17. IGNITION SYSTEM

SERVICE INFORMATION

GENERAL INSTRUCTIONS

- Check the ignition system according to the sequence specified in the Troubleshooting. (⇨1-28)
- The ignition system adopts CDI unit and the ignition timing cannot be adjusted.
- If the timing is incorrect, inspect the CDI unit and A.C. generator and replace any faulty parts. Inspect the CDI unit with a CDI tester
- Loose connector and poor wire connection are the main causes of faulty ignition system. Check each connector before operation.
- Use of spark plug with improper heat range is the main cause of poor engine performance.
- The inspections in this section are focused on maximum voltage. The inspection of ignition coil resistance is also described in this section.
- Inspect the ignition switch according to the continuity table specified in page 20-3.
- Inspect the spark plug referring to Section 3.
- Remove the A.C. generator and pulser coil referring to Section 10.

SPECIFICATIONS

Item			Standard
Spark plug	SH10BA		BR8HSA
	SH10AA		BR6HSA
Spark plug gap			0.8 _ 1.0mm
Ignition timing			13.5° ± 2° BTC/2000rpm
Ignition coil resistance (20°C)	Primary coil		0.153 _ 0.187Ω
	Secondary coil	without plug cap	3.24 _ 3.96KΩ
		with plug cap	6.99 _ 10.21KΩ
Pulser coil resistance (20°C)			50 _ 170Ω
Exciter coil resistance (20°C)			50 _ 350Ω
Ignition coil primary side max. voltage			244V
Pulser coil max. voltage			10.5V
Exciter coil max. voltage			244V

TESTING INSTRUMENT

Electric tester

TROUBLESHOOTING

No spark at plug

- Faulty spark plug
- Poorly connected, broken or shorted wire
- Faulty ignition switch
- Faulty ignition coil
- Faulty CDI unit
- Faulty A.C. generator

Engine starts but turns poorly

- Ignition primary circuit
  - Faulty ignition coil
  - Poorly connected wire or connector
  - Poorly contacted ignition switch
- Ignition secondary circuit
  - Faulty ignition coil
  - Faulty spark plug
  - Faulty high-tension wire
  - Poorly insulated plug cap
- Improper ignition timing
  - Faulty A.C. generator
  - Stator not installed properly
  - Faulty CDI unit