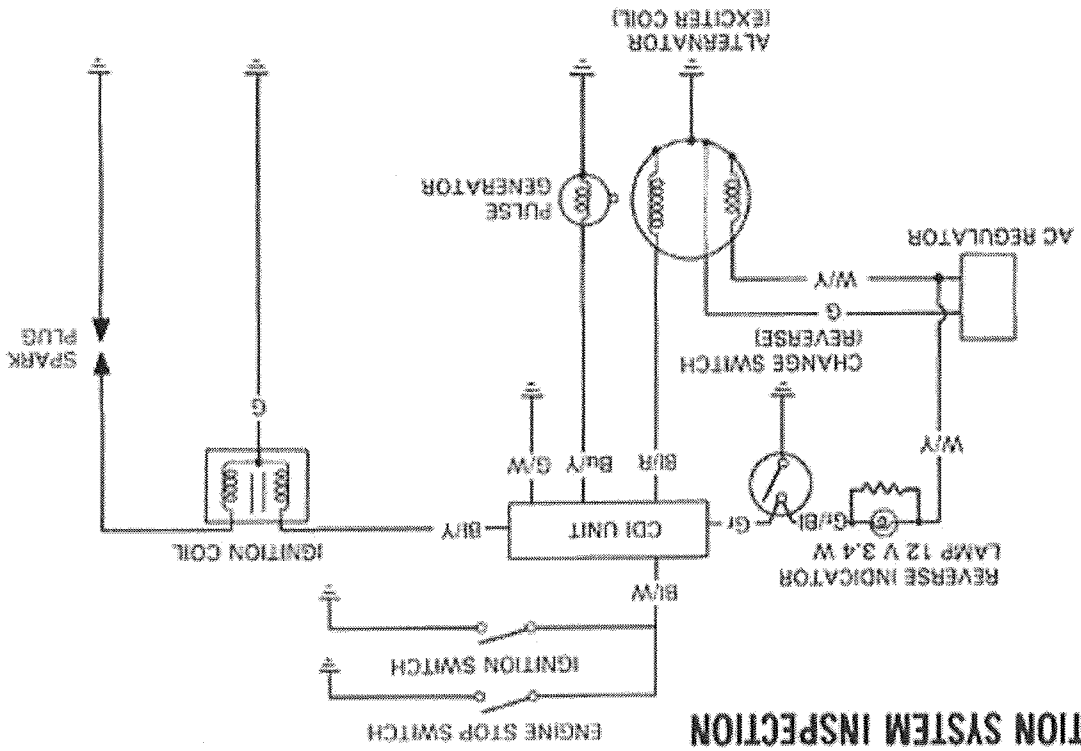


87 TRX 250X

IGNITION SYSTEM INSPECTION



NOTE

• When you try to test spark, you should install the another spark plug to the cylinder head to get enough cylinder compression, because this ignition system is no spark below 430 rpm.

If the problem is weak or no spark, inspect as follows:

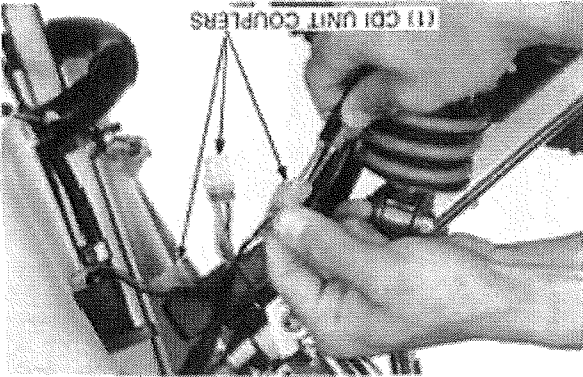
NOTE

• This method does not include an inspection of the ignition timing advance system at the CDI unit.

Inspect the spark plug for condition, before system inspection (page 3-5).

Disconnect the CDI unit couplers and check them for loose contact or corroded terminals.

Measure the resistance between coupler terminals of the following below chart.



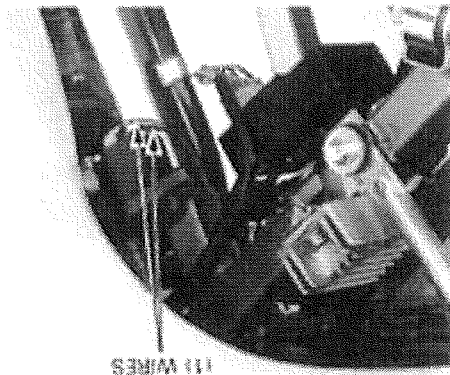
ITEM	TERMINALS	STANDARDS (20±59°F)
Ignition coil (primary coil)	black/yellow-green/white	0.1-0.2 Ω
Ignition coil (secondary coil) with spark plug cap	high tension cord-green/white	8.8-14 kΩ
Pulse generator	blue/yellow-green/white	290-360 Ω
Alternator exciter coil	black/red-green/white	100-300 Ω
Ignition switch "ON"	Engine stop switch "RUN"	no continuity
Ignition switch "OFF"	Engine stop switch "OFF"	continuity
		black/white-green/white
Reverse switch "ON"	gray-green/white	continuity

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STANDARD: 0.1 - 0.2 Ω (20°C/68°F)

Measure the primary coil resistance.

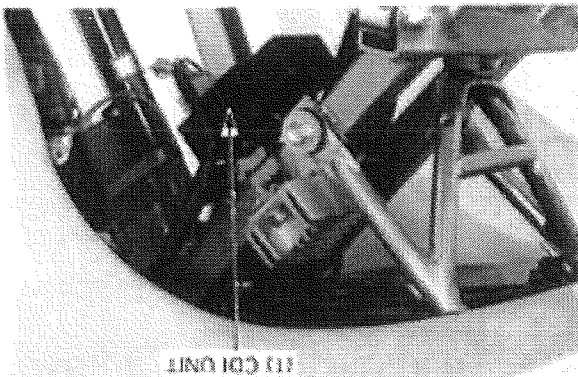


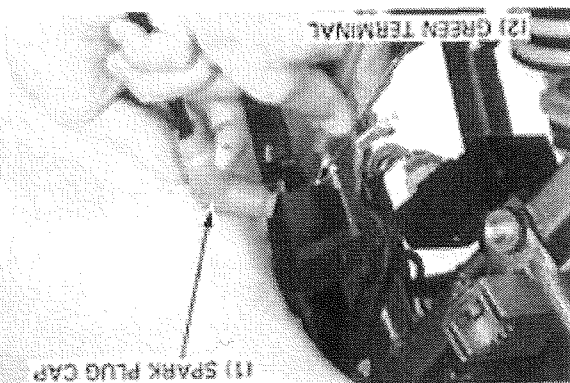
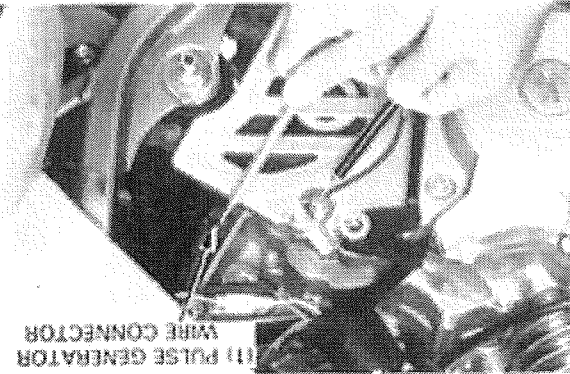
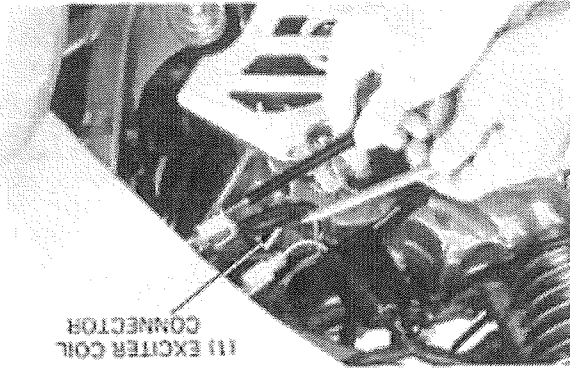
IGNITION COIL CONTINUITY TEST

Remove the spark plug cap from the spark plug.
Disconnect the ignition coil primary wires.

If the above circuits are normal, check the wire harnesses for short or open circuits or the coupler or connectors for loose or poor contact.

- reverse switch (page 16-27).
 - engine stop switch (page 16-9).
 - ignition switch (page 16-8).
 - alternator exciter coil (page 16-5).
 - pulse generator (page 16-5).
 - ignition coil secondary coil (page 16-4).
 - ignition coil primary coil (page 16-4).
- as follows: replace or repair them if necessary.
- If there is indication of abnormality, inspect the related circuit CDI unit.
- If there is no problem with all the above checks, replace the
- AC regulator (page 16-5).
 - alternator lighting coil (page 16-5).
- repair them if necessary.
- If there is no problem, inspect the following circuits; replace or





Replace the alternator stator if the reading is not within the specification (page 16-11).

STANDARD: 100–300 Ω (20°C/68°F)

Check the resistance between the blacked wire and ground with an ohmmeter.
Disconnect the alternator blacked wire connector.

ALTERNATOR EXCITER COIL

If they are normal, replace the pulse generator.

-- wire harness for short or open circuit.
-- normal.
-- pulse generator connector for loose contact or corroded terminal.
If the reading is not within the specification, remove the pulse generator (page 9-3) and check the following:

STANDARD: 290–300 Ω (20°C/68°F)

Disconnect the pulse generator wire connector.
Measure the resistance between the blue/yellow wire and ground.

PULSE GENERATOR INSPECTION

Install the spark plug cap to the plug.
wire connector to the green terminal.
Install the ignition coil and connect the black/yellow wire connector to the black terminal of the ignition coil and the green

IGNITION COIL INSTALLATION

STANDARD: 5.8–7.2 kΩ (20°C/68°F)

If the secondary coil resistance is out of specification, remove the spark plug cap from the wire and measure the secondary coil resistance again, to determine if it is the coil or the cap.

STANDARD: 8.8–14 kΩ (20°C/68°F)

Measure the secondary coil resistance with the spark plug cap.

IGNITION TIMING

NOTE

- The Capacitive Discharge Ignition (CDI) system is factory pre-set and does not require adjustment. To inspect the function of the CDI components, ignition timing inspection procedures are given here.

Remove the timing hole cap.

Connect a tachometer and timing light.

Start the engine and allow it to idle.

IDLE SPEED: 1,400 ± 100 rpm

Inspect the ignition timing.

Timing is correct if the "F" mark on the alternator rotor is aligned with the index mark on the left crankcase cover at idle.

The index mark should be between the advance marks.

If the ignition timing is incorrect, perform the system inspection (page 18-3).

To check the advance, raise the engine speed to 3,000 ± 200 rpm.

