



History in the "Making"

Mark Morgan describes his refurbishment and modernisation of an XJ Coupe.

Iremember feeling very sad watching my dream car drive away with the new owner enthusiastically waving from his window. This was the end of my ownership of a Signal Red 1965 E-type Series 1 4.2 fhc. There was no getting out of it my 1 year old son could not be squeezed in and bolted to the modified baby seat, so the car had to go. I turned round and looked at the beautiful 1989 XJ-S that the new E-type owner part exchanged and my heart sank. Too nice, too smooth and not a manual gearbox. It was not what I wanted.

It was June 1995 and responding to an advert I was on my way to see a car and it was me or am I the only one to get that feeling of excitement when going to view an old Jaguar or Daimler. It had been

standing in a lock up for 4 years while the owner set up business in mainland Spain, and returned to sell the car to raise some cash.

The car was a 4.2 litre Daimler Coupe auto fitted with a tow bar. Although filthy I could immediately see that the body was very good apart from a crusty headlamp area on one of the wings, a rusty rear valance and both tank covers needing replacement. I have owned four Coupes and three XJ-Ss and I am fully aware of the places that the dreaded rust worm resides. The body looked so good that I thought the saving on the panels could go towards fitting air conditioning and doing a few other jobs I would like.

The interior was black velour albeit in good condition, I really wanted leather

but hey! You can't have everything. Upon closer inspection I noticed that the engine number didn't match the number on the VIN plate. It had had a poor re-spray but apart from that and some work needed on the AED, this was a sound car. The faults were reflected in the price and I struck a deal with the man and gave him a deposit.

I returned a few days later to collect it and couldn't wait to get it home and start fettling the old girl. After an uneventful journey home from Bexley in Kent to Thurrock in Essex, I was very pleased with my latest acquisition, until that was when I tried to get back in the car that afternoon. I couldn't get either door open (that's funny, I am sure that these cars didn't come with remote controlled central locking system with time delay). I

now anyhow).

I decided to contact the previous owner to ask him what he had done to the car in terms of work. He had owned the car for a total of 5 years but took the car off the road to rebuild the engine after the first 18 months. Apparently the previous owner/s didn't really look after the engine and when he bought it didn't even have any antifreeze in the block. It proved to be uneconomical to rebuild the old lump so he bought a Series 1 XJ block (which is a stronger block and the same as a Series 2 E-type) and rebuilt it to a good standard. Then he rebuilt and refitted the old Series 2 head. He also fabricated a small section of steel to let in one of the sills. He said that he really liked the car and used to tow a classic motor bike to various shows, hence the tow bar. Eventually he lost interest in the car and the motorbikes and is now rebuilding vintage aircraft.

Over the next few months I bought new panels and new rubbers and booked it in to Auto Art in Dagenham to have it taken down to bare metal and repainted in Old English White. I used this company before and found their quality of work extremely

good and they weren't that expensive. It is really satisfying to see your car in bare metal and oh what peace of mind it brings! It seems my instinct was correct, apart from a little bit of filler in the offside rear wing from a small scrape and (oh yeah that bit of steel brazed into the sill), and a few dents in the doors it was a really sound solid car.

I didn't like the black vinyl roof so off it came. When this was done it revealed some surface corrosion around the rear pillar which had been caused by the flux in the lead loading process Tom said that he would have to weld up the holes that hold the rivets for the chrome trim around the rear pillar anyway and this would be done at the same time.

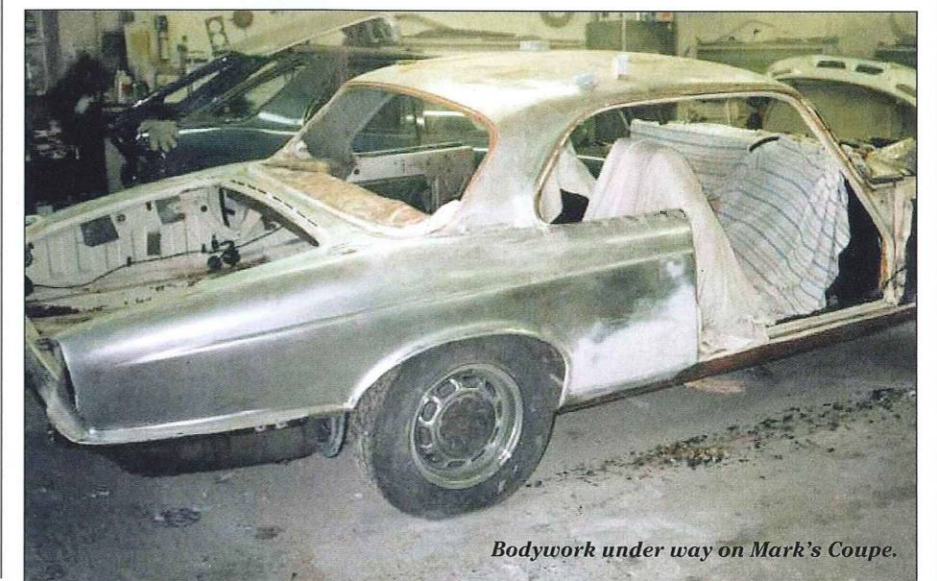
After two weeks and seven litres of two pack primer and paint the car was ready to come home and fitted up. That was five years ago and there have been some additional performance modifications since then.

I opted for the six-cylinder car for ease of servicing and I didn't like the look of all that fuel injection stuff on the V12, it scared me. The most obvious way of improving the performance of the XK

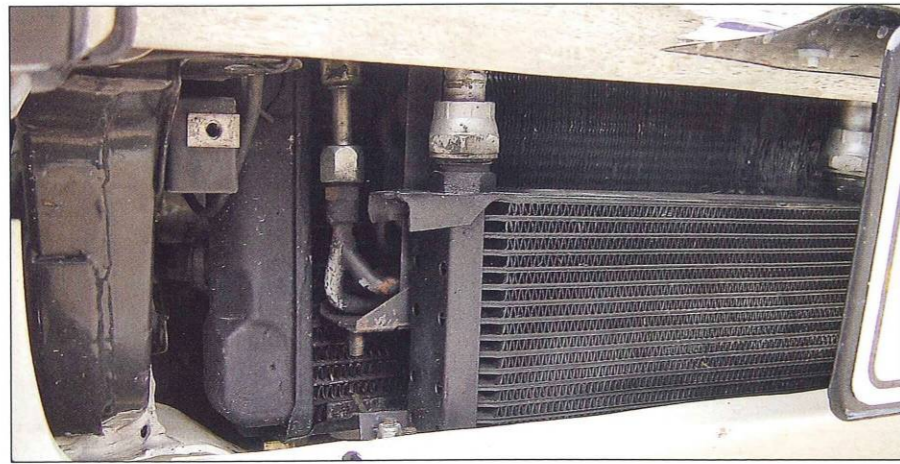
tried and tried and eventually gave up and left the car outside the garage that night. The next morning I went out and the door opened straight away. I found that the door locking mechanism had seized and the grease had solidified. I could only think that the warmer temperature that morning helped the grease to soften. I suppose not being used for four years some parts would need to be worked on.

I noticed that the brakes were a bit spongy, so I bled them before I took it for an MOT, which it passed

I remember driving around that summer with all the windows down and realising what a lovely design the pillar-less Coupe is and how comfortable it was compared to the E-type although somewhat lacking in performance (for



Bodywork under way on Mark's Coupe.



The oil cooler from a Series 3 which was a tight fit in front of both radiators but after reducing the height of the feed and return pipes by cutting and brazing them Mark managed to squeeze it in. This modification includes the fitting of a Series 3 oil filter housing and feed pipe which is to the rear of the cylinder head.

engine and probably the cheapest is to put triple carbs on. So I acquired a 420G setup from a local Jaguar specialist by the name of Barry Shean. I can't stress more about the knowledge and helpfulness of this guy and couldn't have done this without him. I set about stripping, cleaning and generally refurbishing the thirty-year-old carburettors. It would have made sense to change the head to a big valve type but I couldn't justify £1,000 at the time so I stuck with the one on the engine. I then made various phone calls to Burlen Fuel Systems to acquire the appropriate parts to rebuild the 2" SUs. Once this was done, I had to modify the hoses and various brackets needed to

accommodate them. The main problem was the repositioning of the accelerator bracket and kick-down cable. This was finally cured by welding an extra piece of metal to the top of the bracket which meant that it could be fixed to the new position beneath the manifold. I also had to extend the shaft which rotates the carburettor linkage underneath.

I had to connect a 12 volt supply line to the auxiliary carburettor to enable the cold start carburettor to function. This was connected via the otter switch, which was later removed and replaced with a manual switch inside the car. Just a brief note here, any wiring around the carburettors should always be high temperature tolerant ie: ptf. I found this after a small engine fire when the PVC wire used melted against the hot carburettor body. Near disaster!

It was time to go out on the open road and test the performance of the modifications. Initially, the car seemed ok but it kept losing coolant and I couldn't find out

where it was escaping from. I eventually discovered that the filler cap housing at the front of the engine was being depressed after the bonnet was closed but resealed itself when the bonnet was open. To combat this, I made a few calls and found a coupling from a Series 3 model which once fitted, gave me the acquired clearance. I also fitted a Series 3 radiator and expansion tank which suited the high-performance of the car. The acceleration was vastly improved, however the fuel consumption wasn't! but this was a fair trade-off.

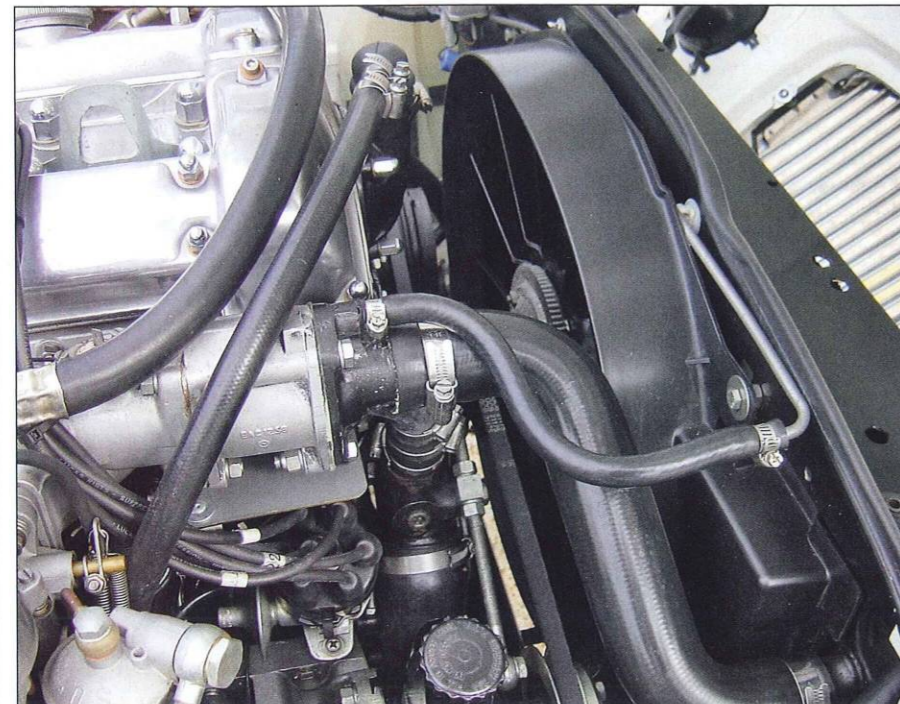
After reading Nigel Thorley's book "The perfect companion" I decided to modify and improve the performance by removing the first silencer box in the exhaust system. This involved buying two special pipes from Double S Exhaust Systems to replace them. This completely changed the character and sound of the car. I now felt I was a driving a performance car, albeit an automatic one.

After about two years I toyed with the idea of converting the car to manual transmission. I have never tried anything like this before so I thought the best way would be to get a complete car (saloon or coupe) and found a cheapish XJ Coupe with the added benefit of blue leather upholstery and air conditioning. The body was quite bad but the car just about ran and it looked sad.

I found a garage about half a mile away with plenty of space inside and out and I must say that I had this proved very useful. Removing parts from an old Jag does require a lot of space especially when removing the engine and gearbox in



The accelerator bracket which the rotating spindle mounts on to. Note this has had a new piece of metal welded at the bottom which is drilled with 2 x 10mm holes to move it down level with the HD8 carb linkages. This was a spare unit welded and zinc plated.



Series 3 thermostat housing and radiator had to be used. The thermostat bypass in the 420G manifold was blocked with plastic metal. The black housing on the end of the manifold above the water pump was nearly £60 but necessary. Series 2 injection version was much cheaper (and silver) at £15 but does not line up with the coupler.



Mark likes the lowers and they help keep the engine cool.

one lump. This came out without any major problems other than I would remove the gear stick if I were to do it again as it gets snagged easily on the way out.

I separated the engine and 'box and removed the flywheel which was extremely scored. I found a local company who collected and returned it after machining for £60. I decided to clean the bell housing which had 20 odd years of old clutch plate dust and oil encrusted into it. I took my old Work-mate bench to the garage and started by degreasing and hosing it down. A lesson to be learned here is that a hose can release quite a lot of pressure which in turn is enough to knock a bell housing and gearbox off of a Workmate. This snapped off the extended part of the gearbox cover which holds the gear stick in place. I should have separated the box from the housing before I started to clean it. This was fixed back on by tig welding it. A week later and £25 lighter I was able to continue with getting the gearbox mated to the engine.

I was told that the phosphor bronze bearing in the crank which the Laycock shaft fits to was no longer available and spent the best part of a morning trying to extract it from the old engine. I eventually achieved this by driving in a drift after filling it up with grease. The grease causes back pressure and forces out the offending part. I found out that these are available from stock for about £3. Aaghhh.

With the engine out of my car I removed the front suspension and sent it to a local guy named Ed@Ward Engineering. He rebuilt the front suspension to a very high standard and I asked him to fit V12 springs to stiffen up the ride.

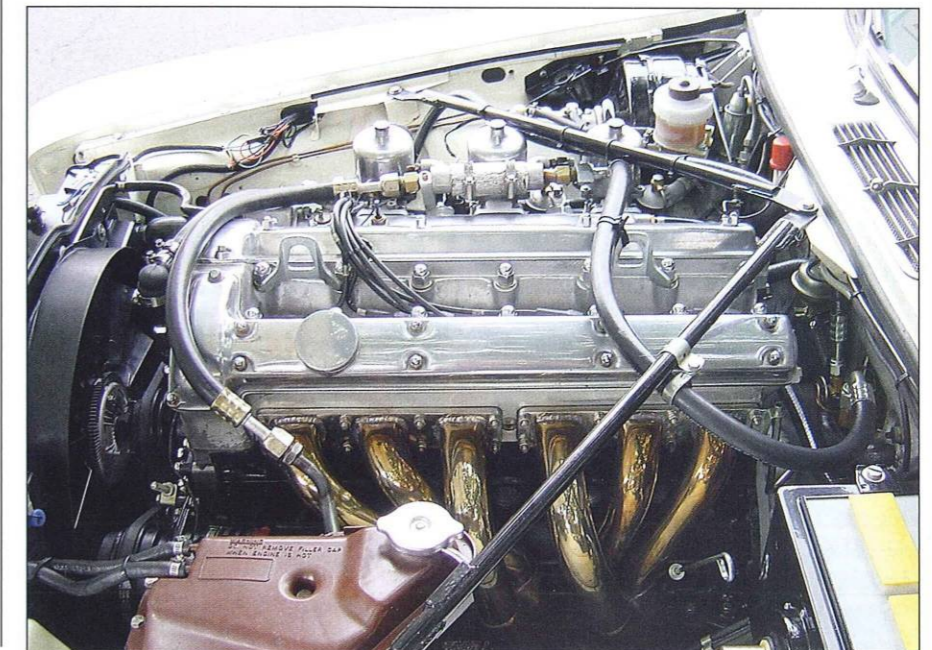
I must say the front suspension makes the rear look like a piece of cake. This wasn't the case but I tackled it myself in the end with new shocks, springs and new hubs from Ed. He also replaced all the seals in a 3.07 diff at a very reasonable price.

Before refitting the engine and the front suspension, I stripped all the underseal off the car. I had to remove the fuel pipe, brake pipes and hand brake cable. This was a long, tedious, messy and unpleasant job but worth it. I used a hot air gun to remove the thick black tarry stuff and then I used an angle grinder with a wire brush cup to clean up the surface of the metal. Now I know there is no rust at all underneath. Needless to say I wore eye protection at all times.

Because of my limited work space (12ft x 7ft garage with up and over door) I could only do about two thirds of the body from



The completed engine bay.



the front backwards. So I had to mask up the complete rear end of the car underneath. This is really awkward as it is hard to move around in such a confined space. After the stripping I sprayed the underside with red oxide paint then two coats of stone chip. This was finished with two pack body colour. This process was a lot of work but well worth the effort as the final finish is very pleasing. Add to this, the fact of knowing there is no corrosion is very comforting. Some people have commented that it must be "difficult to keep it clean mate" but I must say that a swift hose down and it looks like new again.

After having bits blasted, cleaned and plated the conversion was almost there. I decided to fit an oil cooler from a Series 3 XJ6 which was very tight due to the air conditioning radiator being behind it. With a little bit of cutting and welding of the feed pipes at the cooler end I managed to squeeze it in.

My latest acquisition is a stainless exhaust manifold from Heyward and Scott in Basildon Essex. They took eight weeks to supply from the date of the order (due to sheer weight of work) but it was well worth the wait. It fitted straight on to my SS system in less than 1 hour. Now the engine really breaths. Sounds great too. No more cracked enamel or blackening on the old cast units.

I removed the old interior from my car and proceeded to strip out the dash and all the wiring from inside. At this point I went the whole hog and painted the inside of the car in two pack (here we go again). This was followed by the fitting of a Series 3 heater matrix and blowers. This proved to be quite involved as you have to change the centre console to fit the later matrix. Luckily a friend had one in the correct colour. The rest of the air con was fairly straight forward with changes to various pipes and a new drier. I found a local company who could make the relevant pipes for about a third of the Jaguar price.

Fitting the engine and gearbox back in to the car was fairly easy and I recommend that the gear lever can be fitted when the unit is back in the car. It took a while to get the car running nicely as the timing setting of such a mix of different engine parts was unknown. This caused the car to run hot so the louvers were added to aid cooling. They also looked the mutts nuts as well. These were pressed in individually by hand. The timing was eventually done by ear.

All in all it took about a year to do all the work, a long time but the work never stops. For example I decided to remove one of the fuel tanks as it had a very small leak. This resulted in both tanks being removed and painted as well as the inside of the rear wings. What started as a two

day job became three weeks of work by the time you have waited for parts and prepared the area for painting etc.

Final conclusion

Well the car has changed so much mechanically that it's hard to say where the best of the improvements lie. I suppose the most obvious one is the manual gear change coupled to the big valve head. This car is the nearest thing I have driven to my old E-type. The power between 2,000 and 4,000 rpm is amazing,

add to this the stiffer V12 front springs all makes such a good package. I now own a car which is fast, roomy comfortable and gorgeous to look at with those familiar Jaguar curves. Add to this the unique pillarless look which sets it aside to all the other models that Jaguar have produced over the years.

I think that doing something like this is very rewarding, especially when improving the performance and handling. This completely changes the feel and character of the car.



New seating and trim, new gearbox and virtually a new car.

