

FREEZE FRAME DATA

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HINT:

The freeze frame data records the operating condition of the HV battery system and components at the time of detection of a DTC. It is used for estimating or simulating the condition of the vehicle when malfunction occurred.

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the power switch ON (IG).
- (c) Turn the hand-held tester ON.
- (d) On the hand-held tester, enter the following menus: DIAGNOSIS / ENHANCED OBD II / HV BATTERY / DTC INFO / TROUBLE CODES.
- (e) Select a DTC in order to display its freeze frame data.
- (f) Check the freeze frame data of the DTC that has been detected.

Freeze frame data

Hand-held Tester Display	Measurement Item/Range	Suspected Vehicle Status When Malfunction Occurs
BATTERY SOC	Battery state of charge/ Min.: 0 %, Max.: 100 %	State of charge of HV battery
DELTA SOC	Difference between maximum and minimum values of SOC at every battery block/ Min.: 0 %, Max.: 100 %	SOC variance
IB BATTERY	Current value of battery pack/ Min.: -327.68 A, Max.: 327.67 A	Charging/discharging condition of HV battery • Discharging amperage indicated by a positive value • Charging amperage indicated by a negative value
BATT INSIDE AIR	Temperature of inhalation ambient air into battery pack/ Min.: -327.68°C, Max.: 327.67°C	Temperature of inhalation ambient air into battery pack
VMF FAN VOLTAGE	Battery blower motor voltage/ Min.: 0 V, Max.: 25.4 V	Actuation condition of battery blower motor
AUX. BATT V	Auxiliary battery voltage/ Min.: 0 V, Max.: 25.4 V	Condition of auxiliary battery
WIN	Charge control wattage which is sent from battery ECU to HV control ECU/ Min.: -64 kW, Max.: 0 kW	Charge wattage of HV battery
WOUT	Discharge control wattage which is sent from battery ECU to HV control ECU/ Min.: 0 kW, Max.: 63.5 kW	Discharge wattage of HV battery
COOLING FAN SPD	Battery blower motor drive mode/ Min.: 0, Max.: 6	Stopped: 0 Low to high speed actuation: 1 to 6
ECU CTRL MODE	ECU control mode/ Min.: 0, Max.: 4	Operating condition of HV battery
SBLW RQST	Battery blower motor stop control request (standby blower)	Presence of stop control request to battery blower motor
BATT TEMP 1 to 3	Temperature of HV battery/ Min.: -327.68°C, Max.: 327.67°C	Temperature of HV battery
V1 to V14 BATT BLOCK	Battery block voltage/ Min.: -327.68 V, Max.: 327.67 V	Voltage variance among battery blocks