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THE ART OF PERFECTION by Ian Kuah

Lynx not only re-creates the legendary Jaguar XKSS, it ever so carefully improves upon it.

We have just driven what we believe to be the world's most perfect Jaguar XKSS re-creation. Perfection is an elusive concept, but this car, which took over 3,000 man hours to build, was lovingly crafted using ideas and techniques acquired and honed since the first D-Type turned a wheel nearly 50 years ago.



Like appearance, perfection is in the eye of the beholder, and 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 tougher driving environment.

All Lynx D-Type and XKSS re-creations use the vastly superior E-Type independent rear suspension instead of the live axle of the original. Numerous other modifications edit out other weak points of the original design. On that basis, you could say that Lynx cars are more like an evolution model that Jaguar would probably have ended up building had it continued to develop and produce the car for several more years.

So why an XKSS and not a D-Type? "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 you all the thrills and performance of the D-Type without the practical drawbacks," Parkinson said.

"Once we had made the decision to build an XKSS," Parkinson continued, "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 have been made to make this XKSS better and safer. For instance, the fuel tank is a foam-filled racing-style unit and there are full harness seat belts.

Another one of the less obvious upgrades is the headlights. The originals were pretty dim by modern standards, but this car has the benefit of contemporary halogen units, which make the return from a foray after dark much less of a trial.



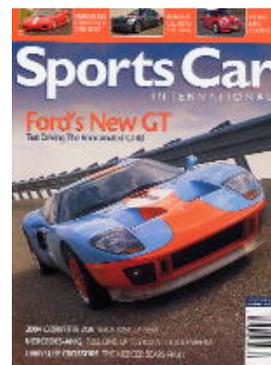
Normally, Lynx will remanufacture the complete engine from a donor car, but in this case, the E-Type 4.2-liter motor had only covered 23,000 miles from new and its crankshaft was in perfect condition, so it didn't need to be completely redone. But that's not to say it wasn't heavily massaged. After being balanced, the crank was mated to new forged pistons by lightweight I-section connecting rods, both from American suppliers. A lightened flywheel enhances the engine's response and rowing abilities. The flywheel 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 were ported, polished and matched to the intake and exhaust manifolds. High-lift cams were installed along with stronger valve springs.

Induction follows the classical recipe of triple Weber DCOE carburetors specially jetted for this motor. A competition coil and electronic ignition were used so there are no points to give trouble, and the ignition advance curve was mapped to suit the engine's characteristics. "We converted the electrical system to negative earth and use a modern alternator," Parkinson explained. "We 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 flavor from the car. You could say we used '70s technology on a '50s car, steering well clear of current electronics".

The engine dyno figures for this car are 320 bhp at 5,900 rpm, with 340 lb-ft of torque at 3,800 rpm. The choice of cams and carb jets has been optimized for torque as well as outright power, so there is around 290 lb-ft on tap from 2,500 rpm. In a car weighing just 2,116 pounds, performance is definitely in the supercar league. Its 0-100-mph time comes in at under 12 seconds.

One of the upgrades to adapt the car to modern traffic conditions is the cooling system. This consists of a much





more efficient aluminum alloy 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 on a hot day. Finally, an alloy oil cooler keeps the lubrication situation healthy in high temperatures or if you are belting round a racetrack.

Another important part of the mechanical upgrade is the 5-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-Wamer 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.

Along time ago, Lynx bought up the remaining spares the Jaguar factory had 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 the Steve McQueen XKSS, 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 unused 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 piece of history. After hearing a mechanical whir from up front, the 4.2-liter twin-cam bursts to life with a powerful roar and settles down to a burbling idle. Unlike modern catalyzed engines, the slightest touch of the accelerator pedal brings an instant response from the engine. Blip the loud pedal and you feel you have a direct line to the carburetor throats feeding each of the six cylinders.

The clutch action is short and progressive, and with 1,300 rpm on the tach in first, we canter off down the road. I drove one of the first Lynx XKSS replicas over 10 years ago, and the original factory XKSS in 2001. This new car far surpasses either in terms of driving qualities.

The original factory car had a very vague gearbox and was quite obviously the road conversion of a race car built to win Le Mans. The older Lynx car drove very well but was not as finely honed as this new incarnation. The 5-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 sanitized feel of a modern car.

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

The new 185/80R16 Avon Turbo Steel tires are the same overall size as the original bias-ply 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 changes the hubs on the E-Type axles to accommodate the earlier system.

The big period-correct tiller keeps steering effort quite light at normal speeds and only loads up when you start to push it in the bends. That said, throttle steering the car to balance it through corners is a given and feels natural.

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

Leda make the four 325-pound rear springs and dampers 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 spring rates.



This car is far more powerful than even the Le Mans D-Types, which had no more than 275 bhp, tops. It is seriously quick even by modern standards. Just as well then that the brakes are also upgraded. The front discs are still solid like the originals, but they are thicker ones from the later and much heavier XJ6, with XJ6 calipers, while the rear discs and calipers are from an XJS. Aided by twin servos, these powerful and fade-free brakes cope easily with modern traffic conditions.

Perfection is an elusive concept, and one subject to interpretation. But the team at Lynx seems to have hit the nail on the head, creating a living classic through a finely balanced blend of original D-Type, XKSS and E-Type components, all lovingly hand assembled. If you are in the market for a usable XKSS re-creation, you really could not ask for more.