

Sparking plugs & carburetor priming

The original sparking plug [specified](#) for the B60 was the No. 1 Mk 1 with a pre-set gap of 0.015" ('15 thou') which, for screened electrical systems were either Lodge SRL14PC or more commonly Champion RSN13P. A helpful debate some years ago between experienced members of the Historic Military Vehicles Forum ([HMVF](#)) highlighted that these Champion plugs frequently caused burnt piston rings in service.

Like the B60, the J60 could use Sparking Plug No.1 Mk 1 and Mk 1/1, which could be mixed. However there were reports of extensive engine damage occurring with the Plug No.1 Mk 1/1 i.e. the Champion RSN 13P with platinum tips. It is not clear what the actual problem was but given the difficulty of re-gapping them, it may have been the earth electrode weld failing (The gap is preset and you should not adjust them as the earthed tip can snap off). There was also an issue of piston crown burn, which may have been plug related. All these plugs were to be withdrawn and as an emergency replacement **RSN 12Y plugs** were fitted. The RSN 12Y was the plug fitted to 4-cylinder FFR Land Rovers, with a gap of 0.029" to 0.032". They start and run better, possibly because of the projected nose and they are much cheaper than the platinum types (With Champion plugs the digits refer to the heat range, the higher the number - the hotter; 1-25 = automotive. No suffix indicates a normal arrangement for the gap. Suffixes J, Y, R, G & P indicate variations. Y gap extends in a little further & has better anti-fouling properties as it gets hotter (also indicated by 12 rather than 8). If you have a choice use RSN12Y over RSN8 as the tip protrudes more it will run hotter & foul less).

Although intended as a stop-gap some enthusiasts use RSN 12Y plugs in their 'B' Series engines on the basis that they foul up less readily than RSN 13P and although not cheap they are more readily available than RSN 13P. Note that the problems of engine damage from the RSN 13P were an issue for the J60 it did not apply to 'B' Series engines. Some users of B60 engines have dispensed with the screened wiring altogether and used commercial 14 mm $\frac{3}{4}$ in reach plugs. They are readily available, cheaper and less prone to foul up. There can be improved reliability once the screened cables have been removed, the capacitance effect of the cable has gone, which will give should be a bigger spark.

It was found that a newer version of RSN 13P, FV817225, Sparking Plug No.1 Mk 2, was quite safe to use with the J60 engine. The newer plug is identified by diamond pattern knurling on the upper part of the body, whereas the older plug had longitudinal serrations. The earlier plug was marked "Made in England" and had a Government Property pheon (arrow).

With contributions from Clive, Richard and Mike

