

Technical Page 1.

Conversion to an aluminium Radiator by the Editor

Some years ago I wrote an article in this magazine about problems I was having with radiator cooling on my Kougur. When I first built the car I fitted the radiator from the donor vehicle (a 1968 Jaguar 420) which I soon discovered was barely adequate, when standing in a queue of traffic on a hot day and also at full power in the South of France in Summer .I subsequently learnt that most Jaguars of that vintage were notorious for cooling problems from E types onwards. However, after discussions with other club members and talking to a radiator repair company, it was suggested that I uprate the cooling system by fitting a heavy duty radiator core and fitting a heavy duty fan. It turned out that a Land Rover core could be fitted to the the Jaguar rad. top and bottom headers which had 158 tubes (5 rows) instead of the original 104 tubes (4 rows) I also replaced the fan with a heavy duty Kenlowe unit and I also fitted aluminium blanking plates either side of the radiator to ensure all the air went through the radiator instead of bypassing round the sides.

.Well, all this happened 25 years ago when I built my first Kougur in 1986. and I experienced no cooling problems for the next 25 years. However recently I have just started to notice, on a hot day, in a queue of traffic, that the radiator was struggling to keep the engine temperature below 100 degrees C.

On subsequent examination, when I took the radiator out, it seemed somewhat heavier than I remembered when I last had it out (to fit another engine) and it would appear that the small tubes are silted up and not passing the water flow it should. So ,I then did a bit of investigation. because for a long time now I have been toying with the idea of fitting an aluminium radiator, not that I was anticipating cooling problems , but because they look so marvellous in the engine bay. (OK, I'm a bit of a poser) Anyway, for a genuine reason, I am now obliged to do something about it.

I soon discovered that it is not possible to buy a replacement aluminium radiator for an old Jaguar "off the shelf". However I did find a company (there are probably lots more) who would build a complete aluminium radiator as an exact copy to the existing unit with identical dimensions, water hose connections and fan fitting but of course with a totally different tube and fin design in aluminium. The aluminium tube stack design has much wider tubes and much improved tube to fin contact than a copper/ brass radiator. It is of course much lighter So , I commissioned the company , Aaron Radiator Ltd in Thornton Heath,in South London, to

build me a replacement aluminium radiator at a cost of £552 (including VAT)

The new radiator , viewed from the front, and showing the Kenlowe fan is shown below:-



The new radiator, after installation in the engine bay is shown below:-



Well, the proof of the pudding is in the eating , so the saying goes , but I have to say that the change in the efficiency of the new radiator, compared with the one it replaced, is dramatic. When I fitted the new radiator I also changed the thermostat to a unit that opened at 75 degrees centigrade. After now having run the car for many miles in hot weather, I think I may have to put the original thermostat back because the engine temperature is running a bit too low at the moment But now , when I open the bonnet to do a bit of posing, it looks bloody marvellous.