DATA LIST / ACTIVE TEST

1. DATA LIST

HINT:
Using the intelligent tester 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 shorten labor time.

(a) Connect the intelligent tester to the Controller Area Network Vehicle Interface Module (CAN VIM). Then connect the CAN VIM to the DLC3.
(b) Turn the ignition switch ON.
(c) Read the DATA LIST according to the display on the tester.

Transponder key ECU:

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
KEY SW	Unlock warning switch signal/ ON or OFF	OFF: Key is in ignition key cylinder ON: No key is in ignition key cylinder	-
IG SW	Ignition switch signal/ON or OFF	OFF: Ignition switch is OFF or in the ACC position ON: Ignition switch is in the ON position	-
IMMOBILISER	immobiliser system status/ SET or UNSET	UNSET: Without key SET: Ignition switch ON	-
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 sending OK: Correct data sending	-
SUB KEY	Sub-key code signal/ NOMATCH or MATCH	NOMATCH: Unmatched sub-key code is sent MATCH: Sub-key code is sent	-
MASTER KEY	Master key code signal/ NOMATCH or MATCH	NOMATCH: Unmatched 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 SPACE	Memory space for key codes registration/ NOT FULL or FULL	NOT FULL: Possible to register more key codes FULL: Cannot register any more key codes	-
+B	Power source/ BREAK or NORMAL	BREAK: Power source open Normal: Power source normal	-
ANTENNA COIL	Transponder key amplifier coil condition/ NORMAL or FAIL	Normal: Antenna coil is normal FAIL: Antenna coil is malfunctioning	-
G-CODE SUPPORT	SUPPORT or NOT SUP	-	*1
G-CODE DECISION	YES or NO	-	*2

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*1: Diagnostic Note
- If the engine does not start using the registered key while the display on the intelligent tester shows "SUPPORT", there may be a problem with the ECM and the transponder key ECU.
- If the engine does not start using the registered key while the display on the intelligent tester shows "NON SUP", there may be a problem with the transponder key ECU.

*2: Diagnostic Note
- YES indicates that the registration of the ECU communication ID for the ECM and the transponder key ECU has been completed.
- NO indicates that the registration of the ECU communication ID for the ECM and the transponder key ECU has not been completed.

2. ACTIVE TEST

HINT:
Performing the intelligent tester 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 shorten labor time. The DATA LIST can be displayed during the ACTIVE TEST.

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

Transponder key ECU:

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

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