

Long, Lean, Green 'n' Mean



one man's battle with a Welsh Dragon

Part 6

Back on four wheels?..... nearly

With the welding completed in and around the inner wing and chassis rails it was time to graft the replacement sub frame onto the grateful recipient. Putting a sub frame back onto a car is not quite as nerve-racking as removing one. Everything that could have dropped down has either done so or stayed put and as the sub frame is slowly lifted back into position, gravity's interest in the engine wanes and he goes off to threaten some other poor soul.

The trick is to get the sub frame as level as possible and raise it very slowly, checking six critical points, 2 engine and 4 sub frame mounts whilst at the same time checking power steering hoses and steering column universals are not getting squished. If you have another pair of hands and eye's you could be really clever and throw the sub in with the dampers already fitted, but in my book with the dampers removed there are two less things to snag up on.

Try to locate the two front bolts first (apply liberal amounts of copper slip) not forgetting to fit the inner washers and external towing plates. This makes it easier for the sub to pivot upwards onto the rear mounts if required. DON'T FORGET to put the nuts back onto the engine mounts, they are nicely

hidden away and easily forgotten especially on a V12 and nothing will look amiss until you launch the car over a hump back bridge. This is one good reason for carefully storing all the nuts and bolts removed during strip down, if you have anything left over at the end it will get you thinking.

Once bolted firmly back in it's just a matter of connecting up the power steering, steering column and brakes. One other thing easily overlooked is the earth strap from sub to engine; you won't get far without that. When replenishing the power steering reservoir make sure you turn the steering slowly from lock to lock so as to bleed all the air out of the rack and pipes, there are two levels on the dip stick, for hot and cold fluid.



Front sub-frame mounting bolts and tow bracket

Belts, not one but four

Apologies for all those who own a 6 cylinder XJS, these articles are biased towards the V12 because the green n mean is a V12. I also offer my congratulations, you have more sense than me, and undoubtedly more skin on your knuckles.

There is a drawing in the Jaguar service manual of a V12 engine with the front of the power plant facing you head on. The thing that strikes you most is the amount of belts and pulleys that adorn this iconic but somewhat ugly lump, if you're as sad as me you'll just sit down and stare at it and wonder how it all came about.

Anyway, I digress. If you have taken my advice and removed the bonnet to sort out the sub frame then now is the time to have a look at the belts. If you like twisting your back, poking bits of V12 into your eyes and scraping the back of your hand until it bleeds then put the bonnet back on before

checking the belts. Whilst the bonnet is off you can stand and marvel at them to your hearts content, and when you've finished marvelling, if they look the least bit dodgy, change 'em.

The belts on the green n mean were awful, they were all cracked and starting to break up, the compressor belt in particular was waving parts of itself about like a crab in a tumble dryer. A set of four, genuine Jaguar belts purchased off eBay for less than the dealers VAT were in my grubby little mitts, and one hour later they were chasing each other round a V12.

The four belts on a V12 XJS, are all driven from the central pulley fitted to the crankshaft, one drives the compressor, 2nd drives the fan, 3rd one drives the water and power steering pumps and the 4th drives the alternator. If it's just the alternator belt that needs changing bad luck, you have to take the rest off to get to it.

With the bonnet off the jobs not too bad at all, but you need access from both above and below the car. There are various pulleys and tensioning bars that need to be slackened off to allow the removal of the belts, it's also important to remember that the two jockey wheels, power steering pump and alternator all pivot on their individual mounting bolts. These also need to be undone slightly to allow free movement. You do not have to remove the fan to get the belts off, two of them don't interfere with it anyway, and the remaining two can be worked over the blades until they are the right side of the big yellow fly swatter.

Once fitted, the belts should be tightened so that 'a load of 6.4lb (2.9kg) gives a total belt deflection 0.22 in (5-6mm) when applied at mid point' ok. Luckily I'd recently had my middle finger (right hand) calibrated so rather than using all that fancy stuff I gave the belts a prod whilst holding an easily read ruler against them. However, finger poking aside, if you do over tension these belts your in danger of damaging the bearings that all these pulleys run on and that will equate to one mighty bill. If, like me you've been poking belts for the last 30 years you'll have nothing to worry about, or maybe you should.

Not long now Ralph, not long now!

The green n mean was now progressing apace; in fact I had high hopes of getting it back on the road within the month if I set to it. But only I knew that; to the uninitiated this crestfallen old boat could have been off to the scrap yard given its current condition. Sat there on four grimy axle stands, devoid of wheels, chrome and bonnet, covered in dust and patches of red primer it looked to be in its eleventh hour. The replacement panels, resplendent in signal red seemed to be screaming with indignation having been plucked from the womb and grafted onto a car that was completely the wrong colour and vintage. It seemed that the old Welsh dragon had finally bowed its head in defeat.

All that aside, I believed that 90% of the work was done and only a tedious gearbox oil change and a hundred and one loose ends stood in the way of this affable old cars re-emergence onto the road!



The mighty V12.....plus belts !!!

For further information and advice, please contact Just XJS

Phone: 07940 998199

E-Mail: justxjsltd@gmail.com

Information and pictures by Andy Harvey (Just XJS)

PDF produced by Letitia Mace (Xclusively Jaguar)

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