To adapt the Chrysler ignition system to the Moto Guzzi the following parts are needed.

Pickup coil- $13

http://tinyurl.com/48r9pal

The control module - $ 20

http://tinyurl.com/295ns9w

The reluctor- $6-8

http://tinyurl.com/465bet3

Some info on the Chrysler system.

http://www.badassmopars.com/1967coronettechElectroniccecus.htm

If you need to search parts for a particular vehicle just about any late 70s-80s Chrysler vehicle will do.

The adaptation is very simple and requires mostly wiring/soldering.

To begin remove the distributor and the points.

The adaptation can be done using two pickup coils and two control units. However it can also be done using one control module and a Y connector to the two pickup coils.

Place the pickup coils 135° apart exactly. This can be done using one screw for each pickup coil. However care should be taken so that the screw (if too long) does not interfere with the advance mechanism.

While a reluctor can be used by grinding down all but one lobe or point, I've found a better method using a fragment of a magnet in the shape of a triangle. Rather than use the reluctor and shaving off the high spots I simply took a small piece of magnet that was busted from a small DC motor but was in the shape of a triangle and glued it with epoxy to the center shaft.

I also increased the distance between the magnet tip and the pickup coils. This seemed to have eliminated stray signals at the higher RPMs.

The coils I use are accel yellow "performance" coils, two of them, one for each side. I've tried one coil using a wasted spark but at the higher RPM seemed to be getting some misfires so I went back to two independent systems.

Also I use a ballast resistor. Without the resistor it draws too much current and it's hard to contain the spark. I use 2 ohms for the ballast resistor.

The system is inexpensive and once set up correctly very reliable.

Early control units used a dual ballast resistor. This is no longer required as that resistor has been incorporated into the control unit itself.

The pickup coil generates an AC current which is (probably rectified) used to turn off the switching transistor thereby colasping the primary field and inducing the secondary high voltage.

The standard control units work fine and since there is only one switching signal per revolution instead of 8 (for a car) there is no need to be concerned about high rpm failure.

Placement of the pickup coils 135˚ apart

The latest adaptation uses a small magnet epoxied to the distributor shaft instead of the reluctor.

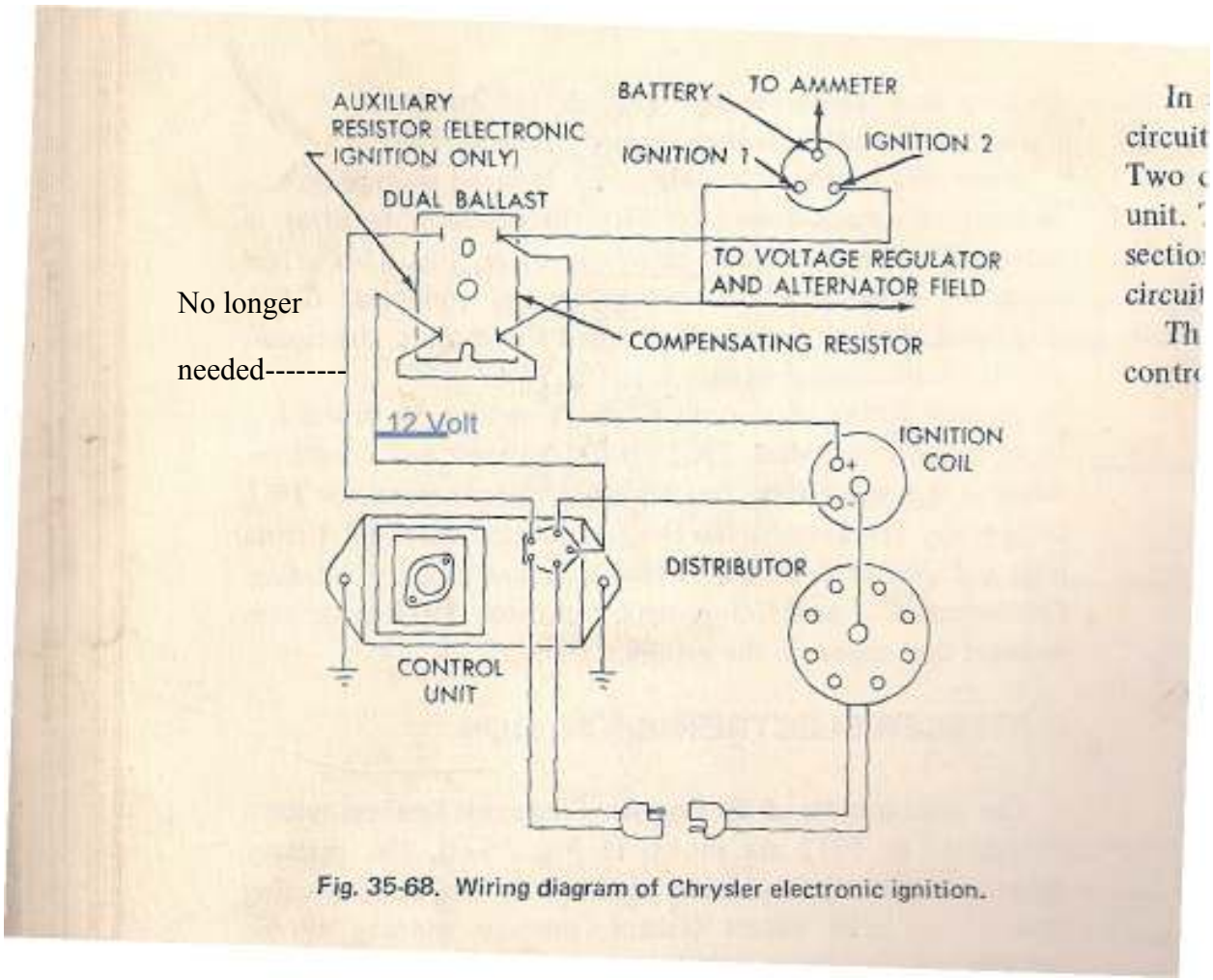

Fig. 35-68. Wiring diagram of Chrysler electronic ignition.

Wiring diagram for early Chrysler Pointless Ignition. The Pin at the 10 O'clock Position is No Longer Produced, No Need for a Ballast Resistor for the Control Module. Only for the Spark Coil. Also No Need for the Distributor.

Picture Shows the Placement of the Chrysler Ignition Control Module and Chrysler Voltage Regulator in the Guzzi tool box.

A short video showing the system being tested before final assembly.

http://home.comcast.net/~gustofur/Guzzi/timing.wmv