



Rolling stock

Time for new tyres, along with a set of refurbished rims and a tyre pressure monitoring system...

WITH SUCH A HUGE mileage, now just over 236,000 and growing by more than 120 miles daily, our Mk 4 GTI 1.8T project car has got through more than a few sets of tyres during its five years with us.

Quite early on, I'd fitted the car with a set of 7.5 x 17-inch Audi TT alloys, using a 225/45 R17 tyre size and, since then, as well as different sets of brand-new tyres, I've bought several sets of good secondhand wheels and tyres. Some may reject the idea of fitting secondhand tyres, but in reality it's no different to buying a secondhand car with tyres already fitted. I've always been very careful to check their provenance and condition first,

something which isn't always done with a secondhand car.

It's also a fairly cost-effective solution, in that you can often buy a complete set of wheels and tyres, already fitted, and ready to bolt straight on the car, for as little as £200 and, when the tyres are spent, you still have a set of spare wheels. In fact, I now have a garage full of them!

The most recent set was a combination of Audi S3 'Avus' rims with Toyo T1-R tyres, but when these finally wore down, around the end of April, I started looking around for suitable replacements. This time, though, with no good secondhand sets on the immediate horizon, a chance

conversation with Justin Gale at Monty's Wheels and Tyres brought the recommendation to try the Falken FK452.

A budget-priced high-performance tyre which is beginning to make a name for itself on the market, it's not the first time I'd heard the name mentioned in a positive manner. I seem to recall that Danny Whitrow at RSD had raved about them, some time ago, and a quick google of various internet tyre reviews and forum comments only reinforced the suggestion that they'd be well worth trying.

'A CHANCE CONVERSATION WITH JUSTIN GALE AT MONTY'S WHEELS AND TYRES BROUGHT THE RECOMMENDATION TO TRY THE FALKEN FK452...'



'AS I NOW HAD A COUPLE OF SPARE SETS OF S3 RIMS IN THE GARAGE, I WAS ABLE TO GET A SET OF FOUR STRIPPED DOWN AND REFURBISHED'

This time, fitting a set of new tyres would give the opportunity to get up to scratch on a couple of other requirements. Because I now had a couple of spare sets of S3 rims in the garage, I was able to get a set of four stripped down and refurbished first.

Again, it was Justin at Monty's Wheels and Tyres who pointed me in the right direction. As well as supplying a wide range of new alloy wheels and tyres, Monty's also does a regular trade in good new-old-stock and refurbished OEM wheels, as well as McGard wheel locks and other wheel and tyre-related products. Having just established a working relationship with a new subcontractor specialising in alloy wheel refurbishing, it was a good opportunity for them to show what they could do.

To make matters a little easier I was able to hand-pick a set of four rims which weren't too badly marked, but even so the finished result is very impressive. The wheels were chemically stripped, re-painted and re-lacquered and then oven-baked to achieve an almost brand-new finish, and at a very reasonable price, starting at £50 each.

Obviously this varies according to the amount of work necessary, but it's well worth considering if your existing wheels have become scuffed and scabby, as it can be much cheaper than having to buy new brand-new rims. With turnaround taking a clear working week, it's sensible to either supply a spare set,



'THE WHEELS WERE CHEMICALLY STRIPPED, RE-PAINTED AND RE-LACQUERED AND THEN OVEN-BAKED TO ACHIEVE AN ALMOST BRAND-NEW FINISH, AND AT A VERY REASONABLE PRICE...'

as I did, or take advantage of Monty's hire arrangement, using a slave set of wheels and tyres to keep you rolling in the meantime. Full details of prices and conditions can be found on the MW&T website.

I'm certainly very pleased with the result and will be taking great care to keep this set of S3 rims looking good in future, starting off with a good coat of an alloy wheel protecting finish while they are still clean and fresh.



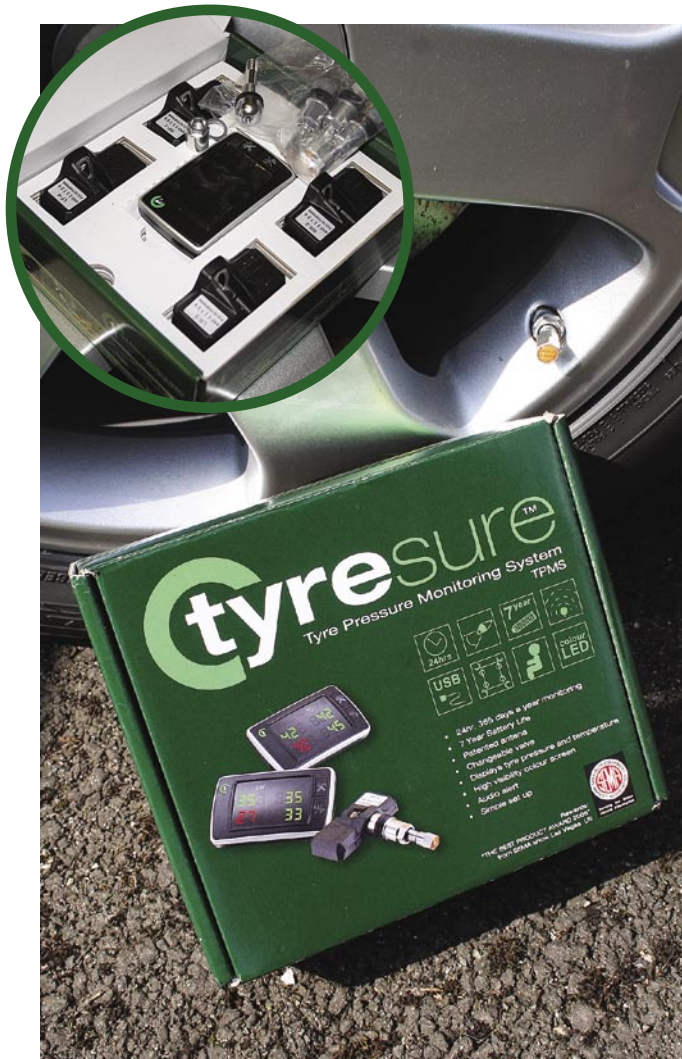
OF COURSE, after only a few days use, it's too early to provide any meaningful feedback on the performance of the new Falken FK452s, because new tyres take a while to wear in and settle before they can provide their full performance. In fact, it's important to drive very carefully on any type of tyre when it's brand-new, because the level of grip can be very poor initially. So far, I've only covered several hundred miles of mainly dry motorway use and they've only just begun to bed in.

But Falken claims that the FK452 provides precise handling and good directional ability because of its 5-rib tread design and 3-dimensional round block, good wet performance and aquaplane resistance due to multi-angled grooves and a new silica compound, and low noise levels for quiet running. The FK452 is also quite affordable, with a normal RRP of around £77 each (inc VAT) for this size.

We'll report further on these tyres after a few thousand miles of mixed road use, and some time on track. In the meantime, you can find more details on the website at www.falken-europe.com

Although it sounds very 'North European', Falken is actually a brand of Sumimoto Rubber Industries Ltd of Japan, founded in 1983

'FALKEN CLAIMS THAT THE FK452 PROVIDES PRECISE HANDLING AND GOOD DIRECTIONAL ABILITY, GOOD WET PERFORMANCE AND LOW NOISE LEVELS'



THERE WAS ANOTHER good reason for having a set of brand-new tyres fitted on this occasion. Last year I'd attended a tyre safety briefing at the Millbrook test track, promoted by TyreSafe (the new name for the Tyre Industry Council), at which the importance of correct tyre pressures was stressed.

Unlike a certain colleague, who shall remain nameless, I've always checked tyre pressures regularly and, as a fairly discerning driver, I can usually tell if there is any significant discrepancy when driving, but one of the products being



'TYRESURE IS AN ELECTRONIC TYRE PRESSURE MONITORING SYSTEM (TPMS) WHICH GOES SEVERAL STEPS BEYOND THE FACTORY-FITTED SYSTEMS WHICH ARE NOW SO COMMON'

demonstrated there caught my eye.

Tyresure is an electronic tyre pressure monitoring system (TPMS) which goes several steps beyond the factory-fitted systems which are now common on modern cars. It involves fitting a tyre pressure sensor and transmitter unit inside each rim, secured using a special tyre valve. Not really a DIY job, you need the services of experienced fitters, like Darren Boeg and Frankie Shiels at Monty's, to take the tyre off and refit it. The sensor itself just screws on to the base of the new tyre valve, but the wheel will need to be carefully rebalanced to take account of the slight increase in weight. Each sensor is referenced to relate to a particular corner of the car and so it's important to mark the wheels and fit them accordingly.

The rest of the installation couldn't be easier. I'd half expected all kinds of complex procedures to index the radio transmissions or set up the monitor but, so long as the wheels are fitted on the correct corners of the car, then the monitor, plugged into the 12V power socket, automatically picks up the radio transmissions and displays the precise tyre pressures for each wheel. Rather like a GPS Satnav, it takes a few seconds for it to tune into the signals but, once up and running, the system displays the individual tyre pressures in real time, to an accuracy of plus or minus 1 psi.

It also shows the temperatures recorded inside each tyre, and that's particularly important because the tyre pressure can also be affected by ambient



'THE REAL VALUE WILL COME FOR TRACKDAY USE, WHEN IT WILL BE POSSIBLE TO CAREFULLY MONITOR TYRE DURESS AND READJUST TYRE PRESSURES ACCORDINGLY'

temperature, let alone the heat caused when running at high speed. Just to prove the point, when I first set up the monitor it was showing higher pressures on the nearside of the car even though I knew that the tyres had previously been set at precisely 32 psi front and 30 psi rear. The answer came when switching to the temperature display, which showed that the tyres on the left-hand side, which had been in bright sunlight all day, were about 5°C warmer than those on the right-hand side, which had been in the shade.

There are other functions available; apart from the ability to switch between psi and bar measurements for pressure, and between °C and °F, the Tyresure system can also be set up to display an alarm if the tyre pressure falls below a certain pre-determined level, selected by the driver, or if the temperature exceeds a certain level.

There is also a procedure to reset the monitor display if the wheels and tyres are swapped diagonally, or front to rear, to balance out wear, so that you don't have to refit the sensors. Make sure to clearly mark the individual wheels, though, so that you don't lose track of them when working on the car.

Even for normal road use, the Tyresure system adds a fascinating dimension to driving. As well as the obvious safety and economy considerations, being able to check for correct pressures both statically and dynamically, it gives a great insight into the way in which temperatures and pressures change with speed and usage. But the real

value will come for trackday use, when it will be possible to carefully monitor tyre duress and readjust tyre pressures accordingly, in combination with accurate temperature readings, to produce better balanced and more consistent handling throughout the track session.

The Tyresure kit doesn't exactly come cheap, priced at around £179 inc VAT for this 4-wheel (20-60 psi) kit but, just to put things into perspective, Justin at Monty's showed me a brand-new TPMS sensor which he was having to fit on a wheel for a customer, a genuine Audi part which costs over £90 for a single sensor, along with a replacement valve assembly for over £25. At that rate, the Tyresure kit, which provides so much more information than a factory-fitted TPMS, looks a much better bet, but do make sure that you also have a good wheel and tyre security system fitted, like the McGard locking wheel bolts which we use. 🇩🇪

Contacts

Falken tyres

www.falken-europe.com

Monty's Wheels & Tyres

Tel: 0845 260 8991

www.montyswheelsandtyres.com

Tyresure

Tel: 01530 517 920

www.tyresure.com

TyreSafe

www.tyresafe.org



How important is correct tyre pressure?

As well as a detrimental effect on handling and safety, a 3 psi drop in tyre pressure has been shown to produce a 5% increase in fuel consumption and a 10-15% increase in tyre wear. A 6 psi drop in pressure produces a 10-20% increase in fuel consumption and 30% increase in tyre wear. Even this amount of tyre pressure reduction is virtually impossible to identify by sight alone, especially on low-profile tyres, and many gauges provided at garage forecourts are seriously inaccurate.



OEM TPMS

In the USA, TPMS has been required to be fitted, by law, on all new vehicles from September 2007 and many European vehicles already have a 'flat tyre warning system' installed either as standard or available as a factory-fitted option. Although the TPMS system for the current Golf, for instance, only costs an extra £35 as an option, it doesn't display actual pressures or temperatures, only indicating a warning symbol when tyre pressure falls below a certain level. In fact, most factory-fitted systems don't actually measure the pressure as such, but detect any substantial difference in the rolling circumference of the tyre via the ABS and ESP system sensors. As such, they will only indicate when a significant reduction in pressure has occurred, by which time the tyre might be seriously deflated and already damaged.

• Next month, we'll finally get on to the next round of suspension modifications, fitting Whiteline's castor bushes and a pair of Audi TT front hubs.