

## Fuel Pump

Whilst on a recent trip to Llandrindod Wells the engine on my RP Saloon suddenly lost power and after a few more minutes died completely. The diagnosis of my travelling companions was fuel pump failure.

Luckily my RP is fitted with a supplementary and separately switched SU pump and after switching that on we were able to continue our journey. A few days later I removed the AC pump and dismantled it. The problem that had caused the pump to fail was that the return spring for the rocker arm had broken. Eddie Loader kindly sourced a replacement for me and I reassembled the pump.



Fig A1



Fig A2

When I came to fit the pump to the engine I was very careful to make sure (as I thought!) that the pump was fitted correctly with the rocker arm on top of the eccentric lobe on the camshaft. I lightly tightened the nuts holding the pump to the crankcase and then gingerly turned the engine over with the starting handle. However, after about 3/4 of a turn - a severe resistance could be felt, clearly something was wrong! The rocker arm was obviously

underneath rather than on top of the camshaft. I removed the pump and tried to refit it several times with no better result. Time to call in an expert, I telephoned the aforementioned Eddie and he told me I just wasn't doing it right and came over to my Cottage to show me how it should be done.

I was perversely pleased when he also failed on every attempt to fit the pump correctly. However Eddie had taken the precaution of bringing with him his spare pump and when he tried to fit this pump he was immediately successful.



Fig B

The problem therefore seemed to lie with the pump. On comparing the damaged pump from which the replacement return spring had been salvaged (Photos A1 and A2) with my pump (Photo B) it could be seen that the damaged pump had a small screw with a stud turned on the end of it inserted at the bottom of the pump and this served

as a stop controlling the movement of the rocker arm. This meant that in pump

A the rocker arm would be unlikely to go the wrong side of the camshaft whereas in pump B gravity meant that as soon as the pump was offered up to the camshaft the rocker arm would drop down and it would be very difficult or impossible to insert the pump with the rocker arm on the correct side of the camshaft. This would not apply if the engine is turned on its side or is upside down. In the Austin factory, the pump was probably fitted into the engine on the bench and so the problem was not noticed, I suspect that it was only realised that a problem existed when reports from Austin dealers came back to the factory. Then, of course, Austin must have told AC to solve the problem and hence the screw/stud was fitted to all later pumps.

Ron Sadler