



17. IGNITION SYSTEM

SERVICE INFORMATION	17-1
TROUBLESHOOTING	17–1
SPARK PLUG	17–2
IGNITION COIL	17-2
CDI UNIT	17–3
PULSE GENERATOR	17-3

SERVICE INFORMATION

GENERAL

- Ignition timing cannot be adjusted since the CDI (Capacitive Discharge Ignition) unit is non-adjustable.
- If ignition timing is incorrect, check the CDI unit and alternator and replace any faulty parts.

SPECIFICATIONS

Spark plug

Standard		For cold climate (Below 5°C/41°F)		For extended high speed riding	
ND	NGK	ND	NGK	ND	NGK
X24EPR-U9	DPR8EA-9	X22EPR-U9	DPR7EA-9	X27EPR-U9	DPR9EA-9

Plug gap:

0.8-0.9 mm (0.032-0.030 in)

Ignition timing:

Initial:

'83: 6° BTDC at 1,200 rpm

'84: 11° BTDC at 1,300 rpm

Full advance:

31° BTDC at 4,000 rpm

TOOL

SPECIAL

Multimeter (Kowa TH-5H-1)

Digital multimeter (Kowa) 07411-0020000 or KS-AHM-32-003 (U.S.A. only)

TROUBLESHOOTING

No Spark

- 1. Engine stop switch "OFF"
- 2. Poorly connected, broken or shorted wires
 - Between alternator and ignition coil
 - Between CDI unit and engine stop switch
 - Between CDI unit and ignition coil
 - Between CDI unit and main switch
 - Between ignition coil and plug
 - Between pulse generator and CDI unit
- 3. Faulty main switch
- 4. Faulty ignition coil
- 5. Faulty CDI unit 6. Alternator faulty
- 7. Faulty pulse generator

Engine Starts but Runs Poorly

- 1. Ignition primary circuit
 - Faulty ignition coil
 - Loose or bare wire
 - Faulty pulse generator
- 2. Secondary circuit
 - Alternator faulty
 - CDI unit faulty
 - Faulty pulse generator
 - Faulty spark advancer



SPERK PLUG

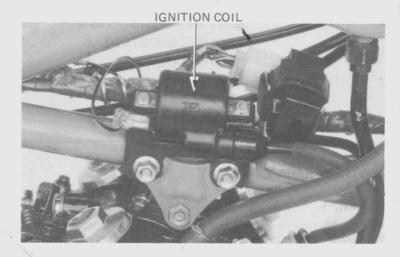
For spark plug gap inspection and adjustment procedures, see Page

IGNITION COIL

REMOVAL

Remove the fuel tank and disconnect the ignition coil wire leads.

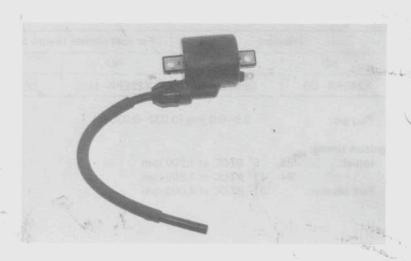
Remove the attaching bolt and remove the coil.



INSPECTION

Measure the resistances of the primary and secondary coils.

PRIMARY: SECONDARY: 0.8Ω 4.1KΩ



ALTERNATOR (IGNITION CIRCUIT)

INSPECTION

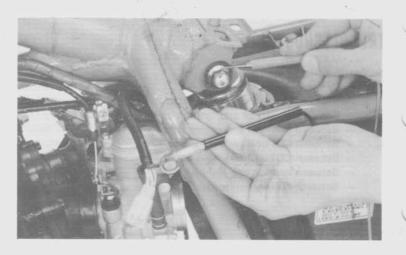
D isconnect the alternator wire coupler.

Disconnect the alternator wire coupler.

Measure the resistances between the black/red wire and ground.

RESISTANCE IN NORMAL DIRECTION:

235-319 ohms





CDI UNIT

REMOVAL

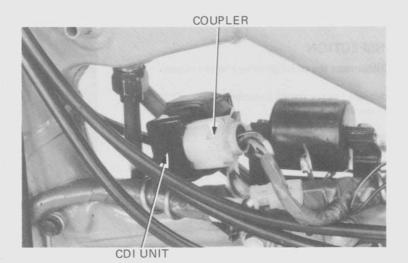
Remove the fuel tank and disconnect the coupler from the CDI unit and remove the CDI unit.

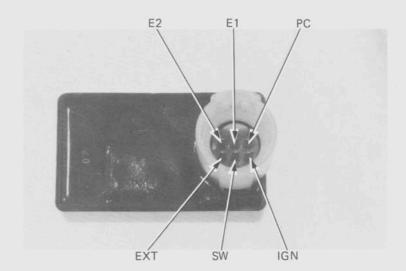
INSPECTION

Check continuity of the CDI terminals. Replace the CDI unit if the readings do not fall within the limits shown in the table.

NOTE

- · The CDI unit is fully transistorized.
- For accurate testing, it is necessary to use a specified electric tester. Use of an improper tester or measurements in improper ranges may give false readings.
- Use Sanwa Electric Tester 07308—0020000, Kowa multimeter TH-5H-1 or Kowa Digital multimeter 07411—0020000 or KS-AHM-32-003 (U.S.A. only).





Tester range: KOWA X 100 Ω , SANWA X K Ω

+ Probe - Probe	SW	EXT	P-C	E1-E2	IGN
SW		00	00	00	00
EXT	0.1-20		*00	*∞	00
P-C	30-300	10-200		1-100	00
E1-E2	1-50	0.1-20	1-100		00
IGN	00	∞	00	∞	

*('83 only): Analog tester: The needle will remains ∞ or swing momentarily, then return to ∞. Digital tester: The indicator remains "1" (∞).

1844



PULSE GENERATOR

INSPECTION

Disconnect the pulse generator wire coupler.

Measure the resistance between the Blue/Yellow and Green white wires.

SPECIFICATION: 510-570 Ω

