FREEZE FRAME DATA

1. FREEZE FRAME DATA

HINT:

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

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the power switch ON (IG) and the tester ON.
- (c) Enter the following menus: DIAGNOSIS / OBD/MOBD / HV BATTERY / DTC INFO / TROUBLE CODES.
- (d) Select a DTC in order to display its freeze frame data.
- (e) Check the freeze frame data of the DTC that has been detected.

Freeze frame data

Intelligent Tester Display	Measurement Item/Range	Suspected Vehicle Status When Malfunction Occurs
BATTERY SOC	State of charge (SOC) of HV battery Min.: 0%, Max: 100%	-
DELTA SOC	SOC variance/ Min.: 0%, Max.: 100%	Difference between maximum and minimum values of SOC at every battery block
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 intake ambient air to battery pack/ Min.: -327.68°C, Max.: 327.67°C	-
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 wattage of HV battery/ Min.: -64 kW, Max.: 0 kW	Charge control wattage which is sent from battery ECU to hybrid vehicle control ECU
WOUT	Discharge wattage of HV battery/ Min.: 0 kW, Max.: 63.5 kW	Discharge control wattage which is sent from battery ECU to hybrid vehicle control ECU
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)	-
BATT TEMP 1 to 3	Temperature of HV battery/ Min.: -327.68°C, Max.: 327.67°C	-
V1 to V14 BATT BLOCK	Battery block voltage/ Min.: -327.68 V, Max.: 327.67 V	Voltage variance among battery blocks

