



Jaguar World Monthly – October 2003

QUEST FOR EXCELLENCE by Ian Kuah

With such pains-taking attention to detail, Lynx's latest recreation of Jaguar's XKSS is a serious temptation for Ian Kuah.



Lynx has been building its D-types from as far back as the late 1970s. Lovingly crafted using ideas and techniques acquired and honed from the restoration of authentic cars, Lynx is well qualified to make a superb rendition of Jaguar's Le Mans car. Indeed, among its customers are owners of original cars, looking for a more practical (and a little less valuable!) alternative to the real thing for leisure motoring.

Like looks, perfection is in the eye of the beholder, and I have just driven what I believe to be the best executed Jaguar XKSS re-creation, a car which has taken over 3,000 man-hours to build. For many people, a replica implies a nut-and-bolt copy. At Lynx, however, the re-creation of such a classic encompasses improving the original design to make it more user-friendly in today's increasingly tougher driving environment.

All Lynx D-type and XKSS re-creations use the vastly superior E-type independent rear suspension (IRS) instead of the original live axle, while numerous further modifications incorporate improvements made in the years since the first Lynx D-type. On that basis, it could be said that the Lynx cars are more like the evolution models that Jaguar would probably have built had the company continued with the D-type after 1956, when it withdrew from racing. Certainly the IRS would have made the car more competitive on all circuits, rather than just Le Mans, as the 'all independent' E2A prototype of 1960 hinted at. The Lynx interpretation, then, can give us an insight into what might have been.

When towards the end of 1956 Jaguar was left with a number of unsold 'customer' D-type monocoques, it was able to produce the most stunning of road sports cars. However, a factory fire early in 1957 curtailed production, leaving just 18 completed cars (including two D-types later converted for owners).

"Although the XKSS is a more practical road car than its competition brother. Lynx XKSS replicas are much rarer than their D-type equivalents," Lynx technical guru Andrew Parkinson explained. The tide is turning, however, and with 42 Lynx D-types and just six Lynx XKSS cars out there, this seventh car could be the start of a renaissance for Jaguar's road racer. "If you want to actually use the car, the two-seater XKSS with its proper windscreen and luggage rack on the back gives all the thrills and performance of the D-type without the practical drawbacks," he said.

"Once we had made the decision to build an XKSS, we put ourselves in the position of a possible client and wrote down a specification based around engine, body, chassis and finish, and it soon became clear that we should set out to build our best one ever."

While the alloy monocoque is a faithful replica of the original down to the exact number of rivets and their spacing, subtle changes under the skin make this XKSS better and safer. For instance, the fuel tank is foam-filled racing style and there are full harness seat belts, while contemporary halogen headlights make the return from a foray after dark much less of a trial.

Normally, Lynx will remanufacture the complete engine from a donor car, but in the case of the car tested here, the E-type 4.2-litre motor had covered a mere 23,000 miles from new. The perfect crankshaft was mated to new forged pistons by lightweight connecting rods, both from American suppliers. A lightened flywheel enhances the engine's response and revving abilities. This and the crank were individually zero balanced, and then balanced again as a unit after being bolted together.



Continuing the theme of traditional tuning, big valves with a three-angle grind were installed, and the cylinder heads ported, polished and matched to the intake and exhaust manifolds. High-lift cams with a 0.45 thou lift and 282° duration were installed, along with stronger valve springs. It's a thorough job.

Induction follows the classic recipe of triple Weber DCOE carburetors specially jetted. A competition coil and electronic ignition were used and the ignition advance curve was mapped to suit the engine's characteristics. "We used a modern alternator," Andrew explained, "and did not go beyond that because the sort of people who would buy such a car are enthusiasts and still want to tinker a bit. We just went as far as we thought was needed to improve reliability and performance without removing too much traditional flavour from the car. You could say we used 1970s technology on a 1950s car, steering well clear of current electronics."

The engine dyno figures claimed for this car are 320bhp at 5,900rpm with 340 lbs/ft (460Nm) of torque at 3,800rpm. That said, the choice of cams and carb jets has been optimised for torque as well as outright power, so there is around 290 lbs/ft (390Nm) on tap from 2,500rpm. In a car weighing just 960kg, performance is definitely in the supercar league. 0-100mph (160km/h) has been roughly timed at under 12.0 seconds with top speed over

150mph, marginally quicker than the original.

One of the upgrades to adapt the car to modern traffic conditions is the cooling system. This consists of a much more efficient aluminium radiator as part of a sealed cooling system with an alloy catch tank. A two-speed low drag thermostatically-controlled fan keeps airflow going in





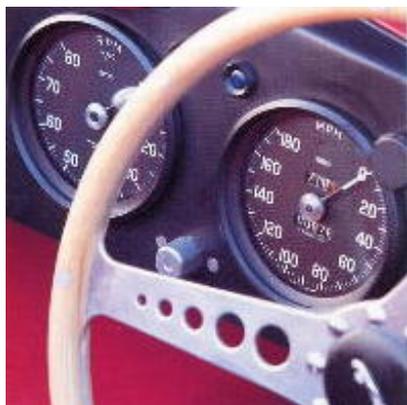
a traffic jam in a hot climate. Finally, a 13-row alloy oil cooler keeps the lubrication situation healthy in hot weather, or if the car's been hammering around a race track.

An important part of the mechanical upgrade is a five-speed gearbox. In fact, this is the first time Lynx has used one on any of its D-type or XKSS re-creations. The gearbox is a Borg Warner T5, re-engineered and shortened three inches to fit the XKSS. This was done by fitting a shorter output shaft and selector rods internally, and making a shorter casting for the rear of the 'box.

A long time ago, Lynx bought up from Jaguar the remaining spares for C-type and D-type models. Some of these parts are built into Lynx re-creations, but there are also some very rare components that Lynx has acquired over the years. One of these is the original windscreen from Steve McQueen's XKSS (as featured in JWM February 2003), now used as a pattern. These parts are wheeled out only for very special cars, of which this XKSS is one. It uses what is probably the last original brand new D-type/XKSS starter button in the world. I relish that fact in between turning the key in the ignition, prodding the throttle pedal once and adding my own index finger print to this small, round plastic piece of history.



A mechanical whirr from up front and the 4.2-litre twin-cam bursts into life with a powerful roar and settles down to a burbling tickover. Unlike modern catalysed engines, the slightest touch of the accelerator pedal brings instant response. Blip the loud pedal and it feels like there is a direct line to the carburettor throats feeding each of the six cylinders. The clutch action is short and progressive plus, with 1,300rpm on the tachometer in first, we canter off down the road. I drove one of the first Lynx XKSS replicas over ten years ago, and the original factory XKSS at the back end of 2001. This new car far surpasses either in terms of driving qualities.



That particular original factory car had a very vague gearbox and overall was quite obviously the road conversion of a racing car built to contest Le Mans. The older Lynx car drove very well but was not as finely honed as this new incarnation. The five-speed gearbox is easy to use but retains the very direct and mechanical feel of a car from this period. Pleasure without pain if you like, but a million light years from the sanitised feel of a modern car.

While new cars have massive mechanical grip on tarmac thanks to their wide, low aspect ratio rubber, cars from this era slip and slide easily. Their steering feel and indeed 'seat of the pants' feedback from all parts of the chassis is so much more direct, giving a clear idea of what the car is doing even at modest speeds.

The big period tiller keeps steering effort quite light at normal speeds and loads up only when pushing on through the bends. That said, steering the car with the throttle to balance it through corners is a given and indeed feels the most natural thing to do.

The new 185/80R16 Avon Turbo Steel tyres are the same overall size as the original crossply Dunlop Racing rubber, but are a quantum leap forwards in all respects. These are mounted on Lynx's own version of the 1950s 5.5 x 16-inch Dunlop racing alloy wheels. The originals had peg-drive mountings, while the later E-type wheels use splines. Lynx change the hubs on the E-type axles to accommodate the earlier system.

The suspension benefits from the in-house modifications evolved over the years. The E-type rear end uses trailing arms, and Lynx triangulate the bottom wishbone with two additional mounting points to the sub frame to prevent any twisting. This makes handling more progressive and predictable.

Dampers and springs are by Leda to Lynx specification while, up front, larger 0.88-inch diameter torsion bars are used.



Bearing in mind that the E-type was a heavier car, these new components result in a proportionately greater increase in ratings.

This car is far more powerful than even the Le Mans D-types, which had no more than a genuine 275bhp. As such, it is seriously quick even by modern standards. Just as well then that the brakes are also updated. The front discs are still solid like the originals, but they're thicker, from the later and much heavier XJ6, with three-pot XJ6 callipers, while the rear discs and callipers are from an XJ-S. Helped by a twin-servo system, the powerful and fade free brakes can cope easily with modern traffic conditions.



The team at Lynx seems to have hit the nail on the head, creating a living classic through a finely balanced blend of new bodyshell, and a carefully chosen amalgam of original D-type, XKSS and E-type components, lovingly hand-assembled. If you're in the market for a usable XKSS recreation, you could not ask for more.