

DATA LIST/ACTIVE TEST

1. DATA LIST

HINT:

Using the DATA LIST displayed on the intelligent tester II, you can read the value of the switch, sensor, actuator, etc. without removing any parts. Reading the DATA LIST as the first step in troubleshooting is one of the methods to shorten labor time.

- Connect the intelligent tester II to the DLC3.
- Turn the ignition switch to the ON position.
- According to the display on the tester, read the "DATA LIST".

BODY NO.2 (DRIVER SIDE JUNCTION BLOCK ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
ACC SW	ACC SW/ ON or OFF	ON: Ignition switch ACC OFF: Ignition switch OFF	–
IG SW	IG SW/ ON or OFF	ON: Ignition switch ON OFF: Ignition switch OFF	–
Stop Light SW	Stop light switch/ ON or OFF	ON: Brake pedal is depressed OFF: Brake pedal is released	–
Illumination Rate Info	Illumination rate in- formation	Condition value will be displayed	–
Response Time	Response time/ 0.1s or 1.0s	Condition value will be displayed	–
Turn ON Lumi Intens	Turn on luminous in- tensity/ DARK2 or DARK1 or NORMAL or LIGHT 1 or Light 2	Condition value will be displayed	–
Light Auto OFF Delay	Light auto OFF delay/ OFF or 30s or 60s or 90	Condition value will be displayed	–
Disp Ex ON Sen	Display extinction lu- minous intensity/ DARK2 or DARK1 or NORMAL or LIGHT 1 or Light 2	Condition value will be displayed	–
Disp Ex OFF Sen	Display extinction re- lease luminous intensi- ty/DARK2 or DARK1 or NORMAL or LIGHT 1 or Light 2	Condition value will be displayed	–

BODY NO.3 (PASSENGER SIDE JUNCTION BLOCK ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Light H-Level Warning Signal Switch	Light H-Level/ ON or OFF	ON: Headlight leveling warning ON OFF: Headlight leveling warning OFF	–
ACC SW	ACC SW/ ON or OFF	ON: Ignition switch ACC OFF: Ignition switch OFF	–
MPX-IG SW	MPX-IG SW/ ON or OFF	ON: Ignition switch ON OFF: Ignition switch OFF	–
Lighting Time (3 Selection)	Lighting time/ 7.5s or 15s or 30s	Customized value will be displayed	–
Illumination System	Illumination system/ AVAIL or NOT AVL	Customized value will be displayed	–

DIAGNOSTICS – LIGHTING SYSTEM

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Light Control	Light control system/ AVAIL or NOT AVL	Customized value will be displayed	–
ACC OFF Control	ACC OFF/ AVAIL or NOT AVL	Customized value will be displayed	–

BODY NO.4 (LUGGAGE ROOM JUNCTION BLOCK ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Tail Light Tr.	Tail light Tr/ OK or BREAK	OK	–
Rear Fog Light Tr.	Rear fog light Tr/ OK or BREAK	OK	–
Stop Light Tr.	Stop light Tr/ OK or BREAK	OK	–
High Mount Stop Light Tr.	High mount stop/ OK or BREAK	OK	–
Back-up Light Tr.	Back-up light Tr/ OK or BREAK	OK	–
Luggage Courtesy Switch	Luggage courtesy/ ON or OFF	ON: Luggage room door is opened OFF: Luggage room door is closed	–
IG SW	IG SW/ ON or OFF	ON: Ignition switch ON OFF: Ignition switch OFF	–

COMBINATION SW (TURN SIGNAL SWITCH ASSY):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Rear Fog Light Switch	Rear fog light switch/ ON or OFF	ON: Rear fog light switch is in ON position OFF: Rear fog light switch is in OFF position	–
Front Fog Light Switch	Front fog light SW signal/ON or OFF	ON: Front fog light switch is in ON position OFF: Front fog light switch is in OFF position	–
Passing Light Switch	Passing light switch signal/ON or OFF	ON: Headlamp dimmer switch is in FLASH position OFF: Headlamp dimmer switch is in except FLASH position	–
Dimmer Hi Switch	High beam SW signal/ ON or OFF	ON: Headlamp dimmer switch is in HI position OFF: Headlamp dimmer switch is in except HI position	–
Light Auto Switch	Auto light SW signal/ ON or OFF	ON: Light control switch is in AUTO position OFF: Light control switch is in except AUTO position	–
Head Light Switch	Headlight control SW signal/ON or OFF	ON: Light control switch is in HEAD position OFF: Light control switch is in except HEAD position	–
Tail Light Switch	Tail light SW signal/ ON or OFF	ON: Light control switch is in TAIL or HEAD position OFF: Light control switch is in OFF position	–
Turn Left Switch	Turn signal SW LH signal/ON or OFF	ON: Turn signal switch is in LH position OFF: Turn signal switch is in OFF position	–
Turn Right Switch	Turn signal SW RH signal/ON or OFF	ON: Turn signal switch is in RH position OFF: Turn signal switch is in except RH position	–
Ignition Switch Signal	IG switch signal/ ON or OFF	ON: Ignition switch ON OFF: Ignition switch OFF	–

AFS (AFS ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
AFS OFF Switch	AFS OFF SW/ ON or OFF	ON: AFS OFF switch ON OFF: AFS OFF switch OFF	–
Transmission Pos R Signal	Transmission position R signal/ON or OFF	ON: Shift position is R OFF: Shift position is except R	–
Transmission Pos N signal	Transmission position N signal/ON or OFF	ON: Shift position is N OFF: Shift position is except N	–
Generator Signal	Generator signal/ ON or OFF	ON: Engine is running OFF: Engine is stopped	–
Headlamp Signal	Headlamp signal/ ON or OFF	ON: Light control switch is in HEAD OFF: Light control switch is in except HEAD	–
Headlamp Auto Signal	Headlamp auto signal/ ON or OFF	ON: Automatic light control system operated OFF: Automatic light control system stopped	–
+B	Battery voltage value/ 0 to 20 V	Condition sign can be displayed	–
Height Sens Pw Supply Val	Height sensor power supply value/ 0 to 5 V	Condition sign can be displayed	–
Fr Height Sens Signal Val	Front height sensor signal value/ 0 to 5 V	Condition sign can be displayed	–
Rr Height Sens Signal Val	Rear height sensor signal value/ 0 to 5 V	Condition sign can be displayed	–
Steering Sens Signal Val	Steering sensor signal value/–384° to 382.5°	Condition sign can be displayed	–
Steering Sens Center Pos	Steering sensor center position/ –3,072° to 3,070.5°	Condition sign can be displayed	–
L Swivl Motor Pos Sens Val	Left swivel motor posi- tion sensor value/ 0 to 5 V	Condition sign can be displayed	–
R Swivl Motor Pos Sens Val	Right swivel motor position sensor value/ 0 to 5 V	Condition sign can be displayed	–

DOOR (EACH OF DOOR ECU):

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
Door Unlock Detection SW	Door unlock detection switch/ON or OFF	ON: Door is unlocked OFF: Door is locked	–
Courtesy Switch	Courtesy switch/ ON or OFF	ON: Door is opened OFF: Door is closed	–

2. ACTIVE TEST

HINT:

Performing the ACTIVE TEST using the intelligent tester II allows the relay, VSV, actuator, etc. to operate without removing any parts. Performing the ACTIVE TEST as the first step of troubleshooting is one of the methods to shorten labor time. The DATA LIST can be displayed during the ACTIVE TEST.

- (a) Connect the intelligent tester II to the DLC3.
- (b) Turn the ignition switch to the ON position.
- (c) According to the display on the tester, perform the "ACTIVE TEST".

BODY NO.2 (DRIVER SIDE JUNCTION BLOCK ECU):

Item	Test Details	Diagnostic Note
Turn Lamp RH Relay Operation	Turn lamp RH relay operation ON/OFF	–
Turn Lamp LH Relay Operation	Turn lamp LH relay operation ON/OFF	–
Headlight Relay	Headlamp relay ON/OFF	–
Illuminated Entry System	Illuminated entry system ON/OFF	Interior light switch is in DOOR position and all doors are closed in case of ES300
Driver Buckle Light Output	Driver buckle lamp output ON/OFF	–

BODY NO.3 (PASSENGER SIDE JUNCTION BLOCK ECU):

Item	Test Details	Diagnostic Note
Front Room Light	Front room lamp ON/OFF	–
Rear Room Light RH	Rear room lamp RH ON/OFF	–
Rear Room Light LH	Rear room lamp LH ON/OFF	–
Step Light Operation	Step lamp operation ON/OFF	–
Center Console Light Operation	Center console ON/OFF	–
Buckle Light 1	Front Passenger Buckle lamp ON/OFF	–

BODY NO.4 (LUGGAGE ROOM JUNCTION BLOCK ECU):

Item	Test Details	Diagnostic Note
Tail Light	Taillamp ON/OFF	–
Rear Fog Light	Rear fog lamp ON/OFF	–
Stop Light	Stop lamp ON/OFF	–
License Light	License lamp ON/OFF	–
High Mount Stop Light	High mount stop ON/OFF	–
Back-up Light	Back-up lamp ON/OFF	–
Luggage Light Control	Luggage lamp ON/OFF	–

BODY NO.5 (MULTIPLEX NETWORK FRONT LIGHT ECU):

Item	Test Details	Diagnostic Note
Light Head (High)	Light Head (High) ON/OFF	–
Front Fog Light Relay	Front fog lamp relay ON/OFF	–
Clearance Light Operation	Clearance lamp ON/OFF	–

AFS (AFS ECU):

Item	Test Details	Diagnostic Note
Drive The Leveling Motor	Drive the leveling motor UP/DOWN	Confirm that the vehicle is stopped and engine is running.
Drive Swivel Motor RH	Drive the swivel motor RIGHT/OFF	Confirm that the vehicle is stopped and engine is running.
Drive Swivel Motor LH	Drive the swivel motor LEFT/OFF	Confirm that the vehicle is stopped and engine is running.
AFS OFF Indicator	AFS OFF indicator lamp ON/OFF	–

DOOR (EACH OF DOOR ECU):

Item	Test Details	Diagnostic Note
Foot Light	Foot lamp ON/OFF	Driver and passenger side door ECU only