05H0X-01

DATA LIST/ACTIVE TEST

1. DATA LIST

HINT:

From the DATA LIST displayed on the intelligent tester II, the value of components such as the switch, sensor, and actuator can be read without parts removal. Reading the DATA LIST as the first step of troubleshooting is one way to shorten labor time.

- (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, read the "DATA LIST".

CC (ECM):

ltem	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	No vehicle in front	-
Vehicle Distance	Laser sensor / min.: 0 m (0 ft), max.: 255 m (836.65 ft)	Distance to the vehicle in front	-
L/C Option Flag	Laser cruise option flag / NO, YES	YES: Vehicle to vehicle distance mode	-
Car Dist Time Setting	Car distance time setting condition /SHORT, MID, LONG, NO	The vehicle selected by distance control switch	-
O/D Cut Request	O/D cut request / Not Request, Request	Not Request: Idling	-
Shift Down Rqst to 3rd	Shift down request to 3rd gear / Not Request, Request	Not Request: Idling	-
Shift Down Rqst to 4th	Shift down request to 4th gear / Not Request, Request	Not Request: Idling	-
Alarm Request	Alarm request signal / Not Request, Request	REQUEST: When beeping NOT REQ: When not beeping	-
All Throttle Close Rqst	All throttle close request / Not Request, Request	ON : Request OFF : Not Request	-
Brake Control Request	Brake control request / Not Request, Request	ON : Request OFF : Not Request	-
Targ Decl Slope	Cruise target deceleration slope / 0.03, 0.06, 0.11, 0.16	0.03, 0.06, 0.11, 0.16	-
CCS Vehicle Spd	Vehicle speed sensor/ min.: 0 km/h (0 mph), max.: 255 km/h (158 mph)	Actual vehicle speed	-
CCS Mem Vehicle Spd	Cruise control memorized speed / min.: 0 km/h (0 mph), max.: 255 km/h (158 mph)	Memorized speed : Cruise control activated	-
Throttle Opening Angle	Required throttle opening angle / min.: 0 deg, max.: 125 deg	Required throttle opening angle : Cruise control activated	-
Cruise Request Torque	Cruise Request Torque/ min.: -1024 Nm, max.: 1016 Nm	-	-
Cruise Control	Cruise control system active condition / ON or OFF	ON : Cruise control activated OFF : Cruise control inactivated	-
Main SW M-CPU	Main SW signal (Main CPU) / ON or OFF	ON: Main SW ON (Pushed on) OFF: Main SW OFF (Pushed off)	*3
Main SW S-CPU	Main SW signal (Sub CPU) / ON or OFF	ON: Main SW ON (Pushed on) OFF: Main SW OFF (Pushed off)	*3
CCS Ready M-CPU	Cruise control system standby condition (Main CPU) / ON or OFF	ON ⇔ OFF : Change ON/OFF each time Main SW is pushed.	*1

ltem	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
CCS Ready S-CPU	Cruise control system standby condition (Sub CPU) / ON or OFF	ON ⇔ OFF : Change ON/OFF each time Main SW is pushed.	*1
CCS Indicator M-CPU	Cruise indicator signal (Main CPU) / ON or OFF	ON : "CCS READY" ON OFF : "CCS READY" OFF	*2
CCS Indicator S-CPU	Cruise indicator signal (Sub CPU) / ON or OFF	ON : "CCS READY" ON OFF : "CCS READY" OFF	*2
Cancel Switch	CANCEL SW signal / ON or OFF	ON : CANCEL SW ON OFF : CANCEL SW OFF	-
SET/COAST Switch	SET/COAST SW signal / ON or OFF	ON : SET/COAST SW ON OFF : SET/COAST SW OFF	-
RES/ACC Switch	RES/ACC SW signal / ON or OFF	ON : RES/ACC SW ON OFF : RES/ACC OFF	-
Stp Light SW M-CPU	Stop lamp SW signal (Main CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	-
Stp Light SW S1-CPU	Stop lamp SW signal (Sub CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	-
Stp Light SW S2-CPU	Stop lamp SW signal (Sub CPU) / ON or OFF	ON : Brake pedal depressed OFF : Brake pedal released	-
Shift D Position	PNP SW signal (D position) / ON or OFF	ON : Shift D position OFF : Except shift D position	-
VCS Fail Safe Flag	VSC fail-safe flag/ ON or OFF	-	-

HINT:

MULTI-INFORMATION DISPLAY CONTROL SWITCH (STEERING PAD SWITCH MODULATOR):

Item	Measurement Item / Display (Range)	Normal Condition	Diagnostic Note
Meter Multi Dsp2 SW	Steering pad switch (DISP2) sig-	ON ⇔ OFF : Change ON/OFF	
	nal /	each time steering pad switch	-
	ON or OFF	(DISP2) SW is pushed.	

2. ACTIVE TEST

HINT:

Performing the ACTIVE TEST using the intelligent tester II 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 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".

HINT:

The ignition switch must be turned to the ON position to proceed to the ACTIVE TEST using the intelligent tester II.

COMBINATION METER ASSY:

Item	Vehicle Condition / Test Details	Diagnostic Note
Indicat. Lamp Cruise	"CRUISE" indicator is ON / OFF	-
Indicat. Laser Cruise Display	Graphic area is ON / OFF	(*1)
Indicat. Lamp L-Cruise Check	"CHECK CRUISE SYSTEM" indicator is ON / OFF	-
Indicat. Lamp L-Cruise Ready	"RADAR READY" indicator is ON / OFF	-

^{*1:} The entire graphic area in the combination meter will light up.

^{*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, W/H, or ECM failure