

TROUBLESHOOTING

BATTERY IS DAMAGED OR WEAK

1. BATTERY TEST

Remove the battery (page 17-5).

Check the battery condition using the recommended battery tester.

RECOMMENDED BATTERY TESTER:

BM210 or BATTERY MATE or equivalent

Is the battery in good condition?

NO – Faulty battery

YES – GO TO STEP 2.

2. CURRENT LEAKAGE TEST

Install the battery (page 17-5).

Check the battery current leakage (Leakage test; See page 17-7).

Is the current leakage below 2.0 mA?

YES – GO TO STEP 4.

NO – GO TO STEP 3.

3. CURRENT LEAKAGE TEST WITHOUT REGULATOR/RECTIFIER CONNECTED

Disconnect the regulator/rectifier 2P connector and recheck the battery current leakage.

Is the current leakage below 2.0 mA?

YES – Faulty regulator/rectifier

NO –

- Shorted wire harness
- Faulty ignition switch

4. ALTERNATOR CHARGING COIL INSPECTION

Check the alternator charging coil (page 17-8).

Is the alternator charging coil resistance within 0.1 – 1.0 Ω (20°C/68°F)?

NO – Faulty charging coil

YES – GO TO STEP 5.

5. CHARGING VOLTAGE INSPECTION

Measure and record the battery voltage using a digital multimeter (page 17-5).

Start the engine and measure the charging voltage (page 17-7).

Compare the measurement to result of the following calculation.

STANDARD:

Measured battery Voltage < Measured charging voltage < 15.5 V

Is the measured charging voltage within the standard voltage?

YES – Faulty battery

NO – GO TO STEP 6.

6. REGULATOR/RECTIFIER SYSTEM INSPECTION

Check the voltage at the regulator/rectifier connector (page 17-8).

Are the results of checked voltage correct?

YES – Faulty regulator/rectifier

NO –

- Open circuit in related wire
- Loose or poor contacts of related terminal
- Shorted wire harness