If you are loosing spark on a Viper 50M, 70, 90 or 90R there are four (4) possible sources of the problem.
1. Ignition Coil  
2. Pick-up Coil air Gap  
3. A/C Generator  
4. C.D.I. Module

First step is to check the primary coil resistance as shown in Figure 1. Then check the secondary coil resistance as shown in figure 2. If any of the readings are different from spec. replace the ignition coil. Replacement part number is; 610189

Second step is to set Pick-up Coil air gap.  
1. Remove the cooling fan shroud.  
2. Using a feeler gage set the air gap of the pickup coil to 0.025” / 0.635mm
Third step is to test the A/C Generator.

Symptoms for faulty generator
1. Weak or intermittent spark
2. No spark
3. Battery continually discharging
4. Slow throttle response

1. Clean the flywheel
2. Set the Pick-up Coil air gap to 0.025” / 0.635mm . (see second step)

To test the generator, set the multi-meter to a 1k ohms scale. Check the ohms from the white/red wire to the generator case or ground and shown in picture. Ohms reading should between 105-115 ohms replace if 100 ohms or less. To check the output voltage the generator must be installed and multi-meter set to AC small scale. Probe the red lead to the white/red wire and the black lead to battery or chaise ground. Push the starter button with the flywheel turning the voltage should read 0.5 to 1.5 volts AC. If reading is low, replaced the A/C generator.

To test the exciter coil set the multi-meter to a 1k ohms scale. Check the ohms from the white/red wire to the generator case or ground as shown in Figure 2. The reading should be 0.520 — 0.535 k ohms.

To test the auxiliary coil, check from the black/red wire to generator case or ground as shown in Figure 3. Reading should be 0.815 — 0.830 k ohms. If the readings are outside this range replace the A/C generator.

To test the output voltage, probe the white/red wire to ground and hit the starter button. With the Flywheel turning the reading should be .4 — 1.0 A/C Volts. Generator part # 650234 for all models.
Fourth step is to replace the C.D.I. module with a known good module either from stock or from a vehicle that is currently running.

There is no test for the CDI module. The module is a non serviceable item.

Replacement part numbers are:

- Viper 50, 50M, 70 & 90: 811114
- Viper 90R: 811033