

Project XK8 *Part 5*

With our 1998 4.0-litre XK8 running smoothly and stopping faster courtesy of uprated brakes, we decide it's high time to see if we can make it a little quicker – and louder too...

Words: Matt Skelton Pictures: Sarah Harrington / Adam Tait

Let's get one thing clear before we start this instalment of Project XK8 – a standard naturally-aspirated 4.0-litre car is not slow. With a quoted 290bhp and 290 lb ft of torque courtesy of that all-alloy AJ-V8, straight out of the box a Coupe will sprint to 60mph in 6.4 seconds and on to 155mph.

Now, that's hardly sluggish, but since the XK8 was launched in 1996 aftermarket tuners have had plenty of time to tinker. That means that today there are a range of options available off-the-shelf to make your XK just a little more sports car than GT. It's true that the supercharged cars are more receptive to tuning modifications – bigger supercharger pulleys and charge-cooling systems can produce significant gains – but there's the potential to improve the naturally-aspirated engine too, so we chose to investigate.

To find out the options, we turned to Slough-based specialists, Paramount Performance (www.paramount-performance.com / 01753 533633), a company that has been supplying aftermarket tuning parts for the Jaguar range since 1986. A look down the list of parts suitable for the XK8 showed that we could go rather a long way if we wanted to (as well as exterior and interior aesthetic enhancements, a range of engine, suspension, steering and brake upgrades are all on offer), but we decided to keep things simple.

As our car is CATs equipped – quite a rarity for an early XK8 Coupe – it handles well enough as standard and the brake upgrade (see JWM October 2008) means it stops well too, so we decided to tick just two option boxes, those for an ECU remap and a catalyst-back performance exhaust system.

Our reasoning was three-fold. First of all, the standard exhaust system does a good job of strangling the aural ability of that V8, and it also compromises power a little too. Paramount's aftermarket systems from Milltek promised not only to improve sound quality dramatically, but also to release an additional 12-18bhp. On top of that, the ECU remap offered a claimed power gain of a further 20bhp (30bhp on an XKR), but also improved power delivery and throttle response. Finally, by only changing two things on the car, we'd be able to feel just how much

difference each made – and we were hoping that difference would be quite noticeable. In combination, the exhaust and remap promised to change the character and performance of our car significantly, but not so much so as to make it unrecognisable from the original.

V8 voice finding

For many and varied logistical reasons which I won't bore you with, it wasn't possible to fit the exhaust and do the remap on the same day, but that suited us as it meant a chance to experience one modification in isolation to begin with. So, first up was the fitting of the exhaust.

Paramount offers two Milltek options – Sports and Super Sports, and both retail at £995 + VAT. Both are full stainless steel systems from the cats back, using 2.25in bore pipes (57.17mm – slightly larger than standard) and finishing in 100mm 'Jet' tailpipes. The difference between the two is that the Sports system retains a centre silencer (albeit a stainless steel replacement), while the Super Sports system loses the silencer completely, replacing it with straight-through pipes. The result is a louder system. After considering the two for about half a second, we ticked the Super Sports box...

While fitting doesn't require any particularly special tools, doing the job on the driveway will be tricky due to the fact the rear part of the XK8's exhausts go up and over the rear axle – just as on an XJ-S. This means that a fair bit of ground clearance is needed to remove them, much easier with the aid of a ramp. As the likelihood

of the original system seizing in place is also very possible, access to an angle grinder and air-saw plus a fair degree of muscle is also very probably necessary. Paramount charges an additional £100 + VAT to do the job – which seemed very reasonable to us (and even this is waived for JEC members), so we took the car to its workshops and stood well back.

Equipped with all the necessary tools, removing the old system was relatively straightforward, and with it off the car, its restrictions were clear. As well as the slightly smaller bore pipes and the centre silencer, the section of the original exhaust that passed over the axle was 'pancaked'. The new system's larger bore (the slight flare being added just after the join with the cats), was consistent throughout its path to the back of the car.

With everything in place, we twisted the key and...grinned widely. The XK8's previous near-silent idle had been replaced by a deep-seated and very pleasant burble. Any fears that



In association with



The new sports exhaust looks subtle from the rear – the larger tailpipes being the giveaway – but it certainly increases the grin factor courtesy of a fabulous noise, and increased performance. An ECU remap helps too...

the noise would be intrusive or tiresome where dispelled on the 50-mile drive back to JWM's offices, a drive that included town-motoring, M25 cruising, and a final blat along country lanes. In all instances the new exhaust was louder than the old system, but only ever in a good way. There was no nasty resonance when cruising, but an instant deep V8 roar whenever the throttle was opened. We didn't tire of it once – and we still haven't. As for power gains, we weren't expecting night and day differences just from the exhaust, and that wasn't the case, but throttle response certainly seemed improved, and the addictive noise available offered plenty of incentive to open the taps at every opportunity.

Return for a remap

After a month of living with the exhaust conversion – after which time the only downside proved to be the occasional stiff neck courtesy of the drafts incurred while driving with the windows

wound down to get the full V8 effect – we were able to return to Paramount for stage two of our tuning process, the ECU remap, which costs £599+VAT.

As Paramount has remapped plenty of XK8s, it has got the process down to a fine art, but each remap begins the same way with the car being strapped down onto the four-wheel rolling-road, hooked up to the computer, and the engine run through its power range to make sure it is operating as it should. Any existing faults or flatspots can then be identified and sorted before the remap takes place.

Our car ran perfectly and, given that it is ten years old and the original Nikasil-bore unit, produced a greater power output than Paramount expected, the result being an indicated 248.8bhp at the flywheel. This is, of course, less than Jaguar's claimed power output which is achieved without ancillaries etc attached to the engine, but is nevertheless a very healthy figure, even taking

into account the better breathing courtesy of the new exhaust.

With this stage of the process complete, the download of the remap to the ECU began, a process that took about 20-minutes to complete. Once finished, the car was left to idle for five minutes, and was then run up through the gears several more times on the rolling road to around 100mph. This process helps the gearbox, which is a 'learning unit', to begin to adapt to the new power-delivery. Before leaving Paramount informed us that it would take around another 100-miles of driving for the gearbox to fully settle down with the engine's new characteristics, after which distance changes would be far smoother.

Given that the indicated power output post-remap had jumped to an indicated 277.3bhp at the flywheel – a gain of 28.5bhp, again, more than was expected – we were keen to get back behind the wheel, and so it didn't take long to knock off that 100 miles.

Exhaust changes



1 Our new system would fit from the cats-back. Though they don't look pretty, the cats are in serviceable condition, but the surface rust here and throughout the standard system means removal is a pain...



2 This is the standard centre silencer box. Our Milltek Super Sport replacement system would do away with this in favour of straight-through pipes



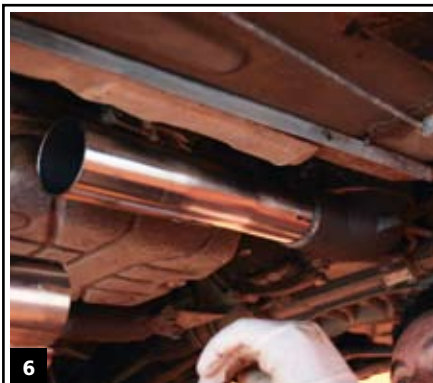
3 After the centre silencer, the standard system branches into two separate pipes again which run up and over the axle to end in these rather weedy looking tailpipes



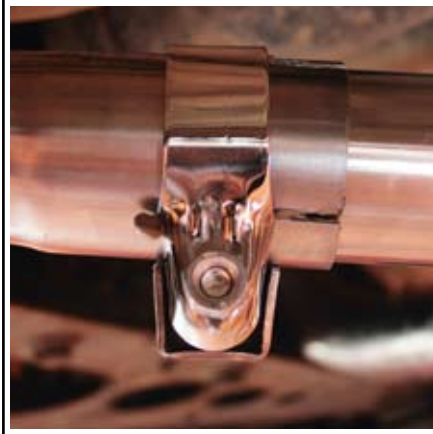
4 Given that the old system was going in the bin, Paramount didn't waste any time and simply cut through the seized retaining fixings. The pipes were also cut into sections to make removal easier



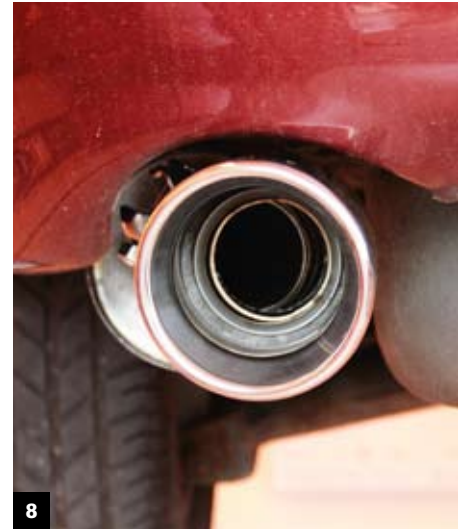
5 The replacement system laid bare in the floor – note the straight through pipes in lieu of the centre silencer. The inset shows how the over axle pipes are constant radius – the standard ones are 'pancaked'



6 The new system begins to go on – note the subtle flare for the bigger bore. Inset shows that the quality of fittings is high



7 Where once there was a centre silencer, now there are straight-through pipes



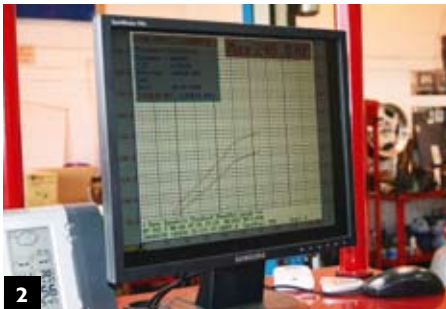
8 The finishing pipes are 100mm bore and look far better than the originals while definitely not being of the boy racer drainpipe variety



A lovely rear end – the new exhausts look a treat, and they sound it too



1 Paramount's rolling road is a serious piece of kit... Here, our car is put through its paces to ensure the engine is healthy before the remap begins



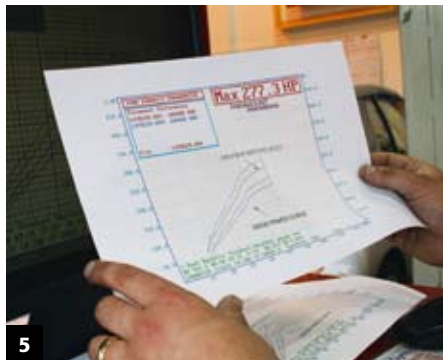
2 The initial result is a better than expected 248.8bhp at the flywheel



4 With the remap downloaded and the car having been left to idle for five minutes, it's taken through several full power runs through the gears to check all is well



3 Engine tuning the modern way – the remap begins



5 Job done – and a creditable 28.5bhp gain. Paramount would expect even better from a supercharged engine

Driving results

So, in combination, have the two modifications been worthwhile? From our point of view, the answer is an unequivocal 'yes'. The exhaust modification was worth it for the sound alone – it's really transformed the character of the car – and the additional power it's released has been a bonus. True, £995+VAT is not a small sum, but then it is a stainless system that should last the life of the car, and the cats-back standard set-up from Jaguar is a not inconsiderable £523.55+VAT. Should your system need replacing, the upgrade is well worth consideration.

As for the remap, though a 28.5bhp increase doesn't sound like a huge amount, the performance gain is noticeable – especially in combination with the exhaust – and not just at the top end. Low-down torque and power delivery throughout the rev range are also noticeably improved, making the XK8 just that little bit more responsive at all speeds. And, as for putting your foot down, the V8 growl is now quite unforgettable...

*Our thanks to Paramount Performance for its help with this article. www.paramount-performance.com
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