

## DATA LIST / ACTIVE TEST

### 1. READ DATA LIST

#### HINT:

Using the DATA LIST displayed on the intelligent tester, you can read the value of the switch, sensor, actuator, etc. without parts removal. Reading the DATA LIST as the first step in troubleshooting is one way to shorten the labor time.

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch on.
- (c) Turn the tester ON.
- (d) Enter the following menus: DIAGNOSIS / OBD/ MOBD / IMMOBILISER / DATA LIST.
- (e) Check the values by referring to the table below.

#### Transponder key ECU:

Item	Measurement Item/Display (Range)	Normal Condition	Diagnostic Note
KEY SW	Unlock warning switch signal / ON or OFF	ON: Key is in ignition key cylinder OFF: No key is in ignition key cylinder	-
IG SW	Ignition switch signal / ON or OFF	ON: Ignition switch on OFF: Ignition switch off	-
IMMOBILISER	Immobiliser system status / SET or UNSET	UNSET: Ignition switch on SET: Without key	-
RESPONSE	Transponder chip data / NG or OK	NG: Data error OK: Data OK	-
FRAME	Transponder chip data / NG or OK	NG: Data error OK: Data OK	-
SERIAL NUMBER	Transponder chip data / NG or OK	NG: Data error OK: Data OK	-
ENCRYPT CODE	Transponder chip data / NG or OK	NG: Data error OK: Data OK	-
STATUS	Transponder chip data / NG or OK	NG: Data error OK: Data OK	-
BCC	Transponder chip data / NG or OK	NG: Incorrect data being sent. OK: Correct data being sent.	-
SUB KEY	Sub key code signal / NOMATH or MATCH	NOMATCH: Non matching sub key code is sent. MATCH: Sub key code is sent.	-
MASTER KEY	Master key code signal / NOMATH or MATCH	NOMATCH: Non matching master key code is sent. MATCH: Master key code is sent.	-
REGIST SUB CODE	Number of registered sub key / min. 0, max. 15	Number of registered sub key.	-
REGIST MAS CODE	Number of registered master key / min. 0, max. 15	Number of registered master key.	-
REG CODE SPAC	Memory space for key codes registration / NOT FUL or FULL	NOT FUL: More key code registration possible. FULL: No more key code registration possible.	-
+B	Power source / BRAKE or NORMAL	BRAKE: Power source open. NORMAL: Power source normal.	-
ANTENNA COIL	Antenna coil condition / NORMAL or FAIL	NORMAL: Antenna coil is normal. FAIL: Antenna coil is malfunctioning.	-

**2. PERFORM ACTIVE TEST****HINT:**

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

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch on.
- (c) Turn the tester ON.
- (d) Enter the following menus: DIAGNOSIS / OBD/ MOBD / IMMOBILISER / ACTIVE TEST.

**Transponder key ECU:**

Item	Test Details	Diagnostic Note
SECURITY INDIC	Turn security indicator ON / OFF	-