

## Lagondaforum: Water Pump Modification

### Re: Water Pump Modification

*Written by randall977 at Dec 13, 2013 4:47 pm*

Yes, good points. I've fitted a 12V coil and by-passed the ballast resistor but the 6V system makes a lot of sense. Was it generally dropped because of alternators or for some other reason? I could easily fit a 6V coil, would it be worth it?

I was planning to change the dynamo for an alternator but the Lucas 'Special Equipment' C45 is a lovely looking dynamo which suits the look of the engine bay (along with the Lucas RB310 voltage regulator). It is a reversible upgrade but personally I love those characteristic items in the engine bay which show quality engineering and technological advances of the day etc such as the Girling Servos, Dynamo, PHH44's (carbs) and so on. It's getting the balance of practicality and authenticity right which is part of the challenge.

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### Re: Water Pump Modification

*Written by ray sherratt at Dec 13, 2013 9:23 pm*

The ballast system was fitted to get round the problem of low voltage at cold cranking speeds. The coil is an 8 volt one which is supplied with 12 volts during cranking, if you look on the starter solenoid there is a connection usually opposite the ignition switch cranking connection, this supplies 12 volts to the output/coil side of the ballast resistor in increasing the secondary output of the coil. If you are concerned about looks have a thought about the dynamo/alternators that are on the market.

I don't know the amps output, but I think if you look at increasing the speed with a smaller pulley it should keep the output up. The control box can stay and the wiring there will be instructions with the unit. Your ground clearance should be 6" under the exhaust system.

Ray.

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### Re: Water Pump Modification

*Written by bill at Dec 14, 2013 3:27 pm*

Modern Dynamo/Alternator. Just a warning to anyone intending to fit one. Check the output on these modern lookalikes. Usually they are at least 40 amp + and depending on how your car is wired you may damage your ammeter. I understand that for our type of cars you should get one that delivers no more than 30 amps. However I think that this type is no longer available. I bought one some years ago for a different car and now need another one. However I cannot find a 30 amp one anywhere so am uncertain what to do next. Anyone have any more information on this subject?

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### Re: Water Pump Modification

*Written by randall977 at Dec 16, 2013 5:56 pm*

I think the C45 dynamo in the Rapide has a maximum output of 25A so probably not worth getting at 30A alternator instead (if one were available). I've not seen any retro alternators with an output of less than 40A and the ones I have seen are not the same size as the Rapide one - which is extra long. Could you fit a C45 (which is available in two sizes)? I'm assuming you don't have a Rapide and therefore have a lower output dynamo...?

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### Re: Water Pump Modification

*Written by ray sherratt at Dec 18, 2013 8:56 pm*

According to the Rapide data I have the dynamo should be a Lucas C 48 with an output of 29/31 amps. I know you like to keep things looking as factory manufactured under the bonnet. Have you thought of driving an alternator a small Japanese one, from the diff/prop flange. I'm sure a man of your capability can make a bracket to bolt to the diff

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cradle. Run the alternator in parallel with the dynamo.  
Demon-tweeks.co.uk have alternators in stock at £175+  
the dreaded. Or they do have converted Lucas C45 dyno/alt  
neg earth output 50/65Amp, for the sum of £335+ VAT.

Ray.

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### **Re: Water Pump Modification**

*Written by randall977 at Dec 19, 2013 12:22 pm*

Hi Ray, you're right - it is a C48. - oops! An electric fan like the one I've fitted will put about 7 amps, but only when required. I think I'm going to stick with the dynamo and see how it goes... I would consider a conversion though!

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