

WELCOME TO OUR SUMMER 2013 NEWSLETTER

UPGRADE XK ELECTRICS

Automotive electrics have come a very long way since the last XK150 was built and some of that new technology is now available to upgrade XKs and allow the use of a wide range of equipment. In particular, the advent of the alternator means that you can use all your electrics at the same time without fear of a flat battery. Batteries too have come a long way and the once common problem of a flat battery on a cold morning is rare today. In fact there are few electrical parts of an XK that you can't upgrade to make your car more reliable and suitable for the fitment of electronic gizmos. The following paragraphs tell what you can do to make your car even better and more reliable.



However, before undertaking any work on the electrics the first job you must do is to make sure that the wiring is in good fettle. At best, dodgy wiring can cause breakdowns or blow fuses and at worst your car can go up in flames!

It sounds a nightmare – and it is not - but unless the wiring is in exceptional condition you should consider replacing the loom. Even if what you can see looks OK, it's what you can't see that should concern you most because that is where a fire might start and if you can't see it, you're going to have a problem putting it out if it should burn. We keep looms for all models, which are ready made up and in the correct colour coding to allow you to follow the wiring diagram. They are also not as expensive as you may imagine. The way they are put together makes them relatively easy to fit as most of the wires come out of the loom close to where they connect. Fitting a loom is more of a fiddle than a complicated job. The worst bit is doing the dashboard and instruments but do make sure to disconnect the battery or batteries before you start so you don't short your new loom to earth and melt it or worse.



Once you are happy with the wiring, the first job I would suggest you do to upgrade your car is replace the dynamo with an alternator. These are easy to fit and the regulator is part of it. First you should change to negative earth if this has not already been done (see the paragraph below). Positive earth alternators are available but are quite rare as not many were made and that was some time ago so go to negative earth.

The wiring instructions come with a new alternator and once fitted you instantly have a far better charging rate and a more reliable piece of equipment than the old dynamo. If you have extras, such as an electric fan and spot lights, with an alternator the electrics will take these in their stride – even on a cold wet night when everything is switched on. For the purest we can supply an alternator that looks just like a dynamo but for those who do a bit of sport with their car, the basic alternator saves some weight. To save even more weight and have better starting, a lightweight starter motor is a must. With 20% more cranking power, this spins the engine faster while using less current and is half the weight of the old Lucas lump. If you are replacing the dynamo and or starter, then keep all the original parts together so that if at any time someone wants to put the car back to original it is all there.

PRODUCT FOCUS

ACCESSORY INDICATOR KIT

For early XK120 roadsters. Very high-quality light units, solid machined and chrome plated in a 50s style. High intensity bulbs, dash switch with internal flashing bulb, low voltage relay, mounting brackets and cable. No drilling of bodywork necessary.



Contact us for more information or to order.

INSTRUMENT RE-CONDITIONING SERVICE

We hold the largest stock of original XK instruments ready for exchange.



MALLORY DISTRIBUTOR

Mallory' twin contact point distributor. Very high quality rally or race specification unit. Also with vac advance.



FACET FUEL PUMP

Suitable for any SU or Weber combination, road or race specification. Complete kit with mountings, adapters and a spare washable filter.



POSITIVE OR NEGATIVE

All XKs started life with positive earth systems – this means that the + battery terminal lead goes straight to earth. This was the practice on most cars at this time but with the advent of alternators (most of them) and the use of transistorised equipment the norm changed. If you are considering upgrading your car, you are advised to change the polarity but check in case your car has already had this done and also check to see if you have anything such as electronic ignition, a fuel pump which has been fitted with electronics or a radio as these might not work with opposite polarity.

Changing polarity is easy and straightforward. First you need to change the battery terminals on the cables as the positive battery post has a larger diameter than the negative one. Next swap the terminals on the ignition coil so that you don't reduce your sparks. If you are retaining the dynamo, disconnect the two wires (D & F) on the back of the dynamo but make sure they don't touch to earth. Then just touch the two together for a few seconds. What you have just done is change the

residual magnetism in the field pole pieces so that the north became the south and vice versa. There will be a flash when you do this so mind your eyes and make sure there is nothing flammable nearby. Next replace the terminals— you can't get them confused as the D terminal is larger than the F. All being well, all the electrics should work OK now but check the wipers and heater motor because you may need to reverse the wires on these in some cases. Having negative earth means that you now have more options regarding your electrics, in particular for fitting electronics and radios. The ammeter will need its leads swapped over and the clock – which probably doesn't work anyway – may be a problem.

BATTERIES

XK120s, XK140 FHCs and XK150s were originally equipped with two 6 volt batteries connected in series to give 12 volts. The 6-volt batteries for the XK120 are different to those for the XK140 FHC and the 150 as they are shorter and are made to take Bakelite covers. We stock both types as well as the 12 volt battery used on XK 140 OTS and DHC models. Buying batteries for XKs can be a difficult if you are not dealing with a Jaguar specialist because there are so many similar looking batteries on the market. Not only can the dimensions vary greatly but also the terminal positions may be different and above all the capacity of the battery (the number of ampere/hours) will make the difference between being able to start the car on a cold day or not.

Be particularly cautious if buying new 6 volt batteries from companies other than an XK specialist as there are some that look alike but have different capacities. MGBs also use two 6 volt batteries which will fit XKs. These are cheaper but are false economy to use because they don't always have enough 'umph' in them to start an XK. Unless you enter the car in concours and ever part is under scrutiny I suggest you fit a single gel-type 12 volt battery which needs no topping up. All you have to do is modify the earth cable and it can save weight too.

IGNITION



Arguably the most unreliable part on any older car are the ignition points. They wear and need adjustment and the faces get burnt. On XKs they are difficult to get at and as they wear they also affect the ignition timing. The answer is simple – fit solid state electronic ignition. Instead of a fibre arm rubbing against the distributor cams opening and closing the points, a hall-effect system uses a sleeve placed over the cam. This has inserts in it, that a magnetic sensor

detects triggering the sparks accordingly. Nothing to adjust, nothing to wear and once the timing is set that's it. These come either as positive or negative earth. If you race though be aware that these are not permitted in some racing series. We also supply complete replacement distributors for road, rally and race including the Mallory distributor. Having said what I did about ignition points the Mallory distributor has twin points but in fact they give a better spark. Having two sets of points gives a longer time for the current to flow in the coil which means bigger sparks at the plugs and more power.

LIGHTING

There was an old joke that Joseph Lucas was the man who invented darkness. Whether that is true or not I can't say but there is no question that early lights on cars were poor to say the least. New bulbs are always worth fitting if the old ones have been in use for a long while and in the case of headlamps halogen bulbs are a must for the best illumination and can be fitted without having to modify the units. We also supply an excellent set of indicators for early XK120 roadsters. These are quite small in size but bright in illumination and are well worth fitting to make sure others can see where you are going. We also have period-style fog and spot lamps with the fittings for all XKs. These not only help visibility but they also look the part.



OTHER COMPONENTS

The only other electrical component on an XK which you may consider upgrading is the fuel pump. The original SU pumps had points in them and replacements are available with electronics for greater reliability (these are polarity sensitive so make sure you order the correct +ve or -ve earth version). We also offer a high pressure fuel pump which is necessary if you have a heavily modified engine and especially if you have Webers. Also why not fit electric screen washers, which we also keep as a kit.

While on the subject of other components I'll mention instruments. These should not be affected by a change in polarity apart from the ammeter which as mentioned needs reversing. We do an excellent reconditioning service and can either exchange or recondition and return your own instruments. For low mileage cars we can even recondition the speedo and return it with the original mileage showing.

Upgrading the electrics is one of the most worthwhile jobs you can do on your car.