Problems with capacitor discharge ignition

CAPACITOR DISCHARGE IGNITION: I recently constructed a CDI system and fitted it to my 1973 Leyland Mini. It starts well and idles well but when a constant speed is maintained (cruising) the engine runs very rough (appears to backfire at times). There is no sign of a miss while accelerating; only when you ease off to maintain a constant speed.

I did find the capacitor across the distributor points was leaky and replaced it with a new one, this did improve matters slightly. There has been a new distributor cap, points and HT cables fitted, also another coil was tried. The CDI fitted to my 6-cyl Holden for four years was also tried with exactly the same results.

With the vacuum advance line disconnected there is a big improvement, also by increasing the value of the $.22\mu$ F capacitor in the trigger circuit there is a further small improvement, but the problem is still there. I have followed all instructions contained in the construction manual.

Also I have been told that when a CDI is fitted to a vehicle the existing capacitor across the points should be removed (which I have not done). Would you please advise me if this is right.

 Answering your last question first, it is not necessary to remove the capacitor across the points when CDI or transistor ignition is fitted to a vehicle. It does not affect the operation of the circuit and it is desirable that it be left in place should you want to make a quick change back to the standard Kettering ignition.

Regarding the rough running of the vehicle when cruising at a constant speed, we are inclined to suspect the initial advance setting on the distributor rather than the CDI circuit. This is indicated by your noting that removal of the vacuum advance line gave an improvement.