

CDI Electronics®

Chrysler Magnapower II Systems

1. Make sure the timing arm is in the full retarded position as the ignition will not spark if the arm is advanced at cranking.
2. The Wide Open Timing (WOT) must be set at the top engine RPM. Do not set at cranking speed.
3. Disconnect the White and Blue stop wires from the CD Module and retest. If the engine starts and runs, the key-switch or stop circuit is bad.
4. Disconnect the stop wires from the CD. Measure DC voltage from the stop wires (from the harness) to engine ground. Turn the ignition switch on and off several times. DC voltage should never exceed 2V. If it does, the stop circuit has a fault. Check the key switch, harness and shift switch.
5. Connect a spark gap tester to all cylinders and test with the spark plugs in and out. If the coils will not spark with the spark plugs in, check compression with the spark plugs removed from all cylinders. A blown head gasket on these engines can prevent the coils from firing with the spark plugs installed. This is caused by a hard to explain problem with the triggering circuit.
6. Crank the engine with the starter and then stop. Check the DVA voltage on terminals T1 and T4 while connected. You should read between 170 and 270 volts Positive on terminal T1 and between 170, and 270 volts Negative on terminal T4. (Remember that some DVA adapters are not polarized and will read the same regardless of the polarity). If there is a low reading on one of the terminals, disconnect the White/Blue and Green/White trigger wires, then retest. If the readings are now correct, one of the trigger modules is bad. A continued low reading may be caused by a bad capacitor. To test, use a couple of jumper wires and swap the Green and White capacitor wires going to terminals T1 and T4. If the low reading remains on the same terminal, the CD is bad. If it moves when you move the capacitor wires, the capacitor is shorted.
7. Disconnect the trigger wires from the T1 and T4 terminals and the ignition coils. Connect a jumper wire to the T1 and T4 terminals. Using the starter, spin the engine over. Touch the jumper wire from T1 to the positive terminal of #1 ignition coil. If the coil now has spark, the trigger is bad (if still no spark, the CD is likely bad). Touch the jumper wire from T4 to the negative terminal of #2 ignition coil. If the coil now has spark, the trigger is bad (if still no spark, the CD is likely bad). On a 4 cylinder engine, T1 should be tested to both # 1 and #2 cylinders coils positive terminals while the T4 must be tested to the negative terminal of #3 and #4 ignition coils.
8. Check to see if the ignition coils are wired correctly. The #1 coil on a two cylinder engine and the #1 & 2 cylinder on a four cylinder engine are wired as NEGATIVE GROUND. The #2 coil on a two cylinder engine and the #3 & 4 cylinder on a four cylinder engine are wired as POSITIVE GROUND.

