BATTERY INSPECTION [SKYACTIV-G 2.0]

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Warning
- **Since battery acid is toxic, be careful when handling the battery.**
- **Since battery acid is highly corrosive, be careful not to allow it to contact clothing or the vehicle.**
- **In case battery acid contacts skin, eyes, or clothing, flush it immediately with running water. If the acid gets in the eyes, flush with water for more than 15 min and get prompt medical attention.**

Electrolyte Specific Gravity

Purpose	Step	Inspection	Results	Action
Battery examination (verification of dendrite short)	1	Using a hydrometer, measure the electrolyte gravity of all the cells and identify the one with the lowest electrolyte gravity value.	1.25 or more	Battery is normal.
			1.17—1.25	Recharge the battery. (See BATTERY RECHARGING [SKYACTIV-G 2.0].)
			Less than 1.17	Replace the battery because it can be determined as a dendrite short. (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-G 2.0].)

Parasitic Draw

Caution
- **Operating electrical loads while the parasitic draw is being measured can damage the tester.**
- **Because the "BATT_SOC" value before disconnecting the negative battery cable is required for the battery condition initial setting (i-stop setting), always verify the "BATT_SOC" value before disconnecting the negative battery cable.**

1. Verify that the ignition is off (lock) and that all doors are closed.
2. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0].)

Note
- If the battery is not left undisturbed for **10 min or more, but less than 30 min**, the tester will indicate a high value (**approx. 300 mA**).
- If the ignition or any electrical accessory is operated after the tester is connected, the battery must be left undisturbed for **10 min or more, but less than 30 min** from that point.
- For vehicles with the immobilizer system, the system periodically shifts synchronization of the security indicator light flashing. Therefore, **65 mA (0.1 s)** current is supplied when the security indicator light is illuminated, and **40 mA (2 s)** current is supplied when the security indicator light is not illuminated. In addition, the measuring instrument, which shows the average value, indicates around **55 mA**.

3. Connect the tester between the negative battery terminal and negative battery cable, leave the battery undisturbed for **10 min or more, but less than 30 min**, and then measure the parasitic draw.
   - If not within specification, measure the parasitic draw while removing the fuses one by one from the inside of the main fuse block and the inside of the fuse block.
   - Inspect and repair wiring harnesses and connectors of the fuse where the current has decreased.

Battery parasitic draw (When the ignition is off (lock), all doors and the bonnet are closed.)
40—65 mA

Note
- If the battery is left for **30 min**, a battery parasitic draw value of **25—45 mA** is indicated.

Battery inspection when i-stop warning light (amber) is flashing

1. Inspect the battery as follows:

Step	Inspection	Results	Action
1	Was the vehicle engine not started for 5 days or more? (Ask the customer)	Yes	Replace the battery.
		No	Go to the next step.

Step	Inspection	Results	Action
2	Using a hydrometer, measure the electrolyte gravity of all the cells and identify the one with the lowest electrolyte gravity value.	1.25 or more	Battery is normal.
		1.17—1.25	Recharge the battery. (See BATTERY RECHARGING [SKYACTIV-G 2.0].)
		Less than 1.17	Replace the battery because it can be determined as a dendrite short. (See BATTERY REMOVAL/ INSTALLATION [SKYACTIV-G 2.0].)
3	After performing any of the following work, verify that the i-stop warning light (amber) turns off. • Battery cable is disconnected and ignition is switched ON (engine off) after reconnection • Ignition is switched ON (engine off) after 12 hours or more have elapsed with ignition switched off		