

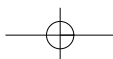
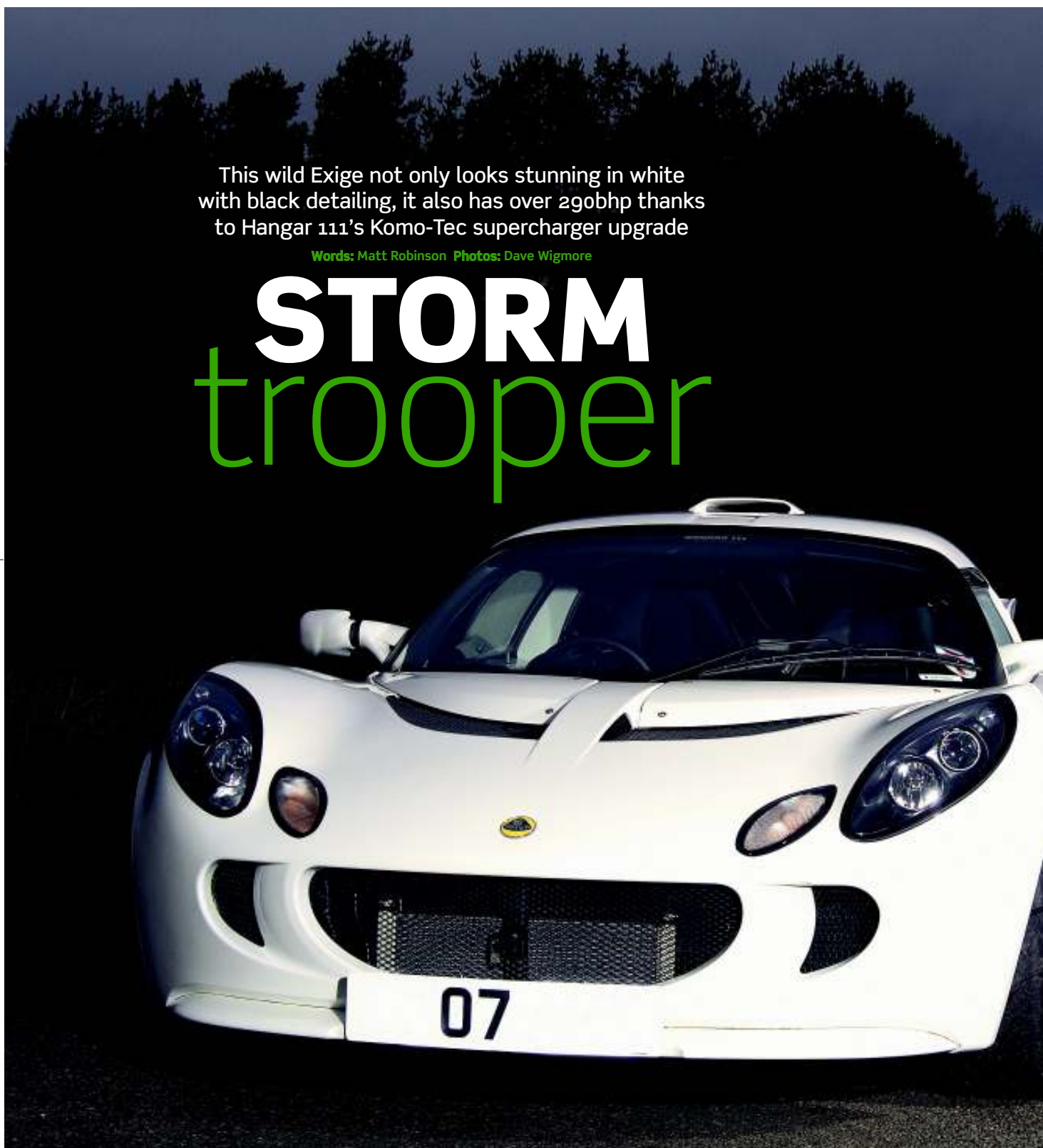


KOMO-TEC EXIGE S 280 reader's car

This wild Exige not only looks stunning in white with black detailing, it also has over 290bhp thanks to Hangar 111's Komo-Tec supercharger upgrade

Words: Matt Robinson Photos: Dave Wigmore

# STORM trooper





**It looks like one of the bad guy foot soldiers from Star Wars and is about ten times as hard; this Exige S is one rapid, sorted machine**

## KOMO-TEC EXIGE S 280 reader's car

Scotland is doing its level best to get rid of us. As we huddle around the white Lotus Exige S on a bleak, desolate moor just north of Stirling, the driving wind that has been groaning at us all morning finally brings with it icy, biting rain. It's hardly the kind of day to be outdoors, even less the sort of day to drive a mid-engined rocket of a car on Yokohama's A048 semi-slick tyres... rubber optimised for the dry.

Still, owner Paul Maclean very proudly hands me the key and – along with Hangar 111 MD Greg Lock and PT's snapper Wigmore – he climbs into our Audi RS4 Avant photo car and says he'll head back to Stirling with the others while I go and 'enjoy myself' in the Exige. "You want as little weight in it as possible so you can experience it to the full," he smiles, knowingly. I'll bet. Well, it's bloody freezing, and even in standard format the S2 Exige S is one of my very favourite cars on the roads – the orange beauty we had in PT9 almost had me refinancing our house so I could have one on the drive. So I don't stand there arguing with him – I just get in the thing and fire it up.

Before any of our Celtic readers north of the border start thinking I'm the typical sort of Sassenach that thinks it always rains in Scotland, though, let me put this on record; I actually lived in Stirling for three years while at uni, and I love the town, the area, the country as a whole. I also especially love some of the quieter A- and B-roads hiding around here in the foot of the Trossachs, so I know exactly where to point the Lotus' swooping snout once the Audi has roared off towards the Ag.

I can't go into too much detail here about the drive (see *Performance Tuner's* verdict at the end of the piece for full impressions), but suffice it to say that I am deeply impressed with this Lotus. The slimy, cold October roads are covered in wet leaves and varying degrees of standing water, from damp patches through gushing sheets to huge puddles which could double as lochs. And do I once feel my buttocks clench in cold fear? Is adrenaline pumping through my body, autonomically preparing me for the worst? Are the palms of my hands sweaty with abject terror?

Not a bit of it. The Lotus is just... *astonishing*. Really, and truly, *astonishing*.

So, let's come back to Paul and Greg –



## KOMO-TEC EXIGE S 280 reader's car

who, I might add, has travelled up from his Ipswich HQ today just to be on hand to help Paul, a resident of local Alloa, talk us through the mods; now that's customer service for you! – and let them explain to us what has gone into making this a Lotus Exige S turned up to 11.

"This is as far as we'd like to push this set-up on the Exige S for the moment, as the spec has been proven through extensive testing," explains Greg, shivering in the teeth of the autumnal Caledonian gale. "It's a safe map, which keeps the car reliable and driveable too. It could go further, but then you'd start to alter the car's characteristics." That's a good start – an S2 Exige S is a superb car out of the box, so you have to mod it carefully not to spoil the dynamics.

Paul takes up his personal story. He and his wife previously owned an S2 Elise with the K-Series 120bhp motor, which is where their love affair with Lotus began. So, in July, having seen one at an Edinburgh dealership, they took the plunge and bought an Exige S, in Aspen White. "It came with the Super Sport pack, which adds twin front oil coolers and Bilstein adjustable dampers," he smiles. "We bought it new in July and loved it straight away... but it wasn't long before I thought I could do a bit more with it."

That decision was probably fuelled by the thoughts of fellow Exige S owners that Paul knows through forums. "There's a belief that the car has the scope for 240+bhp, there's a lot of capability in the car, but you have to keep the Lotus character," he adds.

So it was that in August, he took the car to Hangar 111 and the wonders of the Komo-Tec kit, of which he'd heard a lot about. So began the beginning of a great relationship with Greg.

"A lot of customers want more power with no good reason but straight away Paul was clear that he wanted something driveable and that would realise the Exige's potential," Greg explains. "What you've got to remember is that this is going to be used as an everyday car, and between us we decided that the Komo-Tec kit was right for Paul."

In very broad terms, what the kit includes is a front-mounted intercooler, a sill-mounted coolant pump, a remapped ECU,

**"Paul was clear he wanted something driveable that realised the car's potential"**

updated plugs and injectors and a Komo-Tec exhaust with sports cat to aid gasflow. This is what nets Paul an additional 73bhp and 23lb ft of torque over the standard car; so it's no basic ECU flash to make the supercharger work a bit harder – it's a full-on engineering solution to create an extremely rapid Lotus. "There's an added benefit to the exhaust as well as the better sound and airflow," says Greg, smiling, "because it weighs 15kg less than the standard item, improving the power-to-weight even further."

**Exige with 291bhp is stupidly, stupidly fast – not just in a straight line but around the corners, making it a devastating B-road mid-engine destroyer**





## KOMO-TEC EXIGE S 280 reader's car



While this is the first Exige S in the UK to get this Komo-Tec stage 2 kit (known as Hangar 111's 280S conversion), over 20 cars have been successfully equipped out in Germany and they can now hit 60 from rest in under four seconds. Paul's has already clocked a 4.06, so it tells you just how usable all this extra performance really is – it's only done 6000 miles, after all!

Paul, naturally, is delighted with it (as is his wife; after all, it's her car too!). He's obviously thought carefully about what he wanted to do with the Exige S, and he couldn't have had any better advice than from somebody like Greg, whose company has done a smashing job on this conversion. Over to Paul for his final analysis of his new toy: "The Exige S is already a very quick car, but the chassis could always handle more power: now with the extra 73bhp (and a power-to-weight ratio of over 300bhp-per-tonne) it turns the car into something in a league of its own: a true g11 GT3 beater!" I couldn't agree with him more.

So, spool back a bit, and you'll recall I'm now sitting in the driving seat of this missile, heading towards the Ag and a rendezvous with a scintillating piece of road which is saddled with the prosaic name of the B827...

## Specification

### PAUL MACLEAN'S LOTUS EXIGE S 280 KOMO-TEC

■ ENGINE	Toyota 2ZZ-GE VVTi 16v 1796cc four-cylinder supercharged with Super Sports pack (incorporating twin oil coolers and baffled sump/Morso oil pan) and Komo-Tec Stage 2 conversion, including remapped ECU, front-mounted uprated intercooler with water jacket, silt-mounted coolant pump, specially calibrated fuel injectors, Komo-Tec carbonfibre induction kit, Komo-Tec sports cat with Komo-Tec full exhaust system, uprated spark plugs
■ TRANSMISSION	Standard six-speed Lotus manual gearbox, with torque-sensing LSD
■ SUSPENSION	1-way adjustable Bilstein dampers with adjustable ride height, front anti-roll bar, double shear track control arm brace
■ BRAKES	Standard Exige S 282 x 62mm vented and cross-drilled discs with Lotus AP Racing two-pot calipers front, 282 x 62mm vented and cross-drilled discs with Brembo single-piston sliding calipers rear
■ WHEELS & TYRES	Hi-Power 16in front/17in rear ultra lightweight forged alloy wheels in black, 6.5in wide front, 7.5in rear, on Yokohama Advan A048 LTS tyres all round, 195/50R16 front, 225/45R17 rear
■ EXTERIOR	S2 Exige S in Aspen White with Super Sport Pack and Hangar 111 280 graphics
■ INTERIOR	Standard Exige S interior
■ POWER	291bhp at 8640rpm, 182.3lb ft at 8020rpm
■ WEIGHT	930kg
■ PERFORMANCE	0-60mph: 4.06s 0-100mph: 9.32s 30-70mph: 3.45s Standing 1/4 mile: 12.05s at 113mph Max speed: 150+mph

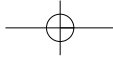
Hangar 111 did the work putting the Komo-Tec 280 kit onto the Exige S, but the car looks largely standard outside

## PERFORMANCE TUNER'S VERDICT: KOMO-TEC EXIGE S 280

Blistering; that's the word that comes back to mind as I try and recount those glorious, precious tens of minutes I spent in Paul's Lotus on the road from Braco to Comrie. To say it's quick is not

Bigger, better intercooler is the star of the Hangar 111 conversion; it negates the need for any cooling air from the car's roof scoop





## KOMO-TEC EXIGE S 280 reader's car

### CONTACT

Hangar 111 Lotus Performance, 01473 636961, www.hangar111.com email: info@hangar111.com

Falkland Performance, Glenrothes, Fife, 01592 773677, www.falkland.co.uk

only blindingly obvious, it also falls some way short of encapsulating the phenomenal shove you get as you take the plunge and fully extend it. Take a look at the stats (see sidebar) to give you some idea; with the extra power, this car now does 0-60mph in just over 4s, it cracks the ton in under 10 and has mid-range stonk like you wouldn't believe - 30-70mph in 3.45 seconds and 30-100mph in a scorching 7.47 seconds.

And it feels this supercar-quick inside; boy, does it feel like it, and more! There is instantaneous go at any revs in any gear, and not just a surge of torque, but violent, urgent acceleration of a magnitude I thought only reserved for full-on race cars. Mind you, power-to-weight is an amazing 313bhp-per-tonne, thanks to the little Lotus weighing a scant 930kg with three-quarters of a tank of Super sloshing about in it.

The additional screaming racket of the supercharger and Komo-Tec exhaust mixes with the

But what truly astounds is the fact it can get this monumental power down to the road without drama or fuss, especially on a day like today. It finds incredible traction at speeds which border on the insane, whipping round apices and firing out onto straights with barely a lift of the throttle, the next curve rushing up on you like the corkscrew section of a roller-coaster. It's intoxicating, laugh-out-loud performance mania and I love it.

The traction light - and I can assure you, the traction control stayed firmly on for my brief drive in the beast on damp roads - barely flickers, the Lotus making the most of its roadholding to deliver searing cross-country pace. The back remains dependable and benign, the front is sharp, informative and biddable, the speed you carry is frightening. I'm no expert driver by any stretch of the imagination but the Lotus flattered me without doing all the work itself, as we hurtled along at velocities only the most mental Mitsu Evo would have been able to live with... and even then I doubt it would've kept up.

And all of the Exige's exquisite characteristics - the beautifully weighted steering, the exemplary body control, the feeling of the chassis talking to you through your coccyx - remain firmly intact; the extra muscle provided by Komo-Tec, courtesy of Hangar 111, hasn't overridden the rest of the package and made it a point-and-squirt monster.

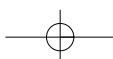
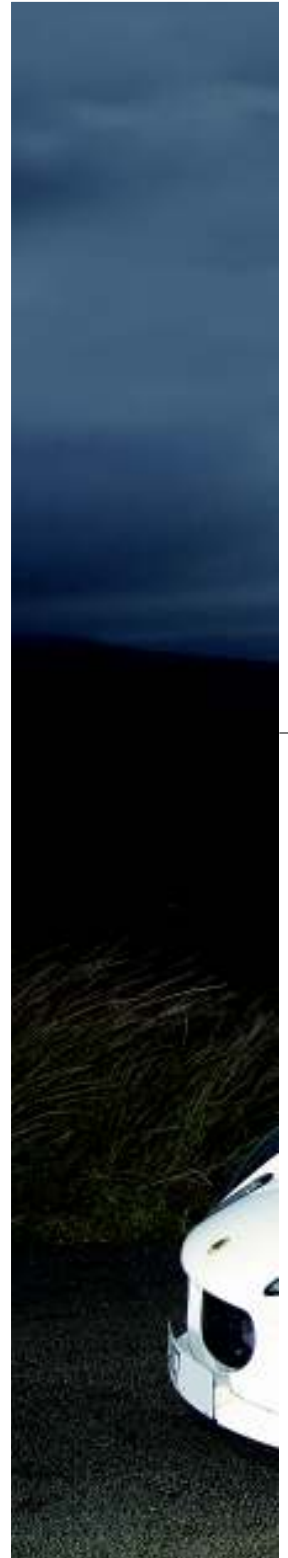
You know what? This is a privately-owned car, but it's possibly *the* best tuned motor I have ever driven, feeling utterly factory while at the same time being as far away from the standard Exige S in terms of performance as I can imagine. In fact, it's one of the very best cars I've ever had the pleasure of driving, full stop. I can't find fault with it; it receives *PT*'s full marks. Awesome. MR **PT**

**PT Rating:** ■■■■■■■■■■

**What truly astounds is the fact it can get this monumental power to the road without drama**

2ZZ-GE 16v lump on cam and the induction roar of all the carbonfibre, and explosive - again - hardly covers it. With a cacophony of beautiful, unfettered mechanical noise washing all around you, your backside three inches off the tarmac, the Exige hauling hard for the 8000rpm sweet spot, it's like the world is on fast-scan forward with accompanying Dolby 5.1 DTS acoustics at maximum volume. The row within makes you think your head is inside the workings of a jet engine, while scenery and bends flash past you before you're even aware you've sized up the radius, inputted your steering lock and hammered round the curve. It's instinctive, and glorious, piloting this taut, focussed demon.

Greg Lock, Hangar 111's MD, and Paul Maclean (below, far right, l-r) have worked closely together on this, the first Komo-Tec 280S Exige S in the UK; the end result is truly phenomenal...



## THE STATS

We're not just about horsepower bragging figures here at *PT*, and neither are Paul or Greg. They brought along reams of data to back up the power and performance claims, and they make for mighty impressive reading. Just days before this shoot, Paul took the Exige S 280 to Falkland Performance's Glenrothes rolling road and came back with peak figures of 291bhp at 8640rpm, and 182.3lb ft of torque at 8020rpm (fret not, over 140lb ft is available from just under 2400rpm, meaning it surges from low revs); that's from standard claims of 218bhp and 159lb ft. And it also equates to almost 221bhp at the wheels, which is ferocious.

(All 1/4-mile tests carried out with AP-22 Performance Meter, October 2007, prior to final rolling road figures - data compiled with earlier rolling road figures/ECU map)

	<b>Lotus Exige S 218bhp, 159lb ft</b>	<b>Lotus Exige S 280 Komo-Tec 278bhp, 181lb ft</b>
<b>Roll out</b>	0.31s/0.56g/4.4mph	0.31s/0.57g/4.5mph
<b>60ft</b>	1.97s/0.64g/36.5mph	1.95s/0.33g/34.6mph
<b>330ft</b>	5.41s/0.38g/66.9mph	5.27s/0.41g/72.3mph
<b>1/8 mile</b>	8.32s/0.30g/87.7mph	7.95s/0.14g/93.2mph
<b>1/4 mile</b>	13.06s/0.25g/106.3mph	12.05s/0.22g/113mph
<b>0-60mph</b>	4.61s/0.47g/225ft	4.24s/0.56g/199ft
<b>0-100mph</b>	11.55s/0.19g/1062ft	9.32s/0.28g/811ft

### Komo-Tec Exige S 280:

**Best 0-60mph** 4.06s

**Best 30-70mph** 3.45s

### 30-100mph performance:

	<b>Seconds</b>	<b>g</b>	<b>Feet</b>
<b>40mph</b>	0.61	0.73	31
<b>50mph</b>	1.5	0.57	89
<b>60mph</b>	2.32	0.55	156
<b>70mph</b>	3.45	0.41	264
<b>80mph</b>	4.57	0.39	387
<b>90mph</b>	5.71	0.39	530
<b>100mph</b>	7.41	0.28	767

## HANGAR 111

Greg Lock and his wife Marianne started this Lotus specialist company back in 2002, having been enthusiastic Lotus owners themselves. The business grew quickly by word of mouth around the Lotus community, providing enthusiasts with parts and services with a wealth of knowledge to back it all up. The company has also designed and supplied aftermarket products to Lotus itself, which distributes the Hangar 111 goodies via the global dealer network. Greg says they can work on pretty much any modern Lotus, but specifically the Elise-based cars, which include the Exige (obviously) and the 340R. I wouldn't be surprised if Greg rang us up soon to tell us he'd got packages available for the 2-Eleven as well.

There are two upgrade packages available for the Exige S, the 250S and the 280S, of which Paul Maclean has the latter. Hangar 111 will fit these Komo-Tec tuning kits to your car, and included in the price are not only all parts, labour and VAT, but rolling road runs before and after so you can see exactly what gain you're getting. The 250S package is £3499, the 280S set-up is £4699. The Turbodriven 250S supercharger is also available for non-supercharged Elise 111R and S, and Exige models.

Haven't got an Exige? Or you don't fancy a full 280S kit because you're on a budget? Check out Hangar 111's excellent website (see contact details on opposite page), which details all its products available for all types of Elise, Exige and 340R, and keep reading *Performance Tuner*; we're planning a visit to the brand new Suffolk HQ very soon, having seen how excellent Paul's 280S was up close and personal...

## GET FEATURED IN *PT*

Got a modified car of your own that you reckon is worthy of a feature? We'd like to hear from you. Whether it's a track day special built for a couple of grand, a rare icon from years past or an enhanced version of a modern performance great, we're keen to see what YOU, our readers, are driving. Drop us an email at [performancetuner@chpltd.com](mailto:performancetuner@chpltd.com) with the spec and a few jpeg photos and your contact details, and we'll get back to you. If you're featured in the mag, we'll give you a *Performance Tuner* T-shirt, some stickers and a gift too!

