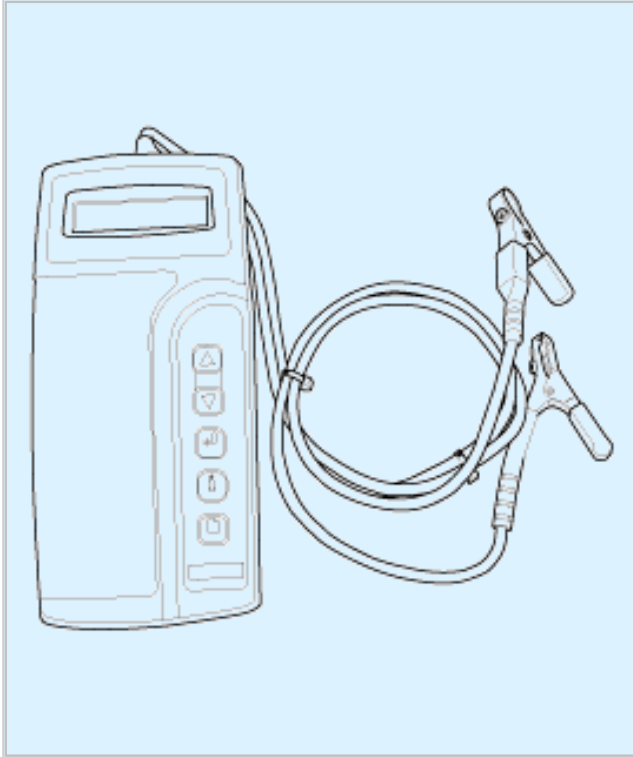




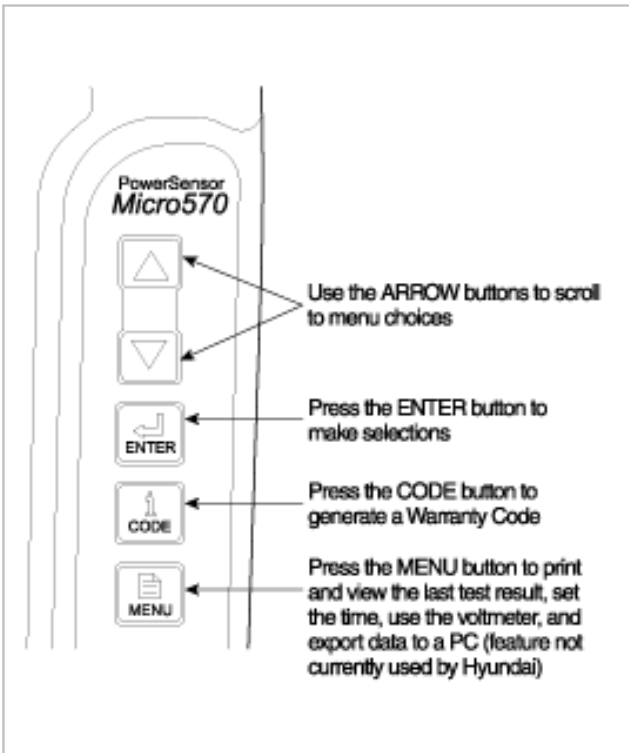
THE MICRO 570 ANALYZER

CAUTION

Because of the possibility of personal injury, always use extreme caution and appropriate eye protection when working with batteries.

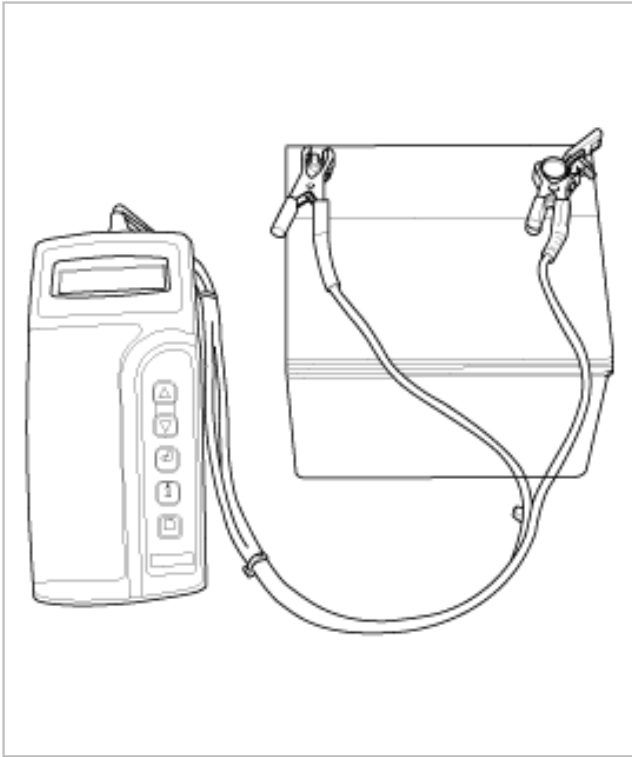


KEYPAD



BATTERY TEST PROCEDURE

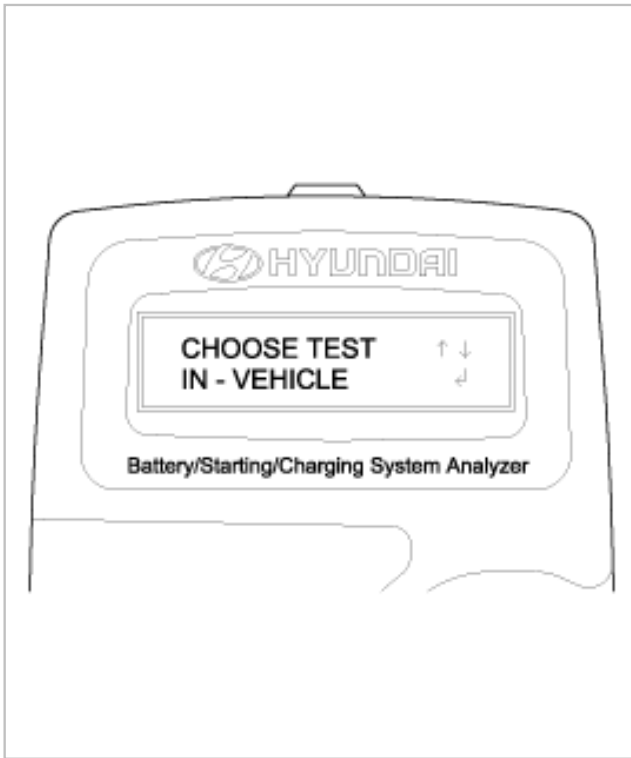
1. Connect the tester to the battery.
 - A. Red clamp to battery positive (+) terminal.
 - B. Black clamp to battery negative (-) terminal.



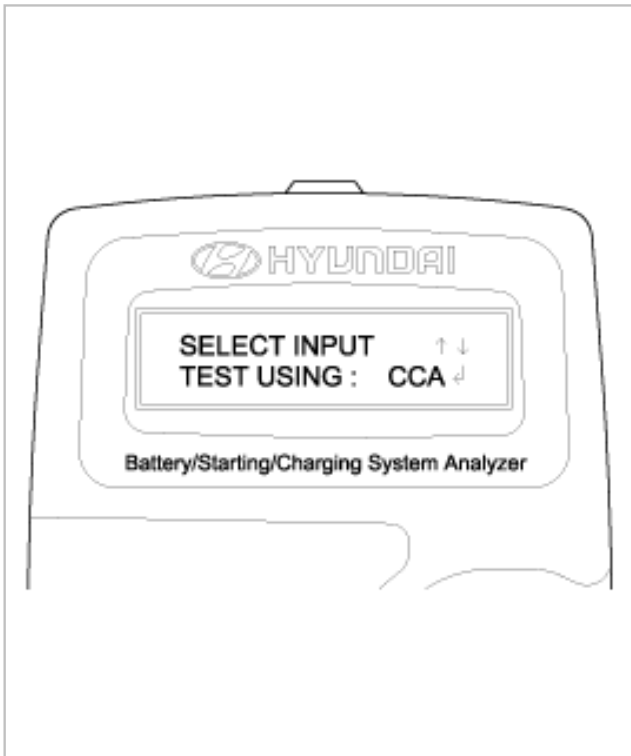
CAUTION

Connect clamps securely. If "CHECK CONNECTION" message is displayed on the screen, reconnect clamps securely.

2. The tester will ask if the battery is connected "IN A VEHICLE" or "OUT OF A VEHICLE".
Make your selection by pressing the arrow buttons; then press ENTER.



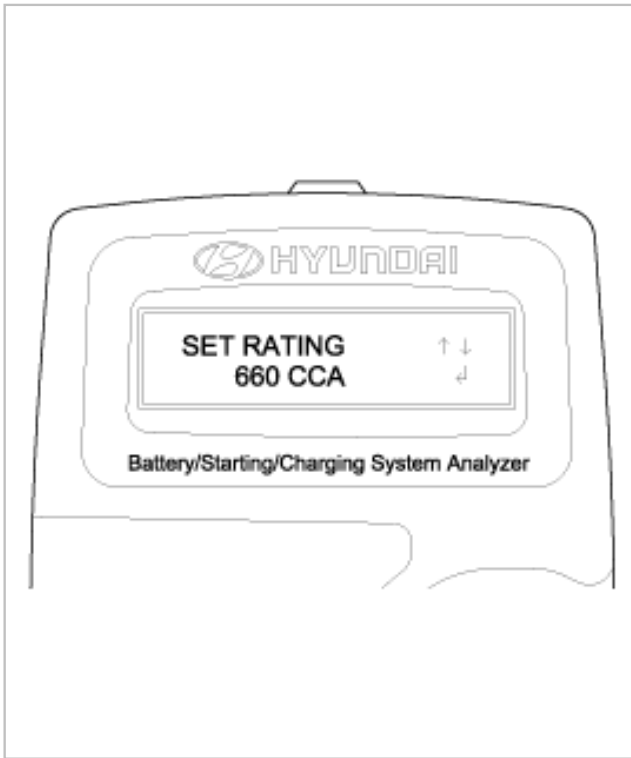
3. Choose either CCA or CCP and press the ENTER button.



NOTE

- CCA : Cold cranking amps, is an SAE specification for cranking batteries at 0°F (-18°C).
- CCP : Cold cranking power, is an SAE specification for Korean manufacturer's for cranking batteries at 0°F (-18°C)

4. Set the CCA value displayed on the screen to the CCA value marked on the battery label by pressing up and down buttons and press ENTER.



NOTE

The battery ratings(CCA) displayed on the tester must be identical to the ratings marked on the battery label.

5. The tester (Micro570) displays battery test results including voltage and battery ratings. A relevant action must be taken according to the test results by referring to the battery test results as shown in the table below.



6. To conduct starter test, continuously, press ENTER.

BATTERY TEST RESULTS

RESULT ON PRINTER	REMEDY
Good battery	No action is required
Good recharge	Battery is in a good state Recharge the battery and use
Charge & Retest	Battery is not charged properly → Charge and test the battery again (Failure to charge the battery fully may read incorrect measurement value)
Replace battery	→ Replace battery and recheck the charging system. (Improper connection between battery and vehicle cables may cause "REPLACE BATTERY", retest the battery after removing cables and connecting the tester to the battery terminal directly prior to replacing the battery)
Bad cell-replace	→ Charge and retest the battery.

WARNING

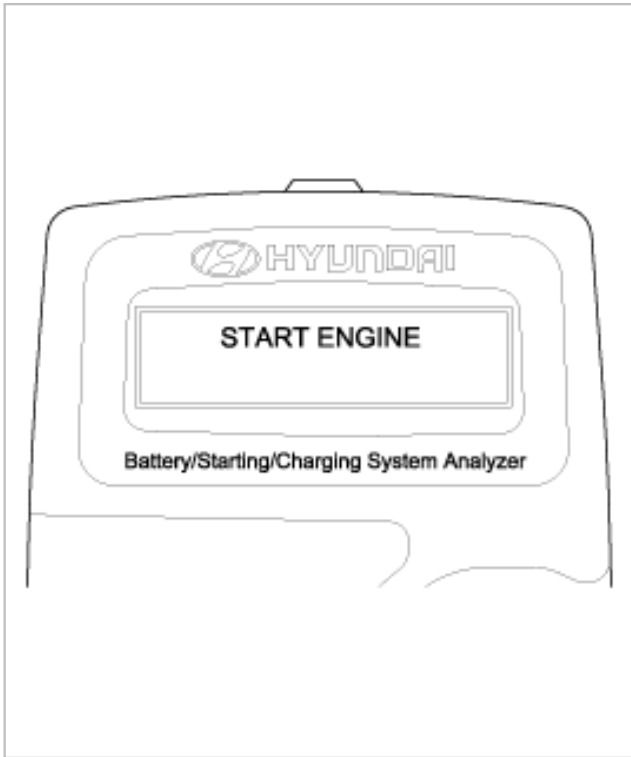
Whenever filing a claim for battery, the print out of the battery test results must be attached.

STARTER TEST PROCEDURE

1. After the battery test, press ENTER immediately for the starter test.

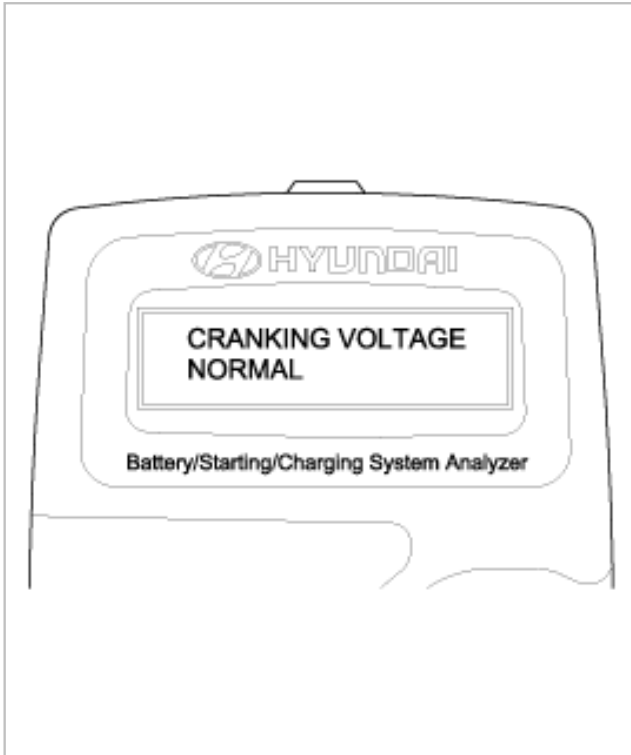


2. After pressing ENTER key, start the engine.



3. Cranking voltage and starter test results will be displayed on the screen.

Take relevant action according to the test results by referring to the starter test results as given below.



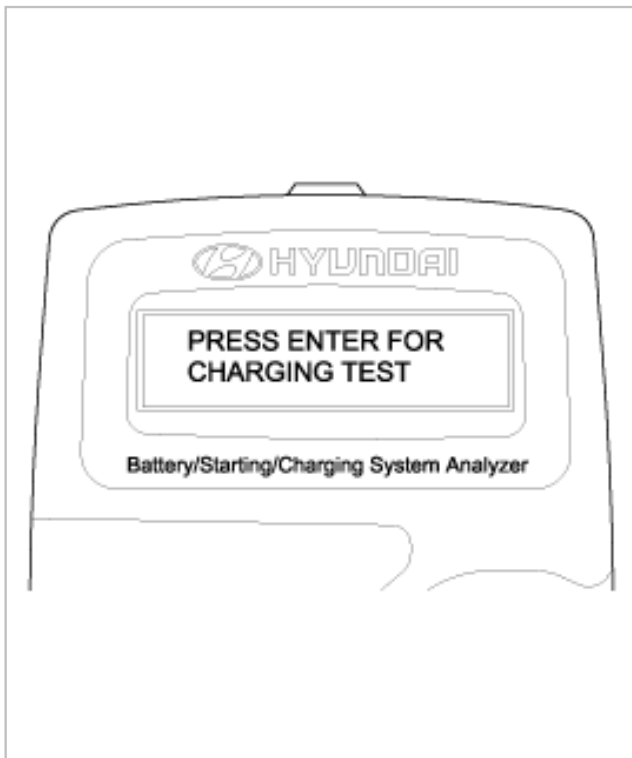
4. To continue charging system test, press ENTER.

STARTER TEST RESULTS

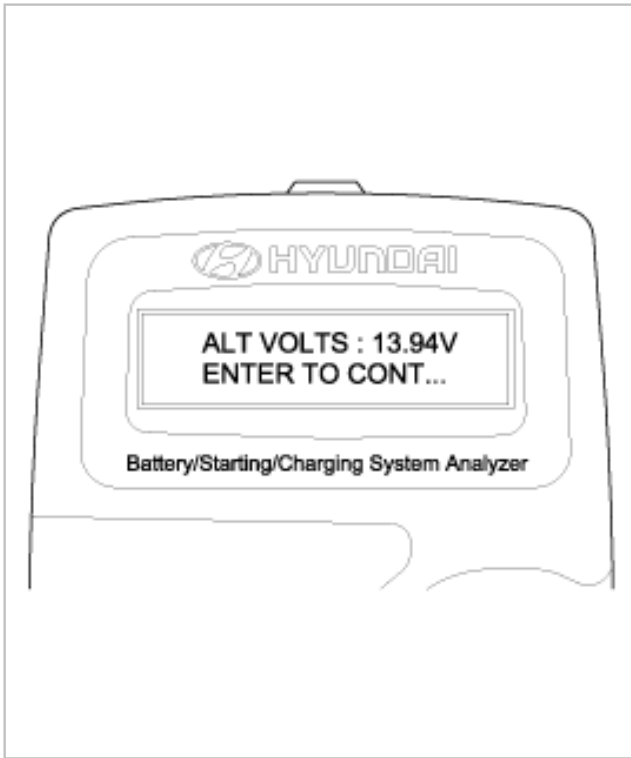
RESULT ON PRINTER	REMEDY
Cranking voltage normal	System shows a normal starter draw
Cranking voltage low	Cranking voltage is lower than normal level → Check starter
Charge battery	The state of battery charge is too low to test → Charge the battery and retest
Replace battery	→ Replace battery → Check wiring for open circuit, battery cable connection, starter and repair or replace as necessary. → If the engine does crank, check fuel system.

CHARGING SYSTEM TEST PROCEDURE

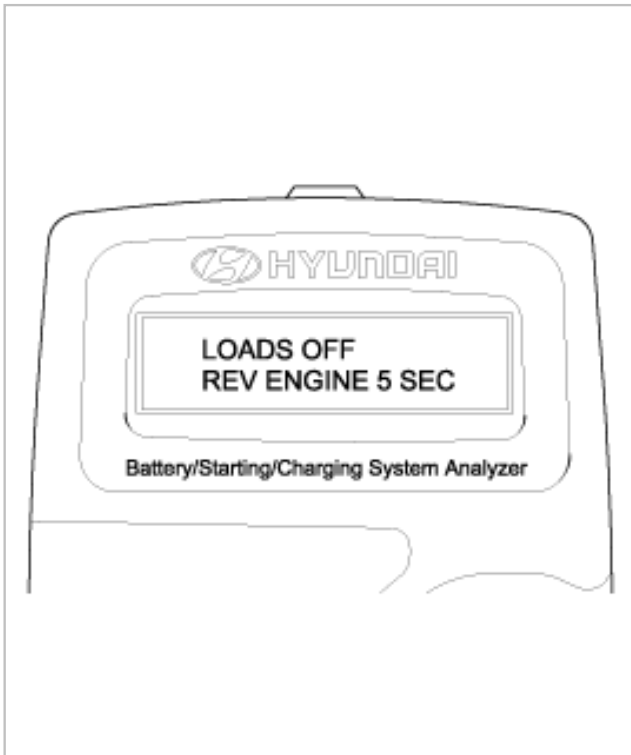
1. Press ENTER to begin charging system test.



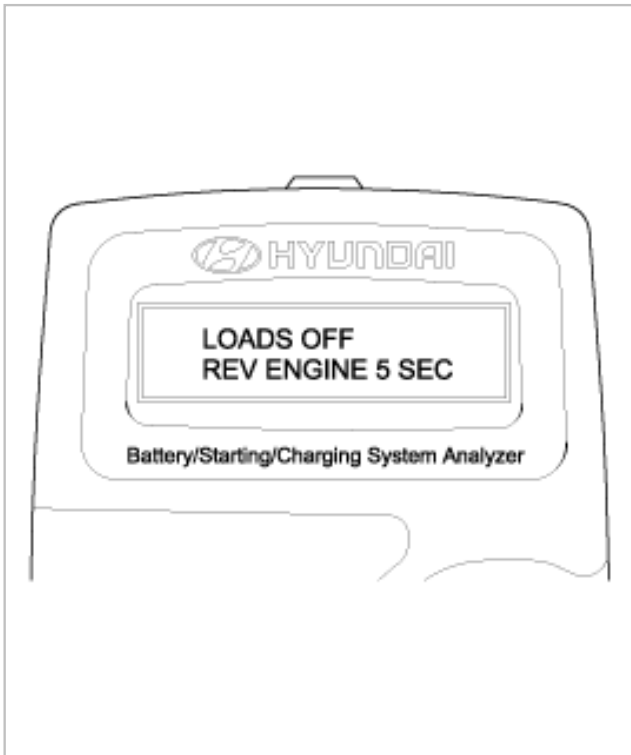
2. If ENTER button is pressed, the tester displays the actual voltage of alternator.
Press ENTER to test the charging system.



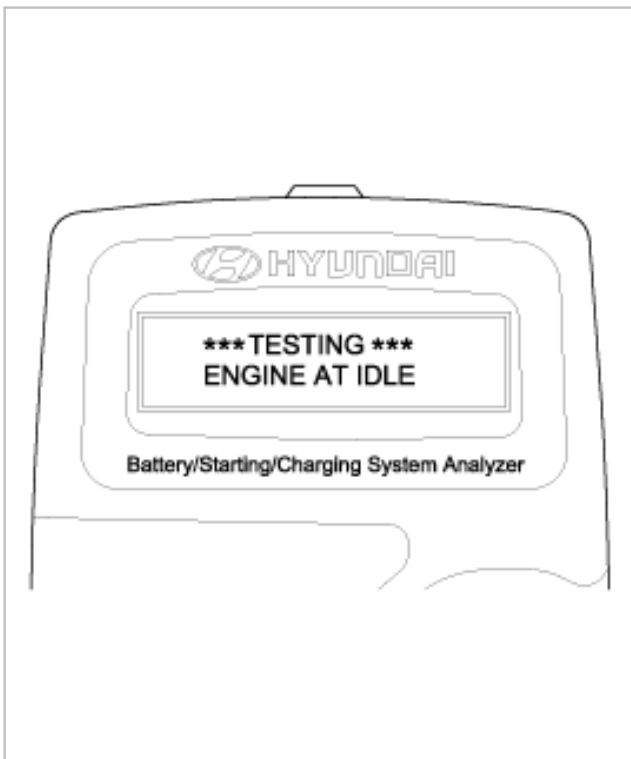
3. Turn off all electrical load and rev engine for 5 seconds.



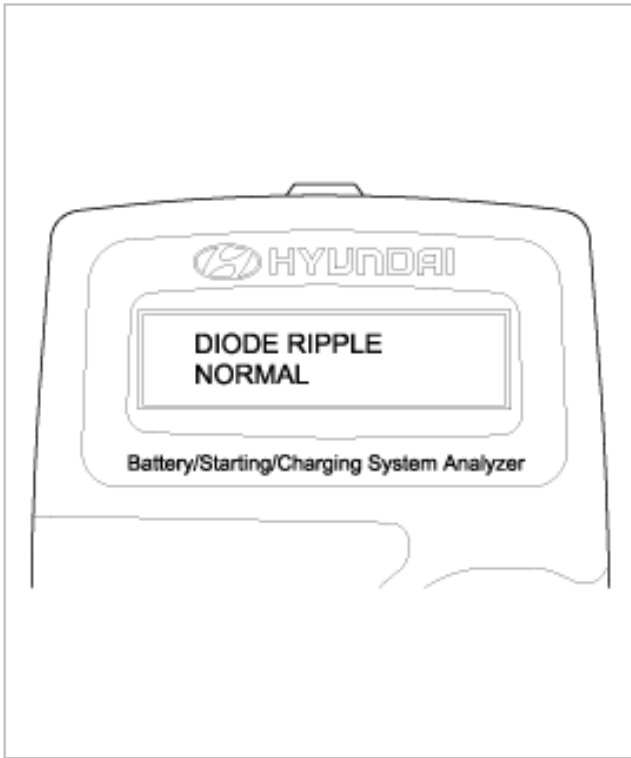
4. Press ENTER.



5. The MICRO 570 analyzer charging system output at idle for comparison to other readings.



6. Take relevant action according to the test results by referring to the table below after shutting off the engine and disconnect the tester clamps from the battery.



CHARGING SYSTEM TEST RESULTS

RESULT ON PRINTER	REMEDY
Charging system normal/Diode ripple normal	Charging system is normal
No charging voltage	Generator does not supply charging current to battery → Check belts, connection between generator and battery Replace belts or cable or generator as necessary
Low charging voltage	Generator does not supply charging current to battery and electrical load to system fully → Check belts and generator and replace as necessary
High charging voltage	The voltage from generator to battery is higher than normal limit during voltage regulating. → Check connection and ground and replace regulator as necessary
Excess ripple detected	One or more diodes in the generator is not functioning properly → Check generator mounting and belts and replace as necessary