DATA LIST / ACTIVE TEST

1. DATA LIST

HINT:

Using the intelligent tester to read the Data List allows the values or states of switches, sensors, actuators and other items to be read without removing any parts. This non-intrusive inspection can be very useful because intermittent conditions or signals may be discovered before parts or wiring is disturbed. Reading the Data List information early in troubleshooting is one way to save diagnostic time.

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

AIR CONDITIONER / DATA LIST

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
ROOM TEMP	Room temperature sensor / min.: -6.5°C (20.3°F), max.: 57.25°C (135.05°F)	Actual cabin temperature	-
AMBI TEMP SENS	Ambient temperature sensor / min.: -23.3°C (-9.94°F), max.: 65..95°C (150.71°F)	Actual ambient temperature	-
AMBI TEMP	Adjusted ambient temperature / min.: -30.8°C (-23.44°F), max.: 50.8°C (123.44°F)	-	-
EVAP TEMP	Evaporator temperature sensor / min.: -29.7°C (-21.46°F), max.: 59.55°C (139.19°F)	Actual evaporator temperature	-
SOLAR SENS-D	Solar sensor (D side) / min.: 0, max.: 255	Changes depending on brightness (D side)	-
SOLAR SENS-P	Solar sensor (P side) / min.: 0, max.: 255	Changes depending on brightness (P side)	-
COOLANT TEMP	Engine coolant temperature / min.: 1.3°C (34.34°F), max.: 90.55°C (194.99°F)	Actual engine coolant temperature	-
SET TEMP-D	Set temperature (D side) / min.: 0, max. 255	Actual set temperature (D side)	-
SET TEMP-P	Set temperature (P side) / min.: 0, max. 255	Actual set temperature (P side)	-
ESTIMATE TEMP-D	Estimated temperature (D side) / min.: -358.4°C (-613.12°F), max.: 358.4°C (677.12°F)	-	-
ESTIMATE TEMP-P	Estimated temperature (P side) / min.: -358.4°C (-613.12°F), max.: 358.4°C (677.12°F)	-	-
A/M DAMP POS-D	Air mix damper position (D side) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (D side)	-
A/M DAMP POS-P	Air mix damper position (P side) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (P side)	-
A/I DAMP POS	Air inlet damper position / min.: -14%, max.: 113.5%	Changes depending on air inlet damper position	-
A/O DAMP POS	Air outlet damper position / min.: -14%, max.: 113.5%	Changes depending on air outlet damper position	-
A/M DAMP TARG-D	Air mix damper target position (D side) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (D side)	-
A/M DAMP TARG-P	Air mix damper target position (P side) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (P side)	-

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
A/I DAMP TARG	Air inlet damper target position / min.: -14%, max.: 113.5%	Changes depending on air inlet damper position	-
A/O DAMP TARG	Air outlet damper target position / min.: -14%, max.: 113.5%	Changes depending on air outlet damper position	-
BLOWER LEVEL	Blower motor speed level / min.: Level 0, max.: Level 31	Changes depending on blower level	-
REAR ROOM TEMP	Room temperature sensor (Rear) / min.: -6.5°C (20.3°F), max.: 57.25°C (135.05°F)	Actual cabin temperature (Rear)	-
R-EVAP TEMP SEN	Rr. EVAP temperature sensor (Rear) / min.: -29.7°C (-21.46°F), max.: 59.55°C (139.19°F)	Actual evaporator temperature (Rear)	-
SET TEMP REAR	Set temperature (Rear) / min.: 0, max. 255	Actual set temperature	-
ESTIMATE TEMP-R	Estimated temperature (Rear) / min.: -358.4°C (-613.12°F), max.: 358.4°C (677.12°F)	-	-
A/M DAMP POS-R	Air mix damper position (Rear) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (Rear)	-
A/O DAMP POS-R	Air outlet mode damper position (Rear) / min.: -14%, max.: 113.5%	Changes depending on air outlet damper position (Rear)	-
A/M DAMP TARG-R	Air mix damper target position (Rear) / min.: -14%, max.: 113.5%	Changes depending on the set temperature (Rear)	-
A/O DAMP TARG-R	Air outlet damper target position (Rear) / min.: -14%, max.: 113.5%	Changes depending on air outlet damper position (Rear)	-
BLOWER LEVEL-R	Blower motor speed level (Rear) / min.: Level 0, max: Level 31	Changes depending on blower level (Rear)	-
SET TEMP SHIFT	Shift set temperature	Changes depending on shift set temperature *1	-
AIR INLET MODE	Air inlet mode	Changes depending on air inlet mode *1	-
COMPRESSOR MODE	Compressor mode	Changes depending on compressor mode *1	-
COMPRS/DEF MODE	Compressor/DEF operation mode	Changes depending on compressor/DEF operation mode *1	-
FOOT/DEF OPER	Foot/DEF auto mode	Changes depending on Foot/DEF auto mode *1	-
AUTO BLOW UP	Foot/DEF automatic blow up function	Changes depending on Foot/DEF automatic blow up function *1	-
#CODES	Number of Trouble Codes / min.: 0, max.: 255	-	-

HINT:

*1: It differs depending on the user setting.

2. ACTIVE TEST

HINT:

Using the intelligent tester to perform Active Tests allows relays, VSVs, actuators and other items to be operated without removing any parts. This non-intrusive functional inspection can be very useful because intermittent operation may be discovered before parts or wiring is disturbed. Performing Active Tests early in troubleshooting is one way to save diagnostic time. Data List information can be displayed while performing Active Tests.

(a) Connect the intelligent tester to the DLC3.

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(b) Turn the ignition switch to the ON position.
(c) From the display on the tester, read the "ACTIVE TEST".

Tester Display	Test Part	Control Range	Diagnostic Note
BLOWER MOTOR	Blower motor	min.: Level 0, max.: Level 31	-
AIR MIX DAMP-D	Air mix damper (D side)	min.: -14%, max: 113.5%	-
AIR MIX DAMP-P	Air mix damper (P side)	min.: -14%, max: 113.5%	-
A/O MODE DAMP-D	Air outlet damper position (D side)	min.: -14%, max: 113.5%	-
A/I DAMP-LINEAR	Air inlet damper position (linear)	min.: -14%, max: 113.5%	-
REAR BLOWER	Blower motor (Rear)	OFF, LO, HI	-
A/O MODE DAMP-R	Air outlet damper position (Rear)	min.: -14%, max: 113.5%	-
AIR MIX DAMP-R	Air mix damper (Rear)	min.: -14%, max: 113.5%	-
A/C MAG CLUTCH	Magnetic clutch relay	OFF, ON	-