#### 05MBC-01

# DATA LIST/ACTIVE TEST

# 1. 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 the first step of troubleshooting is one of the methods to shorten labor time.

- (a) Connect the hand-held tester to the DLC3.
- (b) Turn the ignition switch ON.
- (c) According to the display on 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 OFF : Motor relay OFF	-
SOL RELAY	Solenoid relay / ON or OFF	ON : Solenoid relay ON OFF : Solenoid relay OFF	-
STOP LIGHT SW	Stop lamp switch / ON or OFF	ON : Brake pedal de- pressed OFF : Brake pedal re- leased	-
PKB SW	Parking brake switch / ON or OFF	ON : Parking brake applied OFF : Parking brake re- leased	_
VEHICLE SPD	Maximum wheel speed sensor reading / min.: 0 km/h (0 MPH), max.: 326 km/h (202 MPH)	Actual vehicle speed	Speed indicated on speedometer
ABS OPERT FR	ABS operation (FR) / BE- FORE or OPERATE	BEFORE : No ABS operation (FR) OPERATE : During ABS operation (FR)	Similar speed as indicated on speedometer
ABS OPERT FL	ABS operation (FL) / BE- FORE or OPERATE	BEFORE : No ABS operation (FL) OPERATE : During ABS operation (FL)	Similar speed as indicated on speedometer
ABS OPERT RR	ABS operation (RR) / BE- FORE or OPERATE	BEFORE : No ABS operation (RR) OPERATE : During ABS operation (RR)	Similar speed as indicated on speedometer
ABS OPERT RL	ABS operation (RL) / BE- FORE or OPERATE	BEFORE : No ABS operation (RL) OPERATE : During ABS operation (RL)	Similar speed as indicated on speedometer
WHEEL SPD FR	Wheel speed sensor (FR) reading / min.: 0 km/h (0 MPH), max.: 326 km/h (202 MPH)	Actual wheel speed	Speed indicated on 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 indicated on 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 indicated on speedometer

Item	Measurement Item / Range (Display)	Normal Condition	Diagnostic Note
WHEEL SPD RL	Wheel speed sensor (RL) reading / min.: 0 km/h (0 MPH), max.: 326 km/h (202 MPH)	Actual wheel speed	Speed indicated on speedometer
IG VOLTAGE	ECU power supply voltage / NORMAL or TOO LOW	NORMAL : 9.5 V or over TOO LOW : Below 9.5 V	-
SFRR	ABS solenoid (SFRR) ON / OFF	ON : Operate OFF : Not operate	-
SFRH	ABS solenoid (SFRH) ON / OFF	ON : Operate OFF : Not operate	-
SFLR	ABS solenoid (SFLR) ON / OFF	ON : Operate OFF : Not operate	-
SFLH	ABS solenoid (SFLH) ON / OFF	ON : Operate OFF : Not operate	-
SRRR (SRR)	ABS solenoid (SRRR (SRR)) ON / OFF	ON : Operate OFF : Not operate	-
SRRH (SRH)	ABS solenoid (SRRH (SRH)) ON / OFF	ON : Operate OFF : Not operate	-
SRLR	ABS solenoid (SRLR) ON / OFF	ON : Operate OFF : Not operate	-
SRLH	ABS solenoid (SRLH) ON / OFF	ON : Operate OFF : Not operate	-
AIR BLD SUPPORT	Air bleed support / SUPPORT or NOT SUP	Supported	-
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.: 19	-
SPD SEN FR	FR speed sensor open detection / OPEN or NOR- MAL	OPEN : Momentary inter- ruption	-
SPD SEN FL	FL speed sensor open detection / OPEN or NOR- MAL	OPEN : Momentary inter- ruption	-
SPD SEN RR	RR speed sensor open detection / OPEN or NOR- MAL	OPEN : Momentary interruption	-
SPD SEN RL	RL speed sensor open detection / OPEN or NOR- MAL	OPEN : Momentary inter- ruption	-

#### 2. 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 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.

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

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
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 motor can be heard

# **DIAGNOSTICS** – ABS WITH EBD SYSTEM (DENSO MADE)

Item	Vehicle Condition / Test Details	Diagnostic Note
ABS WARN LIGHT	Turns ABS warning light ON / OFF	Observe combination meter
BRAKE WRN LIGHT	Turns BRAKE warning light ON / OFF	Observe combination meter