

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 (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON.
- (c) Read the DATA LIST according to the display on the tester.

Skid control ECU with actuator

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
PKB SW	Parking brake switch / ON or OFF	ON: Parking brake applied OFF: Parking brake not applied	-
STOP LIGHT SW	Stop light switch / ON or OFF	ON: Brake pedal depressed OFF: Brake pedal not depressed	-
VSC/TRAC OFF SW	VSC/TRAC OFF switch/ON or OFF	ON: TRAC OFF switch ON	-
IDLE SW	Main idle switch/ON or OFF	ON: Accelerator pedal released OFF: Accelerator pedal depressed	-
ABS MOT RELAY	ABS MTR relay / ON or OFF	ON: MTR relay ON OFF: MTR relay OFF	-
SOL RELAY	Solenoid relay / ON or OFF	ON: Solenoid relay ON OFF: Solenoid relay OFF	-
TEST MODE	Test mode / NORMAL or TEST	NORMAL: Normal mode TEST: Test mode	-
SRRR (SRR)	ABS solenoid (SRRR (SRR)) / ON or OFF	ON: Operates OFF: Does not operate	-
SRRH (SRH)	ABS solenoid (SRRH (SRH)) / ON or OFF	ON: Operates OFF: Does not operate	-
SFLR	ABS solenoid (SFLR) / ON or OFF	ON: Operates OFF: Does not operate	-
SFLH	ABS solenoid (SFLH) / ON or OFF	ON: Operates OFF: Does not operate	-
SFRR	ABS solenoid (SFRR) / ON or OFF	ON: Operates OFF: Does not operate	-
SFRH	ABS solenoid (SFRH) / ON or OFF	ON: Operates OFF: Does not operate	-
WHEEL SPD FR	Wheel speed sensor (FR) reading / min.: 0 km/h (0 mph), max.: 326 km/h (202 mph)	Actual wheel speed	Speed similar to that of speedometer
WHEEL SPD FL	Wheel speed sensor (FL) reading / min.: 0 km/h (0 mph), max.: 326 km/h (202 mph)	Actual wheel speed	Speed similar to that of speedometer
WHEEL SPD RR	Wheel speed sensor (RR) reading / min.: 0 km/h (0 mph), max.: 326 km/h (202 mph)	Actual wheel speed	Speed similar to that of speedometer
WHEEL SPD RL	Wheel speed sensor (RL) reading / min.: 0 km/h (0 mph), max.: 326 km/h (202 mph)	Actual wheel speed	Speed similar to that of speedometer
IG VOLTAGE	ECU power supply voltage / TOO LOW / NORMAL	NORMAL: 10 to 14.0 V TOO LOW: Below 10 V	-

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
DECELERATION SENSOR	Deceleration sensor 1 reading / min.: -1.869 G, max.: 1.869 G	Approximately 0 +- 0.13 G when vehicle is not moving	Reading changes when vehicle is shaken
DECELERATION SENSOR 2	Deceleration sensor 2 reading / min.: -1.869 G, max.: 1.869 G	Approximately 0 +- 0.13 G when vehicle is not moving	Reading changes when vehicle is shaken
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)	-
SRLR	ABS solenoid (SRLR)/ON or OFF	ON: Operated OFF: Not operated	-
SRLH	ABS solenoid (SRLH)/ON or OFF	ON: Operated OFF: Not operated	-
SM1 (BA-SOL)	TRAC solenoid (SMF)/ON or OFF	ON: Operated OFF: Not operated	-
SM2	TRAC solenoid (SMR)/ON or OFF	ON: Operated OFF: Not operated	-
THROTTLE	Throttle position sensor/ Min.: 0 deg, Max.: 125 deg	Release accelerator pedal: Approx. 0 deg. Depress accelerator pedal: Approx. 90 deg.	-
ENGINE SPD	Engine Speed/ Min.: 0 rpm, Max.: 6000 rpm	Actual engine speed	-
VEHICLE SPD	Maximum wheel speed sensor reading/ Min.: 0 km/h (0 mph), Max.: 326 km/h (202 mph)	Actual engine speed	Speed indicated on speedometer
YAW RATE	Yaw rate sensor/ Min.: -128 deg/s, Max.: 128 deg/s	Min.: -128 deg/s Max.: 128 deg/s	-
YAW ZERO VALUE	Yaw rate sensor/ Min.: -128 deg/s, Max.: 128 deg/s	Min.: -128 deg/s Max.: 128 deg/s	-
STEERING ANG	Steering sensor/ Min.: -1152 deg, Max.: 1150.875 deg	Left turn: Increase Right turn: Decrease	-
MAS CYL PRESS 1	Master cylinder pressure sensor 1 reading / Min.: 0 V, Max.: 5 V	When brake pedal is released : 0.3 to 0.9 V	Reading increases when brake pedal is depressed
AIR BLD SUPPORT	Air bleed support/ NOT SUP or SUPPORT	Not supported	-
SPD SEN FR	FR speed sensor open detection/ OPN DET/NORMAL	NORMAL	-
SPD SEN FL	FL speed sensor open detection/ OPN DET/NORMAL	NORMAL	-
SPD SEN RR	RR speed sensor open detection/ OPN DET/NORMAL	NORMAL	-
SPD SEN RL	RL speed sensor open detection/ OPN DET/NORMAL	NORMAL	-
EFI COM	EFI communication open detection/ OPN DET/NORMAL	NORMAL	-
YAWRATE SEN	Yaw rate sensor open detection/ OPN DET/NORMAL	NORMAL	-

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
DECELE SEN	Deceleration sensor open detection/ OPN DET/NORMAL	NORMAL	-
STEERING SEN	Steering sensor open detection/ OPN DET/NORMAL	NORMAL	-
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.: 39	-

2. PERFORM ACTIVE TEST

HINT:

Performing the intelligent tester's ACTIVE TEST allows relay, VSV, actuator and other items to be operated without removing any parts. Performing the ACTIVE TEST early in troubleshooting is one way to save time. The DATA LIST can be displayed during the ACTIVE TEST.

- Connect the intelligent tester (with CAN VIM) to the DLC3.
- Turn the ignition switch ON.
- Perform the ACTIVE TEST according to the display on the tester.

Skid control ECU with actuator

Item	Vehicle Condition / Test Details	Diagnostic Note
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
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
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
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
SMF (BA-SOL)	Turns TRAC solenoid SMF (BA-SOL) ON / OFF	Operation of solenoid (clicking sound) can be heard
SMR	Turns TRAC solenoid (SMR) ON / OFF	Operation of solenoid (clicking sound) can be heard
ABS MOT RELAY	Turns ABS motor relay ON / OFF	Operation sound of motor can be heard
SOL RELAY	Turns ABS solenoid relay ON / OFF	Operation of solenoid (clicking sound) can be heard
ABS WARNING LIGHT	Turns ABS warning light ON / OFF	Observe combination meter
VSC WARN LIGHT	Turns VSC warning light ON / OFF	Observe combination meter
VSC / TRC OFF IND	Turns VSC / TRAC OFF indicator ON / OFF	Observe combination meter
SLIP INDI LIGHT	Turns SLIP indicator ON / OFF	Observe combination meter
BRAKE WRN LIGHT	BRAKE warning light ON / OFF	Observe combination meter
VSC / BR WARN BUZ	Turns VSC / BRAKE warning buzzer ON / OFF	Buzzer can be heard