

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)
- Temporarily exchange the ignition coil with a known good one and perform the spark test. If there spark, the exchanged ignition coil is faulty.

IGNITION SYSTEM

No spark at plug

	Unusual condition	Probable cause (Check in numerical order)
Ignition coil primary voltage	Low peak voltage	1. Incorrect peak voltage adapter connections (System is normal if measured voltage is over the specifications with reverse connection). 2. The multimeter impedance is too low; below 10 M Ω /DCV. 3. Cranking speed too slow. <ul style="list-style-type: none"> • Kickstarter is weak 4. The sample timing of the tester and measured pulse were not synchronized (System is normal if measured voltage is over the standard voltage at least once). 5. Poorly connected connectors or an open circuit in ignition system. 6. Faulty exciter coil (measure the peak voltage). 7. Faulty ignition coil. 8. Faulty ICM (in case when above No. 1–7 are normal).
	No peak voltage	1. Incorrect peak voltage adapter connections (System is normal if measured voltage is over the specifications with reverse connection). 2. Short circuit in engine stop switch wire. 3. Faulty engine stop switch. 4. Loose or poorly connected ICM connector. 5. An open circuit or loose connection in Green wire. 6. Faulty exciter coil (measure the peak voltage). 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	1. Faulty spark plug or leaking ignition coil secondary current ampere. 2. Faulty ignition coil.
Exciter coil	Low peak voltage	1. The multimeter impedance is too low; below 10 M Ω /DCV. 2. Cranking speed too low. <ul style="list-style-type: none"> • Kickstarter is weak 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 exciter coil (in case when above No. 1–3 are normal).
	No peak voltage	1. Faulty peak voltage adapter. 2. Faulty exciter coil.
Ignition pulse generator	Low peak voltage	1. The multimeter impedance is too low; below 10 M Ω /DCV. 2. Cranking speed is too low. <ul style="list-style-type: none"> • Kickstarter is weak 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	1. Faulty peak voltage adapter. 2. Faulty ignition pulse generator.