

PRE-CHECK

1. USING HAND-HELD TESTER

- (a) Hook up the hand-held tester to the DLC3.
- (b) Monitor the ECU data by following the prompts on the tester screen.

HINT:

Hand-held tester has a "Snapshot" function which records the monitored data.

Please refer to the hand-held tester operator's manual for further details.

2. DTC CLEAR

- (a) DTCs and freeze frame data will be erased by the hand-held tester operating.

3. DATA LIST

HINT:

According to the DATA LIST displayed by the hand-held tester, you can read the value of the switch, sensor, actuator and so on without parts removal. Reading the DATA LIST as a first step of troubleshooting is one of the method to shorten the labor time.

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch to ON.
- (c) According to the display on tester, read the "DATA LIST".

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
D DOR CTY SW	Driver's door courtesy SW signal/ON or OFF	ON: Driver's door is open OFF: Driver's door is close	-
P DOR CYT SW	Passenger's door courtesy SW signal/ON or OFF	ON: Passenger's door is open OFF: Passenger's door is close	-
Rr DOR CTY SW	Rear door courtesy SW signal/ON or OFF	ON: Either right or left rear door is open OFF: Both the right and left doors are closed.	-
HIGH FLASHER SW	High flasher SW signal/ON or OFF	ON: High flasher SW is on OFF: High flasher SW is off	-
AUTO LIGHT SW	Auto light SW signal/ON or OFF	ON: Light control SW is in Auto position OFF: Light control SW is in except Auto position	-
HEAD LIGHT SW	Head light SW signal/ON or OFF	ON: Light control SW is in HEAD position OFF: Light control SW is in except HEAD position	-
TAIL LIGHT SW	Taillight SW signal/ON or OFF	ON: Light control SW is in TAIL or HEAD position OFF: Light control SW is in OFF or AUTO position	-
ACC SW	ACC SW signal/ON or OFF	ON: IG key is in ACC, ON or START position OFF: IG key is in OFF position	-
IG SW	IG SW signal/ON or OFF	ON: IG key is in ON or START position OFF: IG key is in OFF or ACC position	-

4. ACTIVE TEST

HINT:

Performing the ACTIVE TEST using the hand-held tester allows the relay, VSV, actuator and so on to operate without parts removal. Performing the ACTIVE TEST as a first step of troubleshooting is one of the methods to shorten the labor time.

It is possible to display the DATA LIST during the ACTIVE TEST.

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

Item	Test Details	Diagnostic Note
HAZARD	Turns Hazard light flasher relay ON/OFF	-
DRL RLY	(Test Details) Turns DRL relay ON/OFF (Vehicle Condition) IG SW is ON, Engine is stopped and Light control SW is in OFF position.	-
HEAD LIGHT	Turns Head light relay ON/OFF	-
TAIL LIGHT	Turns Tail light relay ON/OFF	-
ILLUMI OUTPUT	(Test Details) Turns Interior light and Key illumination ON/OFF (Vehicle Condition) Interior light SW is in Door position	-
DOME RLY CUT	Dome relay cut ON/OFF	-

5. ILLUMINATED ENTRY SYSTEM OPERATION CHECK

- (a) The light that is lit in the illuminated entry system is explained below:
- (b) Turn the ignition switch to OFF, close all the doors, and set the driver's door in the lock condition.
- (c) Unlock the door and open any other door, and check that the room light comes on. Close the door, and check that the room light goes off within 15 seconds.
- (d) Turn the ignition switch to ON and open and close any other door. Check that the room light immediately goes off.
- (e) Turn ignition switch to OFF.
- (f) Open and close any door to light the room light. Before the room light goes off within 15 seconds, turn the ignition switch to ON, and check that the room light goes off immediately.
- (g) Turn the ignition switch OFF.
- (h) Open and close any door to light the room light. Before the light goes off within 15 seconds, lock the driver door. Check that the light goes off immediately.

6. DOME RELAY CUT OPERATION CHECK

- (a) Remove the ignition key and close all doors.
- (b) Open the driver door to light the room light, and leave it as opened. Check that the light goes off in about 30 min.
- (c) After the room light goes off, close the driver door.
- (d) Open any door except the driver's door to turn the room light on, and then open the driver's door. Check that room light goes off within 30 min. after opening the driver's door.
- (e) Close all the doors. With the ignition key inserted, open any door to light the room light, and then, remove the ignition key. Check that the room light goes off within 30 min.
- (f) One of the room lamp switch is on and close all doors.
- (g) Lock all doors, and check that the room light goes off within 3 sec.

7. SIDE STEP LAMP OPERATION CHECK

- (a) Turn the ignition switch to OFF, close all the doors, and set the driver door in the lock condition.
- (b) Unlock the door and open front or rear doors, and check that the side step lamp comes on. Close the door and check that the side step lamp goes off within 15 seconds.
- (c) Under the conditions that the ignition switch is ON, one of the front or rear doors opens and the shift range is at any positions except for P positions, check that the side step lamp goes off when the vehicle speed exceeds 8 km/h (4.8 mph).
- (d) Then, check that the side step lamp comes on when the vehicle speed become 4 km/h (2.4 mph) or less.

8. LAMP AUTO CUT OPERATION CHECK

- (a) Turn the ignition switch to ON, and turn the headlamp switch to TAIL or HEAD.
- (b) Turn the ignition switch to OFF and open and close the driver's door, check the headlamp goes off within 30 sec.