

TECHNICAL TOPICS – CSI Electronic Distributor Quandary

By Peter Barratt

It would cost a lot, but would it be worth it? That has been my deliberation for some time with AJJ 552G. My 1969 Cooper S has been performing very well since I put it on the road in 2010. It flew to Monte and Scotland but always seemed to lack a bit of zest. Just not quite right. No flat spots but was not as smooth revving as other members' cars. I knew the distributor needed a full restoration, if not a complete replacement as the casing was broken where the clamp attaches and the main shaft was shaking in its bearings. Also, I was never convinced that it had the correct weights and springs for a Lucas 23D 40819. The new or restored 23D would also need to be properly set up on a rolling road, probably by our honorary member. The costs would mount up.

So I decided to go for it and order a CSI 23D Cooper S positive earth distributor from Swiftune. It arrived a couple of weeks later, complete with installation instructions. The instructions were easy to follow if not grammatically correct, something lost from the Dutch translation. The ignition wiring on AJJ was already adapted for the Aldon ignition system so it was a straight swap from old to new CSI distributor. The CSI distributor uses the same Lucas aluminium body.

The engine has to be set at 10 degrees BTDC for an S, and so with the coil's

earth wire disconnected and the ignition turned on, the distributor was turned until the inbuilt blue light came on. Very similar to static set up using a lamp on a standard distributor. Then with a small screwdriver, one selects a pre-programmed ignition curve. This particular model was loaded with four Swiftune ignition curves ranging from a Large Bore Race Engine to a standard Cooper S road engine. When the blue light flashed four times it signified that I had initiated the standard S curve. I would like to believe that the ignition curve managed by a software program would be far more accurate through the rev range than the mechanical weights and springs.

Then to get the original look for the engine, I used the original Lucas 23D distributor cap and HT leads. After checking that the coil had a resistance of more than 2.5 ohms, I reconnected the positive terminal to earth. A double check that all was correct and present, I turned the ignition key.

AJJ started first time and has never looked back. It now flies along, free revving and pulling from 2000 rpm in top. It cruises much better from 50 to 70 mph and keeps going up until I chicken out at 90mph.

So was it worth it? A definite yes. It has changed the car.

I would like to add that this set-up suits my needs. I do not have the experience or knowledge to compare the CSI with a professionally set up standard ignition system. Others may like to comment.

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