DATA LIST / ACTIVE TEST

1. READ DATA LIST

HINT:

Using the intelligent tester's DATA LIST allows switch, sensor, actuator and other item values to be read without removing any parts. Reading the DATA LIST early in troubleshooting is one way to save time.

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch on.
- (c) Read the DATA LIST according to the display on the tester.

LASER CRUISE:

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
ACCEL REQUEST	Accelerator request signal / min.: -2621.44 k/h/s, max.: 2621.36 k/ h/s	0.8 k/h/s: No vehicle in front	-
VEHICLE DISTANCE	Laser radar sensor / min.: 0 m (0 ft), max.: 255 m (836.65 ft)	Distance to the vehicle in front	-
STEERING ANGLE	Steering angle sensor / min.: - 36864 deg, max.: 36862.88 deg	Approx. 0 deg: When driving straight	-
ALARM RQST	Alarm request signal / NOT REQ, REQUEST	REQUEST: When beeping NOT REQ: When not beeping	-
SHIFT DOWN RQST	Shift down request signal / NOT REQ, REQUEST	NOT REQ: Always	-
L/C OPTION FLAG	Laser cruise option flag / NO, YES	YES: Vehicle-to-vehicle distance mode	-
DISTANCE TIME	Car distance time setting condition / SHRT, MID, LONG, NO	The vehicle select by distance control switch	-
YAW RATE	Yaw rate date / min.: -7999.98 deg/s, max.: 7999.74 deg/s	Approx. 0 deg: When driving straight	-
MAIN SW (MAIN)	Main SW signal (Main CPU) / ON or OFF	ON: Main SW ON (Pushed in) OFF: Main SW OFF (Pushed out)	*3
MAIN SW (SUB)	Main SW signal (Sub CPU) / ON or OFF	ON: Main SW ON (Pushed in) OFF: Main SW OFF (Pushed out)	*3
CCS READY M	Cruise control system stand by condition (Main CPU) / ON or OFF	ON ←→ OFF: Change ON/OFF each time Main SW is Pushed in.	*1
CCS READY S	Cruise control system stand by condition (Sub CPU) / ON or OFF	ON ←→ OFF: Change ON/OFF each time Main SW is Pushed in.	*1
CCS INDICATOR M	Cruise indicator signal (Main CPU) / ON or OFF	ON: "CCS READY" ON OFF: "CCS READY" OFF	*2
CCS INDICATOR S	Cruise indicator signal (Sub CPU) / ON or OFF	ON: "CCS READY" ON OFF: "CCS READY" OFF	*2
CRUISE CONTROL	Cruise control system active condition / ON or OFF	ON: Cruise control activated OFF: Cruise control inactivated	-
SHIFT D POS	PNP SW signal (D position) / ON or OFF	ON: Shift D position OFF: Except shift D position	-
STP LIGHT SW1-S	Stop lamp SW signal (Sub CPU) / ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-
STP LIGHT SW2-S	Stop lamp SW signal (Sub CPU) / ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-
STP LIGHT SW2-M	Stop lamp SW signal (Main CPU) / ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-
RES/ACC SW	+/RES SW signal / ON or OFF	ON: +/RES SW ON OFF: +/RES OFF	-



Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
SET/COAST SW	-/SET SW signal / ON or OFF	ON: -/SET SW ON OFF: -/SET SW OFF	-
CANCEL SW	CANCEL SW signal / ON or OFF	ON: CANCEL SW ON OFF: CANCEL SW OFF	-
VEHICLE SPD	Vehicle speed sensor / min.: 0 km/h (0 mph), max.: 255 km/h (158 mph)	Actual vehicle speed	-
MEMORY SPD	Cruise control memorized speed / min.: 0 km/h (0 mph), max.: 255 km/h (158 mph)	Memorized speed: Cruise control activated	-
THROTTLE	Required throttle opening angle / min.: 0 deg, max.: 125 deg	Required throttle opening angle (0° - 84°): Cruise control activated	-

HINT:

*3 is OK, but *1 is NG → ECM failure

*1 is OK, but *2 is NG → DTC output or ECM failure *3 is OK, but CRUISE main indicator light does not come on → Indicator or W/H or ECM failure

2. ACTIVE TEST

HINT:

Performing the ACTIVE TEST using the intelligent tester allows components such as the relay, VSV, and actuator to operate without parts removal. Performing the ACTIVE TEST as the first step of troubleshooting is one way to shorten labor time.

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

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

HINT:

The ignition switch must be turned to the ON position to proceed Active Test using a intelligent tester.

ABS/TRAC/VSC:

Item	Vehicle Condition / Test Details	Diagnostic Note
VSC / BR WARN BUZ	Turns skid control buzzer ON / OFF	Buzzer can be heard

METER:

Item	Vehicle Condition / Test Details	Diagnostic Note
CRUISE INDIC	"CRUISE" indicator is ON / OFF	-
L-CRUISE DISP	"Multi-information display" is ON / OFF	-
L-CRS CHECK IND	"Master warning light" is ON / OFF	-
L-CRS READY IND	"READY" indicator light is ON / OFF	-
L-CRS NORMAL	"NORM." indicator light is ON / OFF	-

