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 either 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.
- "Initial voltage" of the ignition primary coil is the battery voltage with the ignition switch ON and engine stop switch at RUN (The engine is not cranked by the starter motor).

No spark at all plugs

Unusual condition		Probable cause (Check in numerical order)
Ignition coil primary voltage	No initial voltage with ignition and engine stop switches ON. (Other electrical components are normal)	1. Faulty engine stop switch. 2. An open circuit in Black/White wire between the ignition coil and engine stop switch. 3. Loose primary terminal or an open circuit in primary coil. 4. Faulty ICM (in case when the initial voltage is normal while disconnecting ICM connector.
	Initial voltage is normal, but it drops down to 2—4 V while cranking the engine.	1. Incorrect peak voltage adaptor connections. 2. Undercharged battery. 3. No voltage between the Black/White (+) and Body ground (—) at the ICM multi-connector or loosen ICM connection. 4. An open circuit or loose connection in Green wire. 5. An open circuit or loose connection in Yellow/Blue and Blue/Yellow wires between the ignition coils and ICM. 6. Short circuit in ignition primary coil. 7. Faulty side stand switch or neutral switch. 8. An open circuit or loose connection in No. 7 related circuit wires. · Side stand switch line: Green/White wire · Neutral switch line: Light Green and Light Green/Red wire 9. Faulty ignition pulse generator (measure the peak voltage). 10. Faulty ICM (in case when above No. 1—9 are normal).
	Initial voltage is normal, but no peak voltage while cranking the engine.	1. Faulty peak voltage adaptor connections. 2. Faulty peak voltage adaptor. 3. Faulty ICM (in case when above No. 1, 2 are normal).
	Initial voltage is normal, but peak voltage is lower than standard value.	1. The multimeter impedance is too low; below 10 MΩ/DCV. 2. Cranking speed is too low (battery under-charged). 3. The sampling timing of the tester and measured pulse were not synchronised (system is normal if measured voltage is over the standard voltage at least once). 4. Faulty ICM (in case when above No. 1—3 are normal).
	Initial and peak voltage are normal, but does not spark.	1. Faulty spark plug or leaking ignition coil secondary current ampere. 2. Faulty ignition coil.
Ignition pulse generator	Peak voltage is lower than standard value.	1. The multimeter impedance is too low; below 10 MΩ/DCV. 2. Cranking speed is too low (battery under charged). 3. The sampling timing of the tester and measured pulse were not synchronised (system is normal if measured voltage is over the standard voltage at least once). 4. Faulty ICM (in case when above No. 1—3 are normal).
	No peak voltage.	1. Faulty peak voltage adaptor. 2. Faulty ignition pulse generator.
Ignition switch	There is a continuity between Black and Pink terminals in either of the directions.	1. Faulty ignition switch. 2. Specified tester is not used.
	There is no continuity between Black and Pink terminals in either of the directions.	1. Blown fuse (B) 10 A. 2. Faulty engine stop switch. 3. Faulty ignition switch. 4. Specified tester is not used.