

6. Starter/charging Relay Switch Line Inspection

Turn the ignition switch OFF.
Disconnect the ECM 5P connector.

Turn the ignition switch ON.
Retract the sidestand.
Squeeze the brake lever and push the starter switch.
Measure the battery voltage between the ECM 5P connector and ground.

CONNECTION: Red/yellow (+) – Ground (–)

Does the battery voltage exist?

YES – GO TO STEP 7.

NO –

- Loose or poorly connected connector.
- Open circuit in Red/yellow wire between the starter/charging relay and ECM.
- Open circuit in Red wire between the starter/charging relay and battery.
- Faulty starter/charging relay (Inspect the starter/charging relay: page 6-7)

7. Stator Coil Circuit Inspection

Turn the ignition switch OFF.
Disconnect the ECM 3P (Black) connector.
Measure the resistance at the ECM 3P (Black) connector.

CONNECTION: Red/yellow – Red/white
Red/yellow – Red/blue
Red/white – Red/blue

Is the resistance within 0.03 – 0.20 Ω (20 °C/68 °F)?

YES – GO TO STEP 8.

NO – Replace the alternator/starter with a new one and recheck.

8. CKP Sensor Circuit Inspection

Turn the ignition switch OFF.
Disconnect the CKP sensor 6P (Black) connector.
Turn the ignition switch ON.
Measure the voltage at the 6P (Black) connector of the ECM side and ground.

CONNECTION: White/red (+) – Ground (–)
White/blue (+) – Ground (–)
White/black (+) – Ground (–)
Blue/yellow (+) – Ground (–)

STANDARD: 5 – 10 V

Measure the voltage at the 6P (Black) connector of the ECM side.

CONNECTION: Brown/black (+) – Blue/green (–)

STANDARD: Battery voltage

Does the standard voltage exist?

YES – Replace the CKP sensor with a new one and recheck.

NO –

- Open circuit in wire harness between the ECM and CKP sensor connector
- Replace the ECM with a new one and recheck.

9. Starter/charging Relay Continuity Inspection

Remove the starter/charging relay (page 6-7).
Check the starter/charging relay operation (page 6-7).

Is the operation normal?

YES – GO TO STEP 10.

NO – Faulty starter/charging relay.

