

C-D IGNITIONS

Probably many have considered installing a C-D ignition in the Lotus. I would like to take my column this month in a definitive and meaningful report on them. First, what are the real benefits? We all hear claims of increased horsepower, gas mileage, spark plug life, etc. Don't expect increased horsepower unless you are operating above 7,000 rpm, where the standard ignition system begins to miss. Gas mileage might be increased if the points are hopelessly pitted, a condition we never allow to exist, right? Spark plug life will be increased, but this is not a problem with Lotus engines. The real advantages are quick starts, even in adverse conditions, high speed (above 6,500 rpm) consistent spark, and longer point life with the associated stability in ignition timing.

The capacitive-discharge system operates as a low current solid state switch triggered by the points. The system applies its high voltage to the ignition coil.

Now, which one? There are many on the market. Many are just garbage, a few good. One must, however, weigh the cost with the probable advantages. Most of you have probably read the Road & Track comparison (Nov. '72). It seems to indicate that we should all go out and buy the "Speedatron" for \$125. But, a closer examination reveals several systems that are almost as good for a third of the price. The difference could be completely overlooked with a regular spark plug cleaning, an easy way to save \$80. This is not a 500 mile interval cleaning, but a 6,000 mile cleaning. A good choice would be between the Delta at \$45 (\$35 at Fedco the last time I checked), Mallory at \$60, Mach II at \$50, or Hays at \$100. Several of the clubmembers have been using the Delta (including myself) with very good results.

Before installing, a few tips. Do not buy the Deltakit if you do not have the experience and tools to build an electronics kit. One cold solder joint will cost you nothing but grief. A good idea is to replace the ignition wires, points, and capacitor, and clean the plugs when it is installed. Old ignition wires or poor points or capacitor will not allow the system to work at its maximum. The mounting of these units is critical if one is looking for maximum reliability. The C-D systems are designed to be bolted to a metal car to keep the transistors cool. If you anticipate sitting in traffic for long periods, the system should be bolted to a thin plate of aluminum, 12"x12". If you can't find room for a plate this large, do what you can. Also it's helpful to mount the unit away from the engine and in the air-stream, once again to keep it cool. The place of mounting should be in as dry a spot as possible. To keep the parts inside the C-D together, especially in a stiffened car, the C-D should be shock mounted by putting grommets on the mounting bolts. On kits seal the units with RTV silicone sealer.

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