SAVVA Technical Tip No 131 – Over fuelling (part2)

As discussed previously, over fuelling appears to be a common problem with many early cars, especially where replacement or more modern fuel pumps and/or carburettors have been fitted.

Recently we had two examples:

Firstly, a chap had a piston which was badly scored and he was wondering what caused it. We have a suspicion the problem was with the carburettor which was seriously over fuelling and basically washing the oil off the piston. Could this be more prevalent with the older long stroke engines?

Secondly, another club member had recently purchased a very early Chrysler 6 and was complaining about its poor fuel consumption, something like 30 litres 100 kilos. Looking at his car we found it was fitted with a later model Ball & Ball carb with an adjustable main jet which was wide open. Where and when possible one should use an exhaust analyser to set these carbs up properly. The danger is not only the high fuel consumption, but the damage to the pistons and the dilution of the oil through over fuelling.

Another problem with early carbs is the needle and seat. Often more modern fuel pumps, even electric ones are fitted that run at a higher pressure than the originals. We also tend to set the float level whilst the car is standing still or idling, however, once on the road with road vibrations a higher pressure fuel pump tends to push the fuel passed the needle and seat allowing copious amounts of fuel into the fuel bowl. This could be the cause of serious over fuelling.

In the US it is common practise to fit a fuel line pressure regulator between the pump and carburettor especially when an older carb is used with a modern electric pump. Unfortunately I haven't been able to find a local source of these regulators and they are expensive to import. Can anyone help with a supplier?