

TROUBLESHOOTING

- Inspect the following before diagnosing the system.
 - Faulty spark plug
 - Loose spark plug cap or spark plug wire connection
 - Water got into the spark plug cap (leaking the ignition coil secondary voltage)
- If there is no spark at cylinder, temporarily exchange the ignition coil with the other good one and perform the spark test. If there is spark, the exchanged ignition coil is faulty.

No spark at plug

Unusual condition		Probable cause (Check in numerical order)
Ignition coil primary voltage	Low peak voltage	<ol style="list-style-type: none"> 1. The multimeter impedance is too low. 2. Cranking speed is too low. <ul style="list-style-type: none"> • Battery under charged. 3. The sampling time of the tester and measured pulse were not synchronized (System is normal if measured voltage is over the standard voltage at least ones). 4. Poorly connected connector or an open circuit in ignition system. 5. Faulty ignition coil (Measure the peak voltage). 6. Faulty ICM (in case when above No. 1 – 5 are normal).
	No peak voltage	<ol style="list-style-type: none"> 1. Incorrect peak voltage adaptor connections. 2. Faulty ignition switch. 3. Loose or poor connected ICM connector. 4. An open circuit or loose connection in Green wire. 5. Open circuit or poor connection in ground wire of the ICM. 6. Faulty peak voltage adaptor, or Imrie tester. 7. Faulty ignition pulse generator (measure the peak voltage). 8. Faulty ICM (in case when above No. 1 – 7 are normal).
	Peak voltage is normal, but no spark jumps at plug.	<ol style="list-style-type: none"> 1. Faulty spark plug or leaking ignition coil secondary current. 2. Faulty ignition coil.
Ignition pulse generator	Low peak voltage	<ol style="list-style-type: none"> 1. The multimeter impedance is too low; below 10 MΩ/DCV. 2. Cranking speed is too low 3. The sampling timing of the tester and measured pulse were not synchronized (system is normal if measured voltage is over the standard voltage at least once). 4. Faulty ignition pulse generator (in case when above No. 1 – 3 are normal).
	No peak voltage	<ol style="list-style-type: none"> 1. Faulty peak voltage adaptor or Imrie tester. 2. Faulty ignition pulse generator.