MEMBERS QUESTIONS.

(5) From Mr. R. W. Mansell, Shropshire, who asks - Could you me how to identify which series a Javelin is and which models are fitted with oil coolers?

The Club Technical Officer, Harry Brierly, has replied;

" Jowetts described five different models of Javelin, one for each of the years 1949 to 1953. However, many of the modifications were introduced earlier or later as proved convenient, and one commonly finds that a Javelin does not have all the features claimed for that particular model, or else has some of those belonging to the next year's model. The broad description is as follows:-

1949 model prefixed D9/PA.	Only one model with metal facia. Upholstrey in cloth or leather.
1950 model prefixed E0/PB.	In standard and de luxe. Standard similar to 1949 model but upholstered in P.V.C. No arm rests. Front seat adjusted by sliding only. De luxe had leather upholstery, arm rests, heavier bumpers, cam-lever operated front seats, walnut facia. The full hydraulic brakes were introduced during the run of this model.
1951 model prefixed E1/PC.	Very similar to PB model (1950) but later radiator grille was introduced early in these models and there were other rather minor alterations. Again during this year solid tappets replaced hydraulics.
1952 model prefixed E2/PD.	Facia with chrome rimmed instruments. De Luxe seats slightly altered etc. During this year rubber bushed front suspension appeared.
1953. model prefixed E3/PE.	Series III engines. Otherwise basically the PD model.

Cars were assembled in 1954 but they tended to be from such stock as available and not necessarily PE cars. The 1954 cars were not identical with the 1954 Javelin of the motor show.

Probably rather unlike more banal makes of motor car, the modifications of the Javelin were legion. The Bulletins list about 90 fairly important mechnaical modification, all coming along at different times. As far as engines are concerned quite a few of these were associated with efforts to solve the problem of crankshaft failure, many of these may well not have been necessary but would be desireable even if they had nothing to do with crankshaft breakage! Jowetts referred to Phase I, Phase II, and Series III engines. However, with such a welter of modifications there is no clear line of demarkation other than the introduction of the Series III crankcase.

A Series III engine always had a Series III crankcase and could be identified by the letter PE either in the engine number or between the crankcase number and the engine number. Later a figure 3 was stamped on the shoulder of the crankcase over the petrol pump. The main features of the Series III engine were the radial ribs around the main bearings (these are not visible on an assembled engine of course) and the increased diameter oilways. The rear timing case cover (base of oil filter) was also modified so that, for example, the later type flexible pipe will not fit an earlier cover, which usually had a short copper pipe.

The crankshaft is the main consideration of course. The early crankshaft had machined webs, rectangular in shape. The crankpins were solid. Crankshafts fitted to Series III engines had two necessary modifications, firstly the radii between the crankpins and the webs were increased, and secondly the oil feed holes in the crankpins were drilled off-set. Usually, but not always, the crankpins were drilled through with a 15/16th hole to lighten the off-centre mass. Later the machining of the webs was discontinued and the result of all these changes was the Blackside crankshaft. For normal running the Blackside shaft is apparently quite satisfactory, but another shaft was in the course of design for racing purposes. This had oval webs and these were machined. Later reconditioned engines used either the Blackside shaft or the oval web. ~~The reconditioned engines~~ with an oval webbed shaft have an engine number beginning R_o or N_o. As a word of warning to secondhand engine buyers, an engine with a number prefixed R could have an early "suspect" shaft in it.

The Series III engine also had polished combustion chambers of modified shape, and a submerged oil pump.

Oil coolers were fitted to cars after 7.1.52. However, apart from cars going overseas, there seems to be some question as to whether they were really a regular fitment. The official literature says they were but the people who should have fitted them say they were not. Indeed one sees few Javelins with oil coolers fitted now. They certainly were quite troublesome and apt to spring leaks with little provocation. Some oil cooling technique is certainly worthwhile for hard summer motoring. Jowett engineering recommended the use of a copper sump but there are more up to date coolers which could be fitted successfully."

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