contact adhesive is the cheap and simple cure. Front bumpers sag; a bolt can be added instead of the stock plastic fittings at the wings.

Fiesta paintwork is notoriously thin, so look out for stone chips and scratches. Most importantly, check for accident damage. There are loads of ST180s in salvage vards, and many more that have been repaired and returned to the road - not always involving insurance companies, so they're not registered as write-offs.

Beware of bad repairs: look out for creases or splits in the floorpan or inner wings, mismatched paintwork, paint runs or orange-peel. Then stand back and check for poor panel gaps, and beware of overspray on any trim or under the bonnet.

If fitted (ST-2/ST-3), make sure the LED daytime running lights (DRLs) are working properly. Failing DRLs tend to go dim when the indicators are operated, then don't return to normal brightness when the flashers stop. Replacement units are the only answer

Illuminated sill scuff plates (with the Style Pack) should light up whenever you open the doors, but they frequently fail - sometimes totally but often only half, or one side is dull. Repairs are possible, but complete replacements are usually required - and they're dear. If you're viewing an early car, don't forget LED rear lights weren't fitted until September 2015.

### CONTACTS

### **COLLINS PERFORMANCE**

www.collinsperformance.com

### MOUNTUNE

www.mountunestore.com

### **PUMASPEED**

www.pumaspeed.co.uk

### LAIRD PERFORMANCE

www.laird-performance.co.uk

www.carenhancementsuk.co.uk

### OC MOTORSPORT

www.oc-motorsport.co.uk

### FORD FIESTA ST ONLINE

fordfiestast.online

### FIESTA CLUB OF GREAT BRITAIN

www.fiestaclubgb.co.uk

### FIESTA OWNERS' CLUB

www.fiestaownersclub.com

### FIESTA ST OWNERS' CLUB

www.fiestastoc.com

### FORDFIESTAST.CO.UK

www.fordfiestast.co.uk

### FIESTA ST NETWORK

fiestast.net

### FIESTA ST FORUM

www.fiestastforum.com

### FIESTA ST FORUMS

www.fiestast.org



MODIFYING GUIDE

## MK7 FIESTA ST

It's one of the most fun-to-tune fast Fords ever made, and with so many performance modifications available it's easy to tweak the Mk7 Fiesta to suit your needs

Words JAMIE / Photos FAST FORD ARCHIVES

he Mk7 Fiesta ST will go down in history as one of the most tuneable hot hatches ever. As standard it isn't shy; even a factory example gives us more grunt (200PS/197bhp on overboost) than the quoted 180bhp that earns the car its ST180 nickname.

Yet, ample as 200bhp in a fiery front-wheeldrive hatchback is, the Mk7 Fiesta's excellent chassis means it's just plain rude not exploit it by extracting more power; more than double the factory power is within relatively easy reach, and we've seen cars producing over 500bhp.

Furthermore, the 1.6-litre EcoBoost has proven to be incredibly robust, and even at nearly double the factory power outputs the engine remains reliable, and compliant enough for everyday use.

Of course, the gem of an engine is only part of the ST story. One of the main reasons tuners pushed so hard and so far with engine performance was because no matter how powerful the ST became, the chassis just lapped it up. The Mk7 Fiesta is widely praised for its fun and chuckable handling characteristics across the range, and the ST is understandably the best of the bunch. Yes, it can be a bit stiff and choppy, and the lack of a limited-slip differential can mean it's entertaining trying to put all that power down, but these are easily remedied with bolt-on upgrades. The fundamentals of the chassis itself are sublime, and with the right tweaks in the right places the ST can be whatever you want it to be; anything from airedout show-stopper to race-winning motorsport machine, and everything else in between.

And then we get to what is possibly the best bit about tuning the Mk7 Fiesta ST: it is supported by so many fantastic tuners and specialists that can cater for your every need. Many have been working closely with the ST since it was launched in 2013, and the model has been their staple diet ever since, meaning they really know these cars inside-out.

By quizzing the experts, we've pulled together a picture of what works, what doesn't, and what you should do to get your ST performing the way you want. Over the next pages, we'll go through it all, so sit back, relax, and get your credit card ready, because big power and even bigger performance is only a few clicks/calls away...







### INTERIOR

The ST came well-specced from the factory for a car of its size and price point, and there's not too much it really needs. It's certainly a case of working with what you've already got rather than reinventing the wheel.

A steering wheel and gearknob upgrade is always a good starting point; not only do these tactile parts improve the way it physically feels to drive the car, it also means you'll not have Ford's version of Roland Rat staring back at you at all the time.

Subtle mods like the P3 Gauges unit that integrates neatly into the air vent and plugs into the OBD port to provide real-time data are a clever OEM-plus upgrade. Retrimmed, painted or dipped interior pieces can also be used to good effect.

Bucket seats are always a welcome move for cars that spend a lot of time on track, and roll cages can add styling and performance gains simultaneously – just be aware that some insurance companies (especially the high-street brokers) tend not to like roll cages in road cars, so it's worth checking if it will affect your premiums first.

### TRANSMISSION

The Fiesta ST's Getrag B6 gearbox is incredibly tough and seems to be able to cope with power — and abuse — rather well. One thing that it does respond well to is a quickshifter, and there are a few to choose from. Prices start at around £50, and many even offer different reductions in throw.

We've seen plenty of big-power STs used hard and regularly on track without the stock gearbox so much as breaking a sweat. Even the OE clutch (which is an AP item) can handle the power and hard use without fuss. As the cars get older and the original units have covered more miles, though, you may need to start thinking about a clutch replacement.

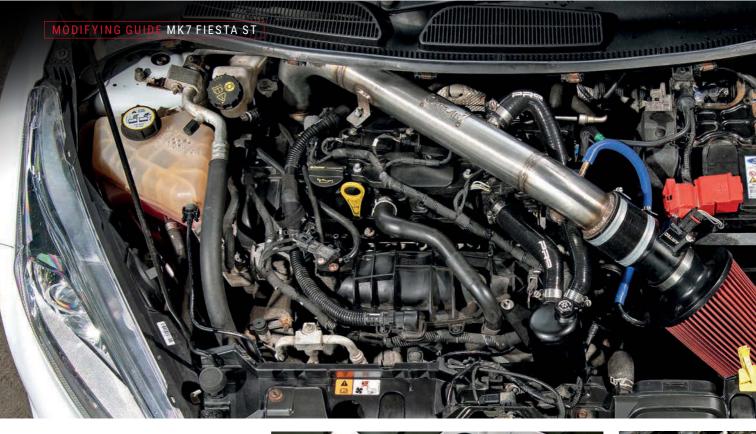
If you're a regular track-day fan, you might want to invest in a proper mechanical limited-slip diff, which is said to make a huge difference to the way an ST behaves. Which you choose will depend largely on how you use the car; a Quaife ATB is traditionally the most common and works well on road and track, but there are other options too.

Wavetrac is a brand that seems to be going down well in ST circles and, unlike other torque-biasing diffs, won't lose drive to one wheel if it's unloaded, while plated-type diffs from the likes of Kaaz, Gripper and Cusco prove popular with hardcore and regular track day users.

At the same time as fitting the diff you'd be wise to replace the clutch and flywheel. Likewise, if the clutch needs replacing, it's the ideal time to upgrade the diff.







### **ENGINE**

The 1596cc EcoBoost four-cylinder in the Mk7 Fiesta ST is a true gem. Unlike other engines from the same series, the 1.6 can handle significant increases in power and torque without having to touch it - over 360bhp is achievable with just bolt-on upgrades.

Before we get to the good stuff, though, the first thing to do is fit a new fuel pump bucket shim. The high-pressure pump runs off the camshaft, and the bucket shim is prone to wear. Excessive wear can result in low fuel pressure, which can cause all kinds of (potentially catastrophic) running issues. The good news is they are cheap and easy to replace, and many specialists now replace them as a matter of course at service intervals.

If your ST is in good health, you can start tuning to more than 300bhp without too much to worry about. The first step is usually a remap, ideally coupled with a performance air filter. This will give around 220-to-230bhp and typically costs between £300 and £500, but adding some hardware means an even more aggressive map can unlock even more potential.

After the initial remap, the next steps should concentrate on breathing and efficiency, so upgrades such as intercoolers and big boost pipe kits, exhaust systems with high-flow downpipes (sports cat to remain street legal, or de-cat for a cheaper, less restrictive option) and a suitably tweaked remap will see a strong 230-to-240bhp.

At this point, the stock Borg-Warner KP39 turbo runs out of puff. The good news is there are plenty of bolt-on options to choose from, and most specialist ST tuners now offer a hybrid or big turbo upgrade package. You'll probably want to swap the original airbox to a proper induction kit if you haven't done so already, and depending on the spec of intercooler you chose earlier you may need to level up here too (Stage 1 and 2 items don't cope well with repeated runs at this higher level, so a full-height Stage 3 item is required).

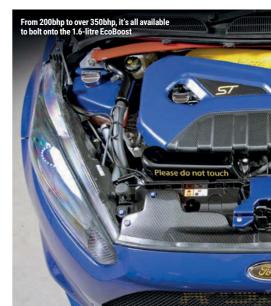
But it's still all bolt-on stuff, and relatively affordable too; Collins Performance's CP5 package (which includes CP5 software, ITG induction kit, Airtec Stage 3 intercooler, sports cat downpipe, Turbo Technics



S280 turbo, and uprated Bosch fuel injectors) is currently available for under £3800, serves up between 340 and 350bhp, and offers huge amounts of fun.

Similar offerings from all the big players in ST tuning are available, with power ranging from 260 to 350bhp-plus, and prices starting under £3000 and running to over £5000.

From there, you really should start to look at a full rebuild with stronger internals. We have seen cars pushing 400bhp on stock internals, but by the time you get to this level you'll want to pull the engine apart to make upgrades in the search of power (such as porting the head, bigger cams, better oil control etc) so it makes sense to add forged rods and pistons at the same time. We've seen a collaborative effort from Laird Performance and SiTech Racing produce 459bhp at the wheels, which is well over 500bhp at the engine. There's clearly more to come from this brilliant little engine in the future too.









### SUSPENSION

Famed for its superb handling even in factory spec, the Mk7 Fiesta ST has the perfect base to build a real performance monster from. The standard ride can be a bit choppy, and from an aesthetics standpoint sits far too high; a set of lowering springs (Eibach and H&R are the most common) will set you back £150-to-200 and offer improvements to the ride and handling, as well as giving a much meaner stance.

Couple these with some polyurethane bushes in key areas (the lower torque mount is a must for any hard-driven ST) and some stiffer anti-roll bars, and you'll have a well-sorted ST that's compliant enough for daily use but firm enough to keep up with more exotic stuff when the road gets twisty.

Lowering springs and bushes will be enough for most road users, but more serious drivers may want the adjustment and stronger damping offered from a good-quality set of coilovers. Bilstein's B14 (£900), KW's Variant 3 (£1500), and ST's XTA (£1000) kits are generally preferred by most tuners, but you could blow the budget on a set of AST 5300s for £4500 if you want full-on three-way adjustable units for a track or race car.

If you are going to that level, you'll want to invest in some chassis bracing to ensure everything remains where it should.

Alternatively, if you're building a show car there are options for air ride kits from the usual suspects, with prices starting around £3000.





### STYLING

Like all modern fast Fords, the ST is a blank canvass upon which you can express your personality. Whether it's perfecting the factory finish, showing the world your fetish for carbon fibre, or plastering the whole car with a lairy, in-your-face, custom wrap design, the Fiesta ST can do it.

Typically, subtle OEM-plus style upgrades to splitters, spoilers, and lowline kits are the starting point for most. Delta Styling offers a range of upgrades, including an RS-style rear spoiler and full lowline kit.

For the ultra-aggressive approach, you can opt to fit a wide-arch kit like the type Auto Specialists has fitted to its track/demo car. The company also now offers a range of clubsport lightweight panels for track and race cars looking to shed some factory weight.

From show queen to hardcore racer, there's plenty of options when it comes to styling an awesome ST.









### **BRAKES**

If there's one area of the Mk7 Fiesta ST that's not able to cope with huge increases in power and performance, it's the brakes. The OE stoppers are tiny by modern performance car standards at just 280mm diameter. Thankfully, some decent pads and uprated discs will cope fine with moderate performance upgrades, but for anything serious you'd want to bin the OE callipers and fit bigger discs too.

Big brake kits start at around 300mm and range through to 330mm; budget kits cost less than £1000, but the more popular 330mm/fourpot offerings from EBC and Revo cost between £1500 and £2000. Tarox also offers a six-pot calliper with 330mm disc kit starting at £1400. The Italian brake specialist also offers a big brake kit for the rear; this uses a spacer bracket to relocate the OE callipers so they will work with 295mm rear discs.

Running bigger discs and callipers often means a minimum 10mm spacer is required to retain the OE 17in wheels. Also, it's worth noting that many track drivers say the ST handles better on 16in wheels (and drag fans often drop to 15in wheels), so just be aware that bigger brakes might mean compromises need to be made elsewhere.





### WHEELS AND TYRES

There's nothing wrong with the stock ST alloys from a styling point of view, but like all OE wheels they are heavy, and that affects performance. Fitting a set of lightweight alloys will reduce unsprung mass by a considerable amount, helping improve all areas of the car's handling, steering, braking and acceleration. A motorsport-influenced wheel will also have better brake clearance and mean you don't need to run spacers when a big brake kit is fitted.

Standard size for an ST180 is 7.0x17in with an



offset of ET47.5, and there are several aftermarket wheels to choose from (stick with offsets from ET45 to ET35). Ideally, you'll also want to stay with 205/40x17 tyres, unless you've fitted wide arches to allow for wider wheel/tyre combos without fouling on the bodywork.

Track fans say that dropping to 16in wheels gives a noticeable improvement to the handling, especially when fitted with slightly taller-profile semi-slick tyres, but just be aware of clearance issues over bigger brake kits.

### CONTACTS

### **AET MOTORSPORT**

www.aetmotorsport.com

### **COLLINS PERFORMANCE**

collinsperformance.com

### MOUNTUNE

www.mountunestore.com

### **WAYSIDE PERFORMANCE**

www.wayside-performance.co.uk

### LAIRD PERFORMANCE laird-performance.co.uk

### OC MOTORSPORT

www.oc-motorsport.co.uk

### AIRTEC MOTORSPORT

www.airtecmotorsport.com

### **DELTA STYLING**

deltastyling.com

### SCC PERFORMANCE

www.focusrsparts.co.uk

www.onlyrevo.com

### **TURBO TECHNICS**

www.turbotechnics.com

www.tarox.co.uk

### STEEDA UK

www.steeda.co.uk

### BILSTEIN

www.bilstein.com



# CERAMIC MADE EASY



n obsession with cars is ingrained in many of us from an early age, and stays with us throughout our entire adult lives. Some of us even have a loyalty to a favourite marque, usually passed down as a family tradition much like a football team or political party. Other people see cars merely as A-to-B transport, and much prefer going down the pub.

Unbelievably, the owner of this highly-

modified ST200 was for most of his life, one of the latter.

"I work at Ford but I was never a car guy at all," explains Burger (a nickname from school). "All of my interests revolved around people, the pub, and a social life."

A fateful day while on his way to work at the Ford Daventry parts centre found him switched on to the world of turbochargers and bodykits like a man possessed.

He recalls, "I saw a Focus RS500 on my commute, and something about it suddenly ignited an interest in cars... I'd not seen anything like it before."

Burger was so inspired that a brand-new Focus ST was swiftly bought, and a virtual pub (an online car group) helped him school up on the slippery slide of car modifying.

He says, "The ST ended up modded to within an inch of its life, a 400bhp engine and



# PERFECTOR MANAGEMENT OF THE PROPERTY OF THE PR M-Sport styling plus Storm Grey paint plus big power equals one of the best Fiestas in the UK Words BEN BIRCH / Photos LIAM HART & DAVE VARLEY TOTAL FORD COMMEMORATING THE FIESTA ST 061



### FIESTA ST200

ENGINE Garrett Gen2 GTX2860R turbo, Nortech Performance GTX tubular manifold, Nortech four-port auxiliary fuel kit, Peron Garrett intercooler, Peron/Nortech hi-flow de-cat race downpipe, Peron/Turbosmart external wastegate, Peron diverter valve, Peron silicone boost and inlet hoses, Peron hard pipe, Peron Stage 4 ECU software Peron/ITG hi-flow CAIS, Wiseco forged pistons, K1 forged conrods, Piper exhaust system, Mishimoto oil catch can

POWER 347bhp (at the wheels)

TRANSMISSION Kaaz LSD, Cobb torque mount, VUDU short-shifter

SUSPENSION KW V3 coilovers, Summit front and rear strut braces, Powerflex poly bushes

**BRAKES** AP Racing four-pot front callipers with 330mm discs on Reyland bells

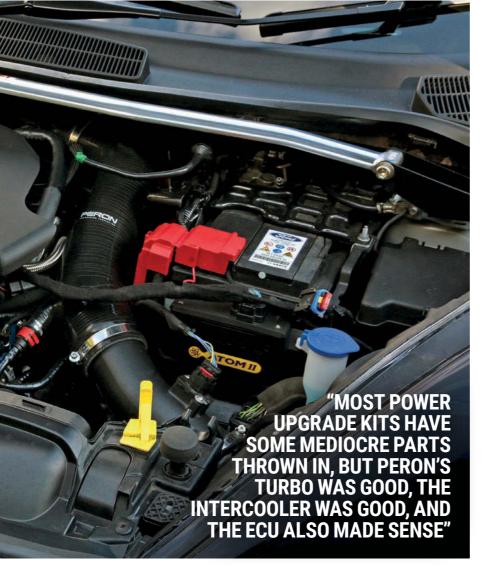
WHEELS & TYRES K Pierce Co bespoke fivestud hubs, Anembo Engineering bespoke hub adapters, 9x18in M-Sport/OZ Racing Super Turismo Rally Asfalto S2000 wheels, 225/40R18 Michelin PS4 tyres

EXTERIOR M-Sport (TGST) WRC bodykit, M-Sport CF R5 rear spoiler and brackets, CM Composite WRC-style bonnet vents, Maxton Design rear bumper/diffuser, Monkey Wrench bespoke custom headlights, Mark One livery, DC3D bespoke badging, DMB overlays, Billet Badges bespoke emblem, MFF (follow the factory) vinyl elements, Ultimate Windscreens MK glazing

INTERIOR P3 multi gauge in driver's air vent













murdered-out black bodywork made it really stand out. But it was an RS that I really wanted."

Four years of utterly enjoyable ST ownership eventually made way for a Mk2 Focus RS in Ultimate Green. Like the Focus before it, this was also tweaked to over 400bhp and given some trick styling touches to make it even more eyecatching than it came out of the factory.

Burger says, "I absolutely loved that car, but as time went on I realised I'd bought an investment vehicle and started worrying about driving it, so the thing ended up just sitting in the garage most of the time."

Burger buys cars to drive them and have fun, not to sit under a cover, so the itch was on for something a bit more useable and chuckable.

He explains, "When I was young, my uncle gave me his Mini 1275GT. That go-kart feeling never really left me, and I started hankering after a proper little hot hatch."

At the same time, Ford announced the Fiesta ST200, touting it as 'the fastest ever production Fiesta', so Burger decided to take a closer look.

He says, "It looked good on paper, but I was worried that I'd buy one, only for Ford to release a Fiesta RS soon after."

Luckily, Burger's work gave him access to Ford top brass who, when asked if he should buy an ST200 or should hold out for an RS, answered, "You should probably buy an ST200."

With that info, Burger pressed the trigger on an ST200, with the mindset of 'if Ford won't build a Fiesta RS, I'll have to build my own'.

The car you see today is a 2017 model and, like all ST200s, was Storm Grey out of the factory. First impressions weren't ideal because its performance came as a bit of a disappointment after owning fast Focuses.

Burger says, "The Focus had twice the power, so the ST200 felt flat in comparison."

Rather than mucking about, he decided to upgrade all the mechanical aspects of the car to give it a big chunk of extra power in one big hit.

He continues, "After lots of research into turbos and power packages, I was only really impressed with Charlie at Peron. Most power upgrade kits have some mediocre parts thrown in, but Peron's turbo was good, the intercooler was good, and the ECU also made sense."

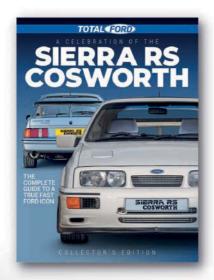
Not keen on hybrid turbos, Burger opted for a Garrett GTX2860R - a dual-ball-bearing unit complete with billet compressor wheel, and in theory able to achieve his desired goal of 350bhp.

He says, "I drove the car up there standard, and drove it away two weeks later with 347bhp at the wheels, running 1.6-bar. So I was really happy, but being a small engine its delivery is different from the Focus - you have to revit and drive it quite hard to unlock its potential."

Yet Burger has even bigger goals: "The plan 400bhp, so we've forged it, done the block mod, and I'm 800 miles into running it in before we turn the boost up and try to reach it."



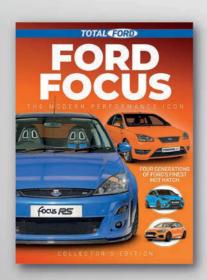
### £8.99 each + P&P



1, Ford Sierra Cosworth - Ultimate Guide June 2021



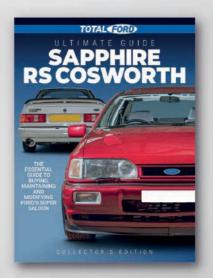
2, Sporting Fiestas - MK1-MK8
September 2021



3, Ford Focus,
Modern Performance Icon
December 2021



4, Escort & Fiesta RS Turbo - Ultimate Guide March 2022



5, Sapphire Cosworth Ultimate Guide June 2022

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### "THE CONCEPT WAS TO CREATE THE FIESTA RS THAT FORD NEVER BUILT. IT HAD TO HAVE AN OEM LOOK AND FINISH, AND WHEN I FOUND A GUY WHO'D GOT A GENUINE WRC BODYKIT, I THOUGHT I'D HIT THE JACKPOT"

Sensibly, at the same time as the power-ups, he had KW's finest street coilovers fitted, a Kaaz LSD to help put the power down through corners, plus proper brakes courtesy of AP Racing which help protect what has been a very substantial investment in the bodywork.

Burger explains, "The whole concept was to create the Fiesta RS that Ford never built. It had to have an OEM look and finish, and when I found a guy who'd got a genuine WRC bodykit, I thought I'd hit the jackpot."

In the flesh, it was obvious the kit was just too wide and extreme for a road car to pull off. But the chap had a load of other trick parts, all from his own Fiesta WRC project that had already eaten up an eye-watering £60,000 of his cash.

Burger groans, "He could take it no further, so I bought the original carbon-fibre S2000 rear spoiler, as well as the genuine Asfalto racing wheels, which were made especially for M-Sport by OZ Racing."

As sexy as they were, they weren't made for

a production Fiesta, being 5x135 fitment as opposed to the ST200's 4x108.

Burger explains, "M-Sport used custom fabricated hubs on the rally cars, but you can't buy them so I spent four months researching what could be done."

Despite most people telling him to just buy a different set of copy wheels, Burger persisted. After advice and help from motorsport engineer Alan Crossley, it was decided that re-drilling the standard hubs from 4x108 to 5x108 and using 1in billet adaptors from Anembo Engineering to mate the 5x108 to 5x135 was the way forward.

Burger laughs, "It might sound simple but that took four months of head-scratching and effort."

With the wheels on, the bodywork could start, built around those alloys. An M-Sport kit was picked out, so trusted bodyshop Motion Factory Finishes got to work cutting out the Fiesta's almost brand-new rear quarter panels to accommodate the arches, and customising pretty much every part of the kit by

chopping and changing other non-M-Sport parts to make it truly unique.

Burger says, "I didn't make life easy for the guys as I kept chopping and changing my mind on rear diffusers and bumpers. In some cases, after getting a perfect fitment, I'd change my idea on a panel, which then meant refabricating areas or in some cases starting afresh."

The bodyshop team's patience was tested to the core, and it's testament to their professionalism that they worked through it like troopers. Even the paint was a pain.

Burger continues, "It's amazing how hard the flat grey paint is to match properly, but I was adamant we kept the colour as it's a unique feature of the ST200 and I think it looks great."

We couldn't agree more - and we're immensely impressed by the detail touches, like the custom 3D-printed badging, wrapped roof, and the usually-textured black plastics (such as on the door mirrors and front grille), which have been smoothed and painted matt black.

Unsurprisingly, at shows the ST200 gets a lot of attention - it's one of those cars that the longer you look at it, the more you spot.

Burger says, "The biggest compliment I've had so far is people telling me it looks like it came from the factory. One guy presumed it was a special edition from Ford."

RSOC National Day also saw a bit of love from

Fifth Gear presenter Vicki Butler Henderson. who couldn't resist sitting in the - for now standard interior.

Burger smiles, "She really liked it, but it isn't just a show queen." His favourite annual event is a road trip through Scotland with a bunch of mates - taking in the beautiful sights and letting the go-kart chassis of the Fiesta come to life.

He says, "I absolutely love that trip. It's the highlight of my year, and is the perfect

environment for the go-kart Fiesta... It's just a huge buzz."

Well, he may have been late to the party, but Burger really is a true petrolhead these days.

"Oh yes," he says. "It took me a while, but I think, with this build, I've certainly made up for lost time."

You're never too late to start, and given the quality of this tasty Fiesta, we bet there's plenty more on Burger's menu.









GET IN TOUCH FOR MUCH MORE

### **WWW.LAIRD-PERFORMANCE.CO.UK**

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# MOTORSPORT SPOTLIGHT

Can a Fiesta really be faster than a supercar on the drag strip? Ross Laird's certainly is...

Words and photos JONATHAN FLETCHER

### HISTORY OF THE CAR

"The car was purchased as a bare shell around the time when I first started Laird Performance. As we didn't have a massive budget at the time and we were growing the business, the car was built over several years. Plans kept chopping and changing as time progressed, and with our road car posting some amazing times on the quarter-mile, we knew we had to build

something special.

"From the outset we knew that we wanted to try for the world's fastest ST180 title, which up until recently was held by American drag racer Chris Goode. But it's now held by the car seen before you.

"Beating the record was no easy task, as we started breaking driveshafts and gearboxes in a bit of an unlucky streak, but once all that was











out of the way we smashed it with a 10.8-second run. Soon after, we revisited the track after a mapping revision and smashed it again, pushing it to be the now-fastest known EcoBoost quartermile time of 10.62 seconds at 132mph."

### **FUTURE PLANS**

"It's a constantly changing and developing machine, so only time will tell what happens next. Whatever happens, it will continue to be a family project, as my dad has done the vast majority of fabrication work and I have carried out the mapping."

### **FAVOURITE PLACE TO RACE AND WHY**

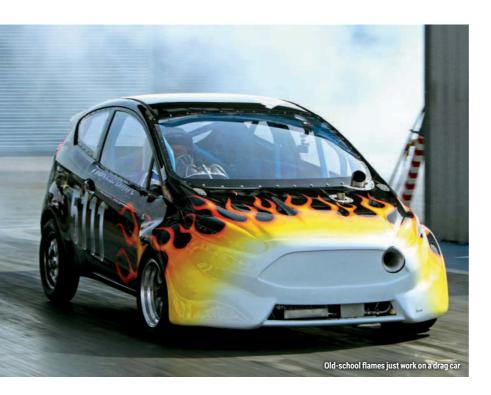
"Santa Pod, as it's the main stage in UK drag racing. When you hit the prepped strip and do a crazy 60ft time, there is no better feeling."

### WHAT GOT YOU INTO DRAG RACING AND HOW DID YOU GO ABOUT IT?

"I got into it after being called out at Crail Raceway to race some other guys who had fast Fiestas. After doing well in our first events I was hooked. Shortly after, Laird Performance was born."

### WHAT WAS YOUR FAVOURITE RACE AND WHY?

"We have had some mad races on the quartermile, but because we've been focused on times, we haven't really noticed the cars beside us. Our most memorable moment was getting the world record time for the ST180 for the first time, as it was years in the making. But I must admit it was more fun chasing the record than having it."



### MK7 FIESTA ST

ENGINE Ford 1.6 EcoBoost with stock internals, Laird Performance high-lift cams. Garrett G25 550 turbo on a sidewinder manifold, Turbosmart 50mm external wastegate, Bosch larger injectors, custom intercooler, radiator and open intake, bonnet-exit exhaust, Syvecs ECU

POWER 474bhp and 360lb.ft

WEIGHT Hasn't been weighed in a while after the new mods but it's under 1000kg

TRANSMISSION Factory ST six-speed gearbox with open diff

SUSPENSION Meister R coilovers all round

BRAKES Standard Ford discs and callipers with PBS pads

WHEELS & TYRES Japan Racing front wheels, VMS rear wheels, with M&H drag slick tyres

**EXTERIOR** Custom widened front drag nose cone, lightened doors and tailgate, custom drag spoiler (all hand-built), polycarbonate windows, custom flame paint job

**INTERIOR** Fully stripped, single Kirkey racing seat, inboard battery, minimum switches and gauges



# ST180 FUEL FOLLOWE

It's a common cause of poor performance with the fabulous Mk7 Fiesta ST, so let's see how to replace a worn fuel pump cam follower...

Words and photos DAN WILLIAMSON

enowned for its sharp performance, immense tuneability and remarkable reliability, the Fiesta ST180 is also prone to one small snag that slashes all of those attributes - yet costs pennies and is easy to fix.

Wear to the ST180's fuel pump bucket (otherwise referred to as a cam follower) causes power loss, restricts modifications and can eventually lead to camshaft failure. But replacing it means half-an-hour's work and a mere £20. It's a complete no-brainer.

But what is a fuel pump bucket, and where does it live? Well, the ST180 runs an ultraefficient direct-injection fuel system, which sprays atomised petrol straight into the cylinders at incredibly high pressure - 170 to 200-bar (2465 to 2900psi).

The high-pressure pump lives on top of the engine, bolted to the cylinder head. It's activated by lobes on the inlet camshaft using a simple

bucket-shaped cam follower, which lifts a rod to drive the pump when the camshaft rotates.

Eventually - through high mileage or increased demands for fuel, such as with modifications - this results in the contact point between rod and camshaft starting to wear, in turn reducing lift and preventing the pump from achieving full pressure.

A mild pressure drop won't make much difference to engine performance but severe cases mean fuel starvation and camshaft damage. You'll then be needing a fresh pair of cams, especially before any tuning can take place; otherwise, sufficient fuel pressure will never be achieved.

It's simply not worth the risk.

Which is why AET Motorsport advises ST180 owners to have their fuel pressure tested, particularly before chasing a power hike. Some cars have been found to be running pressure as low as 80-bar, while a particularly worn bucket

### **ESSENTIALS**

### IN THE KIT

New Ford OE cam follower

COSTS £20



### **HOW HARD**

Relatively straightforward but it's vital to adhere to safety precautions when you're dealing with high-pressure fuel systems

### **HOW LONG**

Half an hour will have the job done smoothly, without rushing

### **TOOLS NEEDED**

7mm spanner/socket, 8mm spanner/socket, 10mm spanner/socket, T45 Torx bit, 12mm socket, 17mm spanner, trim removal tool

### SYMPTOMS OF A WORN CAM FOLLOWER

- Poor performance.
- Fuel pressure dropping significantly under boost
- Poor fuel economy.
- Black smoke on boost if a follower is particularly worn, the ECU recognises fuel rail pressure is low and automatically puts the fuel pump into safety mode in order to prevent the engine from running lean; essentially the effect is to pour excess fuel into the engine when under load, resulting in black smoke from the exhaust when on boost.

### CONTACTS

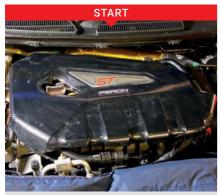
### **AET MOTORSPORT**

www.aet-motorsport.co.uk

is also likely to be producing black smoke under acceleration. It's worth noting that Ford has revised the specification of the bucket several times, and earlier cars deteriorate quicker than newer examples - so if you've just bought an ST180, get it checked for peace of mind. And invest in an oil change too; insufficient lubrication will generate heat and wear the components faster.

AET also advises regular replacement of the bucket, and a condition check as part of a routine service schedule. Although AET's specialist equipment can log fuel pressure, a visual inspection of the components is simple enough to be worthwhile. And because an OE Ford cam follower costs just £20, it would be foolish not to renew the component while the car's apart. No wonder AET sells around five fuel pump buckets every week.

Here's how to remove, inspect and replace vour own bucket...



Pop the bonnet and familiarise yourself with the engine bay. Here AET is working on Tom's 330bhp Peron-tuned ST. Ensure the car is cold before starting work because it involves high-pressure fuel in a potentially hot (and highly flammable) environment.



Remove the engine cover - grab it at each corner and simply lift it off. Put the cover to one side.



Remove the breather hose from the crossover pipe by squeezing the tabs and wiggling it out. Rotate the hose to one side so that it's out of the way.



Undo the four coil pack connectors. Pull out the grey tabs, push down on the back of each clip and pull it out of the coil pack.



The fuel rail pressure sensor connector can be fiddly to remove - give it a good, strong squeeze on the tab, then lift upwards.



Unclip the wiring loom from around the engine. You can use screwdrivers and pliers but a trim removal tool is most useful, and can be bought pretty cheaply. Be particularly careful when working in cold weather because the plastic is easy to snap.



Tuck the wiring loom safely out of harm's way, paying attention to the route of any cables, which will make replacement much easier.



Remove the Jubilee clip securing the intake hose to the crossover pipe this modified Fiesta has a silicone hose but the OE Ford part follows the same procedure.



Take off the insulating pad from above the fuel pump.



Remove all four coil packs - each of which is held down on a pair of 8mm-headed bolts.



The coil packs simply lift up from their sockets. Mark each of the coil packs with Tippex or masking tape to ensure they go back in the same order; it's not critical but good practice.



Unclip the fuel pump connector by pressing down the tab and pulling it backwards.



Remove the four 8mm-headed bolts from the plastic engine cover. They all lift up together but stay in place within the cover.



There are two more bolts in the plastic cover, each 10mm-headed. One is this stud that remains in the cover, and the other is hidden down the back.



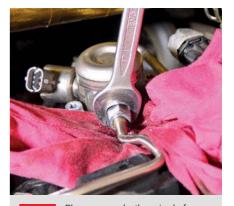
Working on top of the fuel pump, remove the two 7mm bolts - one at each side of pump.



Pull up the plastic cover - it can be a bit awkward, so make sure all the bolts are loose. As you lift it, you'll see it comes with a foam insert. Make a note of how the foam fits because it can be tricky to replace.



Undo the fuel lines, beginning with the 17mm union connected to the pump at the lower-pressure side, and then moving to the front (the high-pressure side feeding the rail, which if not discharged can hold pressure up to 200 bar).



Place a rag under the union before you release it, to stop any leaked fuel dripping onto the manifold. Loosen the nut gradually; you'll hear it hiss and see petrol dribbling onto the rag. To make life easier, remove the pipe altogether.



Unbolt the pump from the cylinder head. It's on a pair of T45s but a 12mm socket will fit. Undo the bolts a bit at a time because there's slight resistance.



With a wiggle and a twist, the fuel pump can be lifted out. Put it somewhere clean.



Next remove the bucket itself, which lifts out of the recess. You might feel a little resistance but don't force it.



Inspect the bucket for wear. Although there's evidence of slight wear in the centre of this bucket, it would potentially be reusable. A concave surface would render it scrap.



Shine a torch inside the pump housing to inspect the inlet camshaft lobe for damage. Look out for scoring or heat marks; if in doubt, consult an expert.



Take your new bucket and squeeze on a drop of new engine oil, then smear it around the surface. Place the bucket into the housing, making sure it's face-down and slides in smoothly.



Clean the mating surfaces for the fuel pump, removing any oxidisation.



Add a drop of new engine oil to the fuel pump's seal, then slide it back into the housing. Tighten the bolts progressively - you're screwing into aluminium, so don't over-tighten.



Put everything back together (a reversal of removal) and the job's done. Be careful to thread the fuel pump unions by hand before nipping up. They hold very high pressure, so it's vital they're tight and checked for leaks with the engine running.

### **EXHAUST**

### FROM £498

"For a better soundtrack and performance, we recommend a Mongoose 3in cat-back system for all levels of upgrade. Unlike some other Ford models, the ST's standard downpipe and OE cat is quite efficient; it has a fairly large surface area to pass the exhaust gas through without creating any real restriction, and will happily cope with our level one and two upgrades. It's only when you get to the cars running a bigger turbo (level three-plus) that you need to upgrade to a full 3in sports cat."



### 2 ACTUATOR

### £108

"Even level two-tuned STs will benefit from running a better actuator especially when the software has been optimised to work with a stronger actuator, such as our CP2-E software."





### **III** TURBO

### £1559 (S280)

"The exceptional standard internal strength of the ST's 1.6-litre EcoBoost engine means simply adding a bigger hybrid turbo is a straightforward upgrade, and a great way to extract a lot more power. There are many turbo options available to allow you to run the car safely up to 340bhpplus; we offer turbos from the Turbo Technics range, with their heavy-duty bearing packs, from the original S270 (300-315bhp), the popular S280 (320-350bhp) right up to the new range-topping S290 (400bhp)."



### TORQUE MOUNT/ ROLL RESISTOR

"A must-do upgrade for any Mk7 ST is the uprated torque mount, also known as the roll resistor. It greatly reduces engine and front axle tramping when accelerating hard in the lower gears. With our CP mount I recommend going for the softer yellow bushes to prevent any transmission of vibration into the cabin."



# TUNER'S CHOICE

Which upgrades does Collins Performance recommend for the Mk7 Fiesta ST?

he Mk7 Fiesta ST will go down in fast Ford folklore as one of the most tuneable hot hatches ever; it serves up the best part of 200bhp straight from the factory, with the possibility to almost double that with bolt-on upgrades alone. And it remains incredibly robust and reliable, even when tuned to crazy levels of power.

Of course, power is nothing without control (as a tyre company once told us), and the Fiesta ST has one of the best chassis of any modern hot hatchback. It's fun, it's extremely chuckable, and the handling is sublime.

But, as with the EcoBoost engine up front, the

### 5 QUICK-SHIFT

"A quickshift upgrade must be one of the best value-for-money upgrades you can install on the car. From as little as £50, our quickshift upgrade only takes ten minutes to install, plus it also offers a couple of different settings, allowing you to choose your preferred reduction in throw."



### **SOFTWARE**

### FROM £349

"Even a first level software upgrade (such as our CP2) will totally transform the Fiesta ST, increasing power to 220-225bhp. Our favourite is the CP2-E software, which utilises the CP actuator and other level-two hardware parts to offer over 240bhp. These days most software upgrades can be installed at home using a device such as our CP iFlash kit too."



### **■ INTERCOOLER**

### FROM £250 (STAGE 1) TO £549 (STAGE 3)

"To help retain the power on hotter days, cars running level one or two software will benefit from a bigger intercooler, such as the Airtec Stage 1 unit. Cars running a bigger or hybrid turbo will require much larger full-size intercooler, such as the Stage 2 or Stage 3 upgrades."





### SUSPENSION

£196 (springs) £506 (dampers)

"There is so much on the market when it comes to suspension upgrades for the Fiesta ST, ranging from simple lowering springs to coilovers with remote reservoirs. We prefer to keep things simple using Eibach lowering springs and Bilstein B8 dampers. Another inexpensive but worthwhile upgrade is to fit performance poly bushes in the rear beam to tighten up the handling."

rest of the ST's chassis and handling package can be significantly improved with just a handful of direct-fit upgrades made in the right places.

Collins Performance knows this only too well - the firm has been tuning the Mk7 Fiesta ST since its launch in 2013, and now has a catalogue of performance upgrades that cover everything from mild-mannered road car to out-and-out racer, with everything else in between.

Working closely with the biggest names in the industry, combined with its own in-house hardware and software upgrades, Collins has built a stellar reputation for tuning the Mk7 ST. But with so many tuning parts available it can

get a bit overwhelming deciding which ones to

To help you out, we asked Gary Lendon at Collins to recommend the upgrades he prefers, those that give the best bang-for-your-buck, and those that will improve the ST the most. Here's what he had to say...

### CONTACTS

### **COLLINS PERFORMANCE**

01260 279604 www.collinsperformance.com



### INDUCTION KIT

£250

"Owners are spoilt for choice for air filter upgrades, with many options available from various manufacturers. Nearly all of the open filter designs offer great induction noise, but in our testing we discovered that while some help increase power, many were neutral, and some even had a negative effect on the engine's performance. Our favourite is the ITG induction kit; despite its unusual design and filter location, it performs very well on most upgrade applications right up to 350bhp."

### TUNING GUIDE

## MK7 FIESTA ST

It's one of the most fun-to-tune fast Fords ever made, and with so many performance modifications available it's easy to tweak the Mk7 Fiesta to suit your needs

Words DAN GOODYER / Photos ARON VICKERS

he Mk7 Fiesta ST is a brilliant hot hatch. Whether you have an ST180 or the similar but slightly more powerful ST200, both are built on the foundation of a great chassis and have fundamentally the same engine under the bonnet.

Even in standard form the ST is a hoot to drive. Add more power and it really comes to life. So whether by happy accident or cunning design, the Fiesta's 1.6-litre turbocharged engine responds well to performance tuning.

The ST copes with extra power too; so well, in fact, it feels like the car was set up for big power all along. So back when we heard the chaps over at Auto Specialists had developed a few tasty bits of hardware to complement Revo's Stage 3 turbo conversion and remap, we had to check it out.

Here's what's involved with converting your stock Fiesta ST into a hooligan-spec, 300bhp-plus, Stage 3 riot.

### STANDARD CAR

The standard Fiesta ST 1.6 EcoBoost produces a claimed 179bhp in ST180 spec, and 197bhp in ST200 spec. In our experience, manufacturer claims are usually optimistic but the Airtec ST200 Fiesta made just over 200bhp at the flywheel, when tested on the dyno at AmD in Essex; torque was fractionally down on what it should have been. When you look at the graph, the power delivery of the standard engine comes in three distinct sections. Initially power builds rapidly, giving 100bhp by only 2600rpm, and the engine is already producing close to its peak torque. This makes the car feel very responsive off the line and when accelerating from low revs. Then power increases at a slightly reduced rate all the way up to around 4500rpm, where torque starts to fall away too. Beyond that, power climbs slower again, up to the peak at around 6200rpm. So most of the grunt is low down and the midrange is punchy. which makes it easy to drive fast. The standard engine pulls smoothly all the way to the redline; there just isn't as much power up top as most of us would like. But that can be cured with a handful of bolt-on upgrades and some better software, like the AS/Revo Stage 3 upgrade...





### PERFORMANCE UPGRADES

### **AIR FILTER**

AS did a lot of research into the effectiveness of aftermarket air filters on the Fiesta's 1.6-litre EcoBoost engine, and, after many hours' dyno-testing different combinations, the team discovered there was an ideal diameter for the air filter. Any filter bigger than this magic number affected the MAF (mass air flow) scaling and ultimately brought on the engine management light. The Airtec Stage 3 induction kit features a K&N filter of the optimal size, with hard pipes and a CNC'd MAF sensor boss. When replacing a closed airbox with an open conetype air filter, it is important to make sure it is not drawing in hot air, particularly in an engine bay that also houses a hot turbocharger. So AS placed the new filter carefully in the bay, and the Airtec Stage 3 kit also includes an effective heat-shield. In addition to the extra power you get an enjoyable improvement in induction noise as a bonus.























### **INTERCOOLER**

The Airtec Stage 3 intercooler increases power by reducing the intake temperature. The original front-mounted intercooler isn't very tall because it's restricted by the crash bar above it. Airtec got around this problem by creating one bar-and-plate 'cooler from two cores, nicknamed the Double Decker. The bottom core is effectively a thicker version of the original 'cooler, but it extends up to a narrower core that fits behind the crash bar. This means the Airtec intercooler has much greater surface area, therefore provides more effective cooling. AS discovered in testing that the ECU starts to back off power when it sees intake temps of 50C, to protect the engine from damage. They fed the original intercooler intake temps of 140C and saw outlet temps of 97C, which would result in the ECU pulling timing and reducing power. When they fed the Airtec Double Decker with 140C, it cooled the intake charge down to just 31C. An incredible difference that means you keep all the power under your bonnet.

AS also fitted the car with a big boost pipe kit, which replaces the original 2in plastic pipes between the intercooler and throttle body with larger 2.5in aluminium hard pipes and silicone joiners.

### COSTS

Airtec Stage III intercooler: £576 Airtec big boost pipe kit: £275











### **TURBO**

The Revo S242 hybrid turbo was designed in partnership with experienced turbo specialist Turbo Technics. In comparison to the original ST turbocharger, the S242 hybrid has a larger compressor wheel mounted in a larger compressor housing. The internals are all beefed up too, with a physically larger shaft and bearings to withstand more boost, plus a ported wastegate to give better boost control. The real magic in this turbo comes from the CNC-machined billet compressor wheel. Not only is it larger than the original but it has a different design, which is far more efficient. In short, this means it spools up fast and can make more power without working so hard. The S242 hybrid turbo kit also comes with 2in hard pipes to connect the turbo to the intercooler.

Revo S242 hybrid turbo: £1195 (exchange), £1795 (outright)

### TUNING GUIDE MK7 FIESTA ST













### **EXHAUST**

The idea of a good exhaust on a turbocharged car is to provide minimum pressure to the rear of the turbine. This way the hot gases can escape from the turbo as quickly as possible, allowing the turbine to spin up nice and freely. The original exhaust is a 2in system and surprisingly restrictive. In testing, Auto Specialists discovered it made a restriction from the moment you started increasing power. Anything more than a simple remap and it was clear the original turbo was bunged-up.

You can replace the stock exhaust for a performance cat-back system to help free things up a bit, but for maximum performance potential the AS Stage 3 conversion works best when a cat-back is coupled with a performance downpipe, either fitted with a sports catalytic converter to remain emissionscompliant or a complete de-cat for outright performance on track cars.

The downpipe fitted here is AS's own design, featuring 3in diameter pipe and no cat. From there it's got a Milltek 3in stainless-steel Race system, which has no resonator and ends in titanium tips. AS also fitted an equal-length tubular exhaust manifold to this car, which helps the turbo spool up faster and removes another area of restriction to gasflow.

AS de-cat downpipe: £199 Milltek Sport Race non-resonated exhaust with titanium tailpipes: £665 AS stainless steel equal-length tubular exhaust manifold: £545





### **SOFTWARE**

Revo is a name most readers of this feature are more than aware of. The ECU software specialist writes its performance maps to suit a specific combination of bolt-on parts, making sure the settings work in varying atmospheric conditions, including temperature and altitude. This software is readily available from any authorised Revo dealer, and is simply uploaded to your car's ECU via the OBD port.

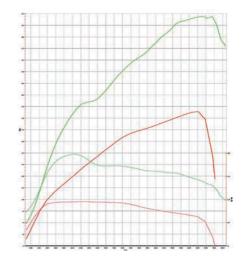
By adding performance hardware (such as the air filter, exhaust, intercooler, and turbo upgrade) we have altered the physical properties of the engine (such as how much air it gets, how much boost it's capable of, and how quickly it gets rid of waste exhaust gases), so to make the most of all these upgrades some revised software settings are needed. Revo's Stage 3 software, as used as part of the AS Stage 3 upgrade, has been developed specifically to work with the hardware modifications that come with the kit. The result is a reliable, drivable and much more powerful car. The software has been designed to improve the driving experience without comprising on driveability or reliability, increasing power without comprise.



REVO Stage 3 ECU software: £719







### **FINISHED CAR**

With all the hardware upgrades fitted and the new software installed it was time to take the car back to the same dyno at AmD Essex to see just what difference the Stage 3 package made. As you can see from the graph, it clearly works...

The 1.6-litre EcoBoost engine obviously has great potential, and by adding some key upgrades in chosen areas and some cleverly developed software, Auto Specialists and Revo have unleashed a great deal of it. On the dyno, the Stage 3 Fiesta makes more power at 3500rpm than it did at over 6000rpm beforehand. That makes for a seriously punchy road car.

Power rises sharply to over 200bhp at the 3500rpm mark, before rising sharply again all the way up to a peak of 312bhp at around 6300rpm.

3.8

Stage 3 ST

It's a similar story with the torque. The character of the original engine is still there - in the sense that torque comes on strong low down in the rev range- it's just a much harder shove in the back now. Peak torque is over 100lb.ft up on the standard car, offering 327lb.ft at just 3300rpm. There is also a lovely bubble of torque on the graph from 2700rpm to 3700rpm.

These numbers look impressive enough on the dyno, but on the road the transformation really comes to life. AS conducted some basic acceleration tests, and the difference between the Stage 3 car and the standard Fiesta ST times is quite incredible - almost two seconds quicker on the 0-to-60mph dash and a whopping six seconds faster to 100mph.

£4499

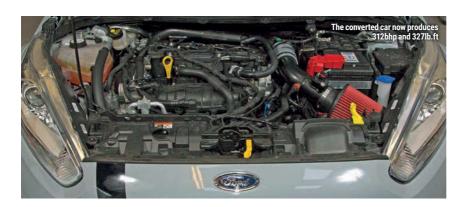
### AUTO SPECIALISTS SAYS...

"The Fiesta ST is a proper hot hatch. It reminds me of the Mk2 Fiesta XR2 in a way. It's a return to a smaller, simpler car that's great fun to drive. Even in standard form they're pretty guick and the chassis really is fantastic, but they come alive when you tune them. The main difference between the ST180 and ST200 is the 200 has a better cold-air feed into the airbox and a different ECU map. In standard form, the biggest downside of both versions is they're a bit quiet. Plus the standard map is a bit safe, a bit lacking in excitement. Even a basic Stage 1 tune of intercooler, exhaust and air filter really wakes them up."

### **AUTO SPECIALISTS STAGE 3 FIESTA ST200**

Engine torque	327.2lb.ft @ 3282rpm		
0-60 MPH		COST	
Standard ST	7.25s	Airtec induction kit	£325
Stage 3 ST	5.3s	Airtec intercooler	£576
		Airtec big boost pipes	£275
0-100 MPH		Turbo Technics S242 turbo	£1195 (exchange)
Standard ST	17.6s	AS de-cat downpipe	£199
Stage 3 ST	11.4s	Milltek cat-back race system	£665
		AS tubular manifold	£545
30-70 MPH		Revo Stage 3 software	£719
Standard ST	6.2		

TOTAL



### CONTACTS

### **AUTO SPECIALISTS**

(01375) 371449 www.autospecialists.co.uk

### **AMD TUNING**

01708 861827 www.amdtuning.com

### **REVO TECHNIK**

01327 301901 www.revotechnik.com

### **TURBO TECHNICS**

01604705050 www.turbotechnics.com



DRIVEN

## FIESTA ST EDITION

We were lucky enough to get behind the wheel of the special version of the Mk8 Fiesta ST, and this was our verdict...

Words and photos JASON DODD



'Ah, but they already did a limited edition,' you might be thinking, but the new, blue Edition model picked up where the previous, orange Performance Edition left off. Along with a change of colour, numbers were strictly limited - with just 300 coming to the UK.

Not to be confused with the Nitrous Blue on the Mk3 Focus RS, the ST Edition was finished in an exclusive Azura Blue, with the same 18in gloss black lightweight flow-formed alloys from the Performance Edition (saving an impressive

7kg each over the stock ST alloys). This ST looked mean and ready for the track - or in our case, some Kent B-roads.

As with the Focus RS Edition models, the ST Edition benefited from a Quaife ATB limited-slip differential, the Performance Pack upgrades. and lashings of carbon-fibre trim as standard. Crucially, it also got the same adjustable coilover suspension as the Performance Edition, dropping the ride height by 15mm at the front and 10mm at the rear. Meanwhile, the engine was the same 1.5-litre EcoBoost as the rest of the ST line-up, developing 197bhp and 214lb.ft of torque.

Priced at £27,075, the Edition was a chunk more expensive than the base ST-3 model

(starting at £24,575), but for that you did get all the bells and whistles, and perhaps more importantly for many buyers, the exclusivity of just 300 UK cars. But what was it like to drive?

Thanks to that clever suspension, it felt perfectly poised on a twisty B-road as I set off for a journey from Haynes in Maidstone (which loaned me the car for the day), back to Canterbury for some static photos.

There were 12 bump and 16 rebound settings. You could reach the tops of the front struts by lifting the bonnet, but you had to go under the car and/or take the wheels off to get at the rest; it seemed a bit of hassle, but I imagine if you do the odd track day it would be worth getting











it set up to suit - you'd just need access to a ramp (or maybe ask your friendly Ford dealer).

Once you played around with the suspension settings, you'd have a cracking car that, on a short and twisty circuit, very few cars would be able to keep up with.

For me, the sweet spot of a hot hatch has always been around the 200-to-250 bhp mark; it's realistically all the power you need, and it means you can get hold of the car by the scruff of the neck and throw it about, rather than having to be gentle with the throttle for fear of it dumping you in the nearest ditch at a moment's notice. The Fiesta's Michelin Pilot Sport 4 tyres definitely helped here, even on a cold winter day when the

temperature didn't get above five degrees.

The overall balance and ride of the Edition was sublime; the steering was direct, and precision was the key to this car's USP. I could imagine that on a track it would be real hoot.

So, the last question: was the Edition worth the extra £2500 over the regular ST-3?

For everyday duties, probably not – the ST-3 delivered all you'd need; it had the Performance Pack with all the goodies that came with it, had the same excellent chassis, and was a deserved multi-award-winning car.

But for the die-hard enthusiast who wanted to exploit the ST's on-track abilities, the coilovers and wheels came into their own - they were

available from Ford Performance to fit to any Mk8 ST, but together cost more than the extra £2500.

Then you needed to factor in the signature colour and the exclusivity of the Edition. Do that and it quickly became apparent that the answer was ves, it was worth the extra cash.

The only fear I did have was that the limited build numbers and higher price tag would attract collectors who would wrap the cars up and sit on them for a future pay day. These cars weren't built to sit in heated garages, they were best enjoyed at full throttle rattling through some B-roads or chasing more expensive exotica on track days.

If I'd been one of the lucky 300, my ST Edition would still be getting used as often as I could.





Taut, muscular, impressively powerful – and the Fiesta's not bad either. Former body-builder Al Smyth has just what it takes to pump up the adrenaline in this lean and fit Mk8 ST

Words DAN BEVIS / Photos IAN ALLEN

edication is key when it comes to body-building. The obsession with perfection is an all-consuming mantra, 24-7, 365.

Endlessly focusing on your plyometric exercise and your progressive resistance, building sharp definition beneath your onion skin.

A key facet is the idea of the overload principle – applying a greater load than normal to a muscle to increase its capability, a concept that has a clear crossover to the car tuning scene. This is something Al Smyth appreciates

all too well, being a former body-builder "I competed up to professional Mr Universe standard," he explains. "I was Mr Northern Ireland twice, Mr Britain, and a Mr Universe top-three a total of three times."

Since retiring from competition, all of that endless daily discipline has been rediverted into his passion for fast-road motoring. Al readily admits that this Mk8 Fiesta ST is the first car he's really modified, but it's evident that his extraordinary sense of focus when it comes to optimisation and cause-and-













### MK8 FIESTA ST

ENGINE 1.5-litre three-cyl EcoBoost, Collins Performance Stage 3 tune, Turbo Technics S285 hybrid turbo, Pro Alloy induction, full Milltek exhaust system with decat and resonated GPF delete, Collins torque mount, Pro Alloy intercooler, Airtec coolant tank, Paintmodz carbon-effect engine covers, sunstrip and graphics from DMB and PrintPeel&Stick

POWER 285bhp, 317lb.ft (on Shell V-Power)

TRANSMISSION Stock ST, Pumaspeed shortshift

SUSPENSION KW V3 coilovers

**BRAKES** EBC front big brake kit, EBC rear discs

WHEELS & TYRES 18in OZ Racing Ultra HLT wheels, 215/35x18 Goodyear tyres

**EXTERIOR** Colour-coded Maxton Design front splitter and side skirts, carbon-effect V2 rear diffuser, Delta Styling spoiler riser

INTERIOR Stock ST, plus CEUK footwell and interior light upgrade

effect has translated very clearly into the pursuit of fast Ford perfection.

Al assures us, "I've been a car fanatic all of my life. During my competitive years I certainly enjoyed a fast car, but they had to take a bit of a back seat as I didn't have as much time to wash and look after them as I'd have liked. But since retiring, I'm not spending so much time in the gym - and the cars are certainly benefiting."

The thought process behind buying a Mk8 ST was dictated by the simple fact that Al had owned a Mk7 for a number of years and really rather liked it. It was all bone-stock aside from a warrantied Mountune map, and was used as a daily driver while a BMW M4 CS was the weekend tov.

He's owned six BMW M cars in the last 20 years so its place in the garage kinda makes sense, but Al never loses sight of the fact that his first car was a Mk2 Fiesta XR2, and those still waters run deep.

He says, "I loved that dearly, all 96bhp of it.

### **"WHEN I RETURNED** IT WAS ALL READY -THE TURBO TECHNICS HYBRID, ALONG WITH A **SWAP TO A PRO ALLOY** INTERCOOLER, PLUS THE STAGE 3 SOFTWARE"

After that I had an Escort RS Turbo, then a Fiesta XR2i. But this Mk8 - which I bought brand-new is really the first time I've modified a car to any great extent. I'm enjoying working on the car myself, along with a couple of tech friends who help me with the more complicated procedures."

Having appreciated the merits of a Stage 1 Mountune map on his previous Fiesta, it was Al's immediate go-to for the new car. But before long he found himself hankering after more, and following online research it seemed Collins Performance would be able to provide the sort of bang his buck demanded. After a number of in-depth conversations, it became clear that Gary at Collins was a kindred spirit, with an intuitive understanding of how to achieve what Al was after.

Al says, "I purchased the Collins CP2 package back in February 2020, with a view to going Stage 3 whenever the newly-developed turbo setup would be ready. I could have gone straight to a hybrid turbo with another company, but I gelled with Gary and, although I know very little about turbos, I reckoned that Turbo Technics have always had a great name in the field, especially with Fords, so I waited."

See, it's that sense of discipline manifesting itself again: eyes on the prize, rather than rushing into quick fixes.

Al's been busy with the rest of the Fiesta too; this isn't just about horsepower gains but ensuring the car is ready to deploy them when they come galloping in.

The car sits tautly suspended, agile and catlike, on KW V3 coilovers, while the brakes have been addressed with EBC discs and pads out back and a full EBC big brake kit at the business end. The latter comprises lightweight four-pot callipers and fully-floating two-piece discs; a hardcore setup, and Al's favourite part of the car so far. They peep out behind OZ Racing Ultra HLT wheels, again reducing unsprung mass and contributing to the body-builder-like keenness for fit-for-purpose solutions at an elemental level.

The exterior makeover has an impressively muscular vibe as well, the Maxton Design front splitter and side skirts having been colour-coded in matching white to give the impression in your rear-view mirror that you're just about to be nutted by a Stormtrooper's helmet.

With the spec list buttoning up nicely, the  $\longrightarrow$ 



quest for power was evolving apace too, but of course 2020 wasn't the friendliest year when it came to getting anything done.

Al says, "Unfortunately we all know how the year went, so everything was put on hold. But the new hybrid turbo is finally available and it's now been installed. Ben, the tech at Collins Performance, was left to it and when I returned it was all ready - the Turbo Technics hybrid, along with a swap to a Pro Alloy intercooler, plus the Stage 3 software."

The car's now running great and making a proven 250-plus bhp (at the wheels) on Collins's dyno, which equates to around 285bhp and 320lb.ft - although that's on 99RON V-Power, which isn't readily available in Northern

The balance of logic here is all part of the overarching sense of discipline, knowing what everything will do instead of guessing and taking risks. Debuting the box-fresh Turbo Technics hybrid for the Mk8 is a big deal, and Al and Collins Performance were keen to get it done right. The results speak for themselves, with the ST now enjoying a new-found urgency; the 0-to-60 run is similar, largely due to the element of traction, but the 60-to 120mph time has dropped by a massive three seconds. The implications for

day-to-day usable power are huge.

Al is philosophical about the trajectory of this project, and has a word of wisdom to those who may follow in his footsteps: "I would advise young guys on a budget to think carefully about expensive mods. After this experience, I can definitely say that not all modifications give the extra power they promise in flashing lights. Stick to tried-and-tested: a Stage 1 map can

yield 40bhp for £350, that's great bang for your buck. Over and above this you can spend a lot of money for little return, so be careful..."

Pearls of wisdom from a man elbows-deep in the process, and the obsession with perfection endures. Teasing out the overload principle, the little Fiesta just keeps getting more muscular - and Al's the perfect coach to guide its athletic future to victory.





## Ignite your BLUE.



### TOYO TIRES





MODIFYING GUIDE

## MK8 FIESTA ST

The fast Fiesta already has sensational performance figures straight from the factory, but it's so easy to make things even better, it's almost rude not to...

Words JAMIE Photos FAST FORD ARCHIVES

aking a fast Fiesta and making it faster isn't something new. In fact, it's something Fiesta owners and enthusiasts have been doing right from the launch of the very first sporting Mk1s, and it's a tradition that is very much still alive today.

Not only is it alive, but it's very much thriving; improving the performance and styling of the latest fast Fiesta is easier than it ever has been before.

Building on the massive Mk7 Fiesta ST tuning scene, the foundations for improving the performance of the Mk8 ST were already in place even before the car was launched, with numerous specialists all quick to get to grips with the upgrades.

Today we're well catered for: whether it's just a stealthy, simple first-stage remap or a full-on big-turbo, big-power monster you're

after, there are specialists ready to deliver.

Of course, the sweet spot for most enthusiastic owners is somewhere in between those two extremes, and the exact mods you opt for will depend ultimately on what you want from the car. Is it a B-road bruiser, a track-day racer, or a show stunner?

But the good news is there are loads of options, and here's just some of the mods we'd recommend for tuning the Mk8 ST...







### **EXTERIOR**

The ST already looks sharp with its sports styling, but those aggressive looks can be beefed up even further with some well-placed subtle upgrades. The ever-popular lowline splitter kits work well on the Mk8 to accentuate its sporting credentials, and pair up perfectly with lowering springs to give a ground-hugging race car-like stance. There's plenty to choose from too: Delta Styling, Maxton Designs, and Triple R Composites all have a catalogue of styling parts for the Mk8 ST.

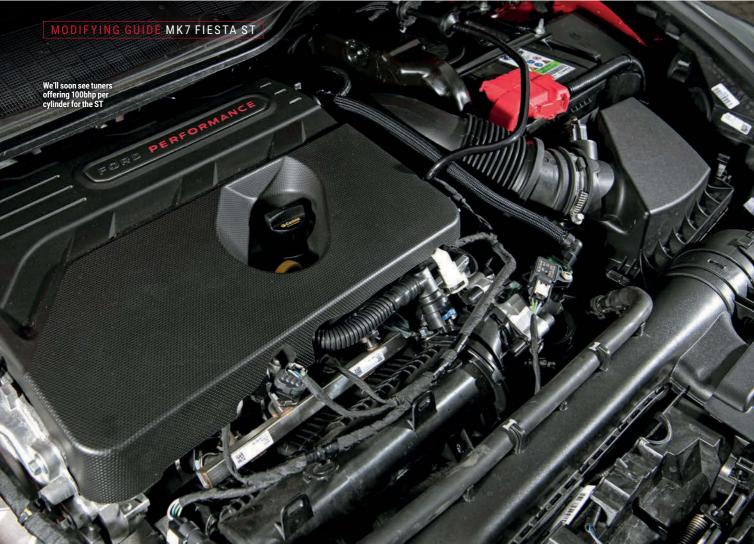
### INTERIOR

All Mk8 STs come well-equipped, but if you've already got a top-spec ST-3 model, or have the sought-after Track Pack added, then you've already got an ideal fast road setup that's practical enough for the odd track day too.

If you do want to personalise things, a set of sporty bucket seats from Corbeau do the trick. You can take things further with rear seat deletes, and Airtec Motorsport even does a bolt-in show cage for a racy look. Add a false floor to cover up where the rear seats have been removed and a cargo net to allow you to retain some kind of boot space, and the whole things starts to look very OEM-plus – like a kind of Fiesta ST Clubsport; perfect for cruising across to Germany in comfort, setting some blistering laps around the Nürburgring, and then cruising home again.







### **ENGINE**

The Mk8's EcoBoost may have lost 100cc and dropped a cylinder compared to the Mk7, but that hasn't made it any less tuneable. Or powerful.

Your first step should be a performance remap. Even if you're keeping the car totally stock elsewhere, a firststage software upgrade (that requires nothing more than a decent panel filter in the stock airbox) will really bring the ST to life, offering sharper throttle response, better pulling power, and ultimately a decent dollop of extra bhp. The only caveat is you need to pick a calibration from a reputable company - do your homework and choose one from the many respected Ford tuners in the scene. and you'll enjoy all the benefits without any compromise. Mountune, Laird Performance, Revo. and Collins Performance all have first-stage software upgrades for the Mk8 ST, with prices ranging from £300 to £600.

That will quench your thirst for power for a while, but those of you looking to take engine tuning to the next level will start reaching the limits of the factory hardware pretty quickly.

The fundamentals of air filter and exhaust upgrades come next and are well supported by upgrades from the main names in Ford tuning. Mountune offers a very impressive carbon induction kit for £399, but alternatives are also available from as little as £150. The good news is, at this point you don't need to start worrying about expensive sports cats and sports GPFs, and a decent catback system will bring a healthy growl to your ST, as well as getting rid of the unwanted gases fast enough not to impede engine tuning.

A performance intercooler is next on the list to keep the charge air temps under control (prices range from £310 for the Stage 1 Airtec unit through to £640 for the

massive Pro Alloy upgrade). The Mk8's 1.5-litre EcoBoost also struggles with restrictive pipework, so a big boost pipe kit, high-flow throttle elbow and induction hose will all make a notable difference.

Collins says its CP2 software adapts as you add further hardware upgrades so there is no need for further software upgrades at this point, whereas other software is designed to work with hardware upgrades: Mountune's m260 and Revo's Stage 2 work best with an induction kit, intercooler and charge pipe upgrade, while Laird's Stage 2 software ideally requires an intake, intercooler, sports cat and GPF delete for optimal results.

These fundamental upgrades will take power to around 260-to-270bhp without any problem, but for more you'll need to replace the turbo. As with the Mk7 ST, there are several turbo upgrade options for the Mk8. Mountune has recently released its new hybrid turbo that forms the foundations of the m285 upgrade, while Collins Performance has been working closely with Turbo Technics and the new S285 hybrid turbocharger to offer complete upgrade kits for the Mk8 Fiesta ST.

Existing m260 customers can upgrade to the m285 for less than £2000, while the Collins S285 turbo and CP3 software is available for around £1600 outright, or as little as £1050-to-£1300 if you exchange your old turbo. But both the m285 and CP3 packages recommend upgrading to forged pistons and conrods too, so factor this into any budget.

Hybrid turbo kits take power to around 280-to-290bhp, which is about the limit for bolt-on upgrades for the Mk8 at present. But with some custom tuning and a bit of forward thinking, well into the 300bhp range is easily possible. And there's plenty more to come...





### **TRANSMISSION**

Like the Mk7 ST, the Mk8 seems to handle power increases remarkably well; even the stock clutch seems happy until you start fitting bigger turbos and chasing 300bhp – upgrades are available, starting at around £300.

One thing you will want to invest in is an upgraded lower torque mount to reduce engine movement and the likelihood of any wheel hop under hard acceleration. Collins Performance offers a CNC-machined aluminium stabiliser that's available with either Powerflex's yellow (70A) bushes, or the stiffer Purple (80A) bushes for track use, which costs £114. Owners also report more positive gearshifts as a result.

Finally, a quickshift kit (prices start around £50) is a simple upgrade that makes a positive difference and is something you'll benefit from every time you drive the car.

### **SUSPENSION**

The Fiesta has always been famed for its playful handling, and the Mk8 continues that tradition. But, as ever, the excellent base Ford gave us can be improved upon. The first step, and more than enough for most users, is a set of lowering springs. These cost around £150-to-£200 and work with the OE dampers to provide OE levels of comfort but with a meaner stance that offers reduced body roll, better turn-in, and an all-round sharper handling experience. They're not expensive and make a huge improvement to how the car looks, as well as how it drives.

For more serious drivers, or those venturing on

track a few times a year, a good set of coilovers might be a better option. Bilstein's B16 kit and KW's Variant 3 coilovers are among the best available, and cost around £1600. Indeed, Ford even fitted adjustable coilovers to the Performance Edition, and ST Edition, which can be retro-fitted and cost about £1800. The compromise in ride quality might not be ideal for all Fiesta owners, but a good set of coilovers will certainly help see your lap times tumble on track.

A quality set of poly bushes and chassis stiffening braces take things to the next level before we begin to enter uncompromising, stripped-out race-car territory.













### WHEELS AND TYRES

Wheels are always a game-changer, and it's no different with the latest Fiesta. The stock ST alloys are fantastic, but if you want to make your Mk8 stand out from the crowd then a new set of alloys is the way to do it. If you choose wisely, you can also save yourself a good few kg over the stock rims and have even more clearance for bigger brakes too.

We'd suggest sticking with 18in rims for a road car, but - as with the Mk7 - track fans may find a

smaller 17in or even 16in wheel better for handling

The stock wheels are 7.5J with an offset of ET42.5, but you can play around a little and run an 8in rim with a slightly lower offset and fill the arches better - many specialists recommend retaining the 205-section tyre to avoid and clearance issues, although we have seen owners running 215s without any fuss.

### **BRAKES**

One area that can be improved without any negative side-effects is the brakes. Start by replacing the OE-spec pads with some quality fast-road upgrades these can be accompanied by performance discs and brake lines to provide a performance overhaul of the standard stoppers.

But the ultimate in braking means swapping the factory calliper for something more manly. That doesn't always mean having to go massive, though: a decent 330mm brake kit works wonders on the little ST, and Pumaspeed offers a complete bolt-on 330mm/four-pot kit for less than £900.

### CONTACTS

### **MOUNTUNE**

www.mountunestore.com

### **COLLINS PERFORMANCE**

www.collinsperformance.com

### **REVO**

www.onlyrevo.com

### LAIRD PERFORMANCE

www.laird-performance.co.uk

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### **\$280 TURBO**

Complete in house designed, engineered and manufactured by **Turbo Technics**. Direct fit Hybrid performance turbo for Ford Fiesta 1.6 Ecoboost, Stage 2. Complete with fitting kit including silicone inlet hose, designed to fit with standard air box. Includes all the parts required to fit to the engine.

BHP Rating: Up to 350 BHP\*

### **Specification:**

Turbo Technics designed larger upgraded billet compressor wheel. Full size K04 turbine wheel upgrade.

Turbo Technics designed anti-surge ported compressor housing.

Turbo Technics large a/r turbine housing (nickel-alloy)

Bearing housing and bearing system upgrade (K04)

Upgraded journal bearing and shaft.

Turbo Technics 360 degree thrust bearing assembly.

Competition seal kit.

\*with supporting modifications

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If there's one thing Ford does well, it's fast, nimble, and hugely entertaining hot hatches. The first fast Fiestas set the bar and were quickly joined by excellent Escorts in the 1980s and 1990s. But it was the arrival of the Fiesta ST in 2004 that took things up a notch.

Combining sporty appearance and practical performance in a real-world package that's just as comfortable on the school run as it is a flying lap around the Nürburgring, the Mk6 Fiesta ST was an instant hit. And Ford continued to improve the recipe with the award-winning Mk7 and Mk8 models to create the benchmark modern hot hatch.

Sadly, the Fiesta and therefore the much-loved ST models will cease production in 2023. But the legacy they leave will last long in the memory of fast Ford fans worldwide. To celebrate, we've compiled this special 100-page collector's edition bookazine. Inside, we look back at the three generations of Fiesta ST and include some of the very best Fiesta STs to appear in magazines, comprehensive buying guides, detailed tuning advice, and trusted tech advice.

The Fiesta ST will long be remembered as the car that defined the hot hatches of its era, and with this issue of Total Ford, we pay homage to one of Ford's greatest-ever hits.

