

Service Information

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Category G	Technical	Ref. No. E004/12	Page 1 of 2
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued March 15, 2012	
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised	
Applicable Model CX-5 (KE) with i-stop		Applicable Countries or Specifications Europe	

Subject: Battery maintenance during storage

DESCRIPTION

“i-stop”, newly established together with SKYACTIV engine, operates as it's designed only when the battery operable capacity (SOC: State of Charge*1) is on or more than 68.4%.*2.

On the other hand, the battery is discharged during storage due to parasitic draw and self discharge. Therefore the battery maintenance during storage is essential to have the customer enjoy i-stop function from the beginning of new vehicle driving.

Besides, due to its unique design of SKYACTIV with i-stop, inspection and charging procedure is different from ordinary models.

Therefore all Distributors and Dealers are requested to follow the “battery maintenance points during storage”. Thoroughly follow the procedure described below as a part of new vehicle handling.

*1: The battery operable capacity is read from BATT_SOC, the PID newly established for i-stop battery.

*2: Frequency and/or operation time of i-stop is reduced when SOC gets less than 75%. To prioritize the battery charge, i-stop is disabled when SOC gets less than certain level.

<Battery maintenance points during storage>

Point I: Inspect battery condition by reading “BATT_SOC” with MMDS.

Specific gravity of battery acid is uneven after charging. Therefore, leave the battery for 6~48 hours when reading SOC after charging. The PCM does not show the correct SOC right after charging because it is unstable, sometimes M-MDS temporarily shows “0%” as SOC.

Caution: Even if SOC gets low and i-stop is disabled, engine cranks and starts just as normal. Therefore, “engine-cranks-or-not” method cannot be used to determine the battery condition.

Point II: It is recommended to disconnect the negative battery cable to eliminate possible parasitic draw and inhibit SOC reduction when keeping the vehicle in storage,

Following table shows SOC reduction rate per day on each vehicle condition as reference.
(The rate may vary depending on vehicle's equipments and individual variability)

<u>Vehicle condition</u>	<u>SOC reduction per day</u>
Normal condition	1.16%/day
Room fuse removed	0.48%/day
Room & audio fuses removed	0.4 %/day
Battery negative cable disconnected	0.17%/day

Following operation with room fuse installed awakens electronic devices from its "sleep mode" so parasitic draw will be increased as a result.

- Opening engine hood
- Opening a door
- Placing the key inside the cabin or near the vehicle

Point III: Charge the battery every 2 months at least (refer to DSOG). During storage, the battery may be weakened due to parasitic draw and self discharge.

Note: The more the battery discharges, the more the sulfation progresses and takes time to recover the battery.

Point IV: It is preferable to inspect and charge the battery on the day before the vehicle delivery to customer as it takes time (6~48 hours as described on I) to stabilize the battery condition and obtain correct SOC.

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