

## DATA LIST / ACTIVE TEST

### 1. DATA LIST

#### HINT:

By referring to the DATA LIST displayed on the intelligent tester, you can read the value and status of parts such as switches, sensors and actuators without removing any parts. Reading the DATA LIST as the first step of troubleshooting is one method of shortening diagnostic time.

- (a) Connect the intelligent tester to the DLC3.
- (b) Turn the ignition switch to the ON position.
- (c) Turn the intelligent tester.
- (d) From the display on the tester, read the "DATA LIST".

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
ABS MOT RELAY	ABS motor relay / ON or OFF	ON: Motor relay ON	-
SOL RELAY	Solenoid relay / ON or OFF	ON: Solenoid relay ON	-
STOP LIGHT SW	Stop light switch / ON or OFF	ON: Brake pedal depressed OFF: Brake pedal released	-
PKB SW	Parking brake switch / ON or OFF	ON: Parking brake applied OFF: Parking brake released	-
ABS OPERT FR	ABS operation (FR) / BEFORE or OPERATE	BEFORE: No ABS operation (FR) OPERATE: During ABS operation (FR)	-
ABS OPERT FL	ABS operation (FL) / BEFORE or OPERATE	BEFORE: No ABS operation (FL) OPERATE: During ABS operation (FL)	-
ABS OPERT RR	ABS operation (RR) / BEFORE or OPERATE	BEFORE: No ABS operation (RR) OPERATE: During ABS operation (RR)	-
ABS OPERT RL	ABS operation (RL) / BEFORE or OPERATE	BEFORE: No ABS operation (RL) OPERATE: During ABS operation (RL)	-
WHEEL SPD FR	Wheel speed sensor (FR) reading / min.: 0 km/h (0 MPH, max.: 326 km/h (202 MPH)	Actual wheel speed	Similar speed as indicated on speed meter
WHEEL SPD FL	Wheel speed sensor (FL) reading / min.: 0 km/h (0 MPH, max.: 326 km/h (202 MPH)	Actual wheel speed	Similar speed as indicated on speed meter
WHEEL SPD RR	Wheel speed sensor (RR) reading / min.: 0 km/h (0 MPH, max.: 326 km/h (202 MPH)	Actual wheel speed	Similar speed as indicated on speed meter
WHEEL SPD RL	Wheel speed sensor (RL) reading / min.: 0 km/h (0 MPH, max.: 326 km/h (202 MPH)	Actual wheel speed	Similar speed as indicated on speed meter
DECELERAT SEN (*1)	Deceleration sensor 1 reading / min.: -1.869 G, max.: 1.869 G	Approximately 0 +- 0.13G in still condition	Reading changes when vehicle bounced
DECELERAT SEN2 (*1)	Deceleration sensor 2 reading / min.: -1.869 G, max.: 1.869 G	Approximately 0 +- 0.13G in still condition	Reading changes when vehicle bounced
IG VOLTAGE	ECU power supply voltage / TOO LOW / NORMAL / TOO HIGH	TOO HIGH: 14 V or more NORMAL: 9.5 V to 14 V TOO LOW: Below 9.5 V	-
SFRR	ABS solenoid (SFRR) ON / OFF	ON: Operate	-
SFRH	ABS solenoid (SFRH) ON / OFF	ON: Operate	-
SFLR	ABS solenoid (SFLR) ON / OFF	ON: Operate	-
SFLH	ABS solenoid (SFLH) ON / OFF	ON: Operate	-

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
SRRR (SRR)	ABS solenoid (SRRR (SRR)) ON / OFF	ON: Operate	-
SRRH (SRH)	ABS solenoid (SRRH (SRH)) ON / OFF	ON: Operate	-
SRLR	ABS solenoid (SRLR) ON / OFF	ON: Operate	-
SRLH	ABS solenoid (SRLH) ON / OFF	ON: Operate	-
VEHICLE SPD	Maximum wheel speed sensor reading / min.: 0 mph (0 km/h), max.: 202MPH (326 km/h)	Actual vehicle speed	Speed indicated on speedometer
WHEEL DIR FR	Front right wheel direction	Wheel direction BACK: BACK, FORWARD: FORWARD	-
WHEEL DIR FL	Front left wheel direction	Wheel direction BACK: BACK, FORWARD: FORWARD	-
WHEEL DIR RR	Rear right wheel direction	Wheel direction BACK: BACK, FORWARD: FORWARD	-
WHEEL DIR RL	Rear left wheel direction	Wheel direction BACK: BACK, FORWARD: FORWARD	-
SPD SEN FR	FR speed sensor open detection / OPEN or NORMAL	OPEN: Momentary interruption	-
SPD SEN FL	FL speed sensor open detection / OPEN or NORMAL	OPEN: Momentary interruption	-
SPD SEN RR	RR speed sensor open detection / OPEN or NORMAL	OPEN: Momentary interruption	-
SPD SEN RL	RL speed sensor open detection / OPEN or NORMAL	OPEN: Momentary interruption	-
TEST MODE	Test Mode / NORMAL or TEST	NORMAL: Normal mode TEST: During test mode	-
#CODES	Number of DTC recorded / min.: 0, max.: 255	min.: 0 max.: 255	-

HINT:

(\* 1): Pre-runner, 4WD

**2. ACTIVE TEST**

HINT:

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

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

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

HINT:

Ignition switch must be turned to the ON position to proceed to the ACTIVE TEST using the intelligent tester.

Item	Vehicle Condition / Test Details	Diagnostic Note
SFRR	Turns ABS solenoid (SFRR) ON / OFF	Operation of solenoid (clicking sound) can be heard
SFRH	Turns ABS solenoid (SFRH) ON / OFF	Operation of solenoid (clicking sound) can be heard

Item	Vehicle Condition / Test Details	Diagnostic Note
SFLR	Turns ABS solenoid (SFLR) ON / OFF	Operation of solenoid (clicking sound) can be heard
SFLH	Turns ABS solenoid (SFLH) ON / OFF	Operation of solenoid (clicking sound) can be heard
SRRR	Turns ABS solenoid (SRRR) ON / OFF	Operation of solenoid (clicking sound) can be heard
SRRH	Turns ABS solenoid (SRRH) ON / OFF	Operation of solenoid (clicking sound) can be heard
SRLR	Turns ABS solenoid (SRLR) ON / OFF	Operation of solenoid (clicking sound) can be heard
SRLH	Turns ABS solenoid (SRLH) ON / OFF	Operation of solenoid (clicking sound) can be heard
SFRR & SFRH	Turns ABS solenoid SFRR & SFRH ON / OFF	Operation of solenoid (clicking sound) can be heard
SFLR & SFLH	Turns ABS solenoid SFLR & SFLH ON / OFF	Operation of solenoid (clicking sound) can be heard
SRH & SRR	Turns ABS solenoid SRH & SRR ON / OFF	Operation of solenoid (clicking sound) can be heard
SRLR & SRLH	Turns ABS solenoid SRLR & SRLH ON / OFF	Operation of solenoid (clicking sound) can be heard
SFRH & SFLH	Turns ABS solenoid SFRH & SFLH ON / OFF	Operation of solenoid (clicking sound) can be heard
SOL RELAY	Turns ABS solenoid relay ON / OFF	Operation of solenoid (clicking sound) can be heard
ABS MOT RELAY	Turns ABS motor relay ON / OFF	Operation of solenoid (clicking sound) can be heard
ABS WARN LIGHT	Turns ABS warning light ON / OFF	Observe combination meter
BRAKE WRN LIGHT	Turns BRAKE warning light ON / OFF	Observe combination meter