

SELF-DIAGNOSTIC SYSTEM

Entering Self-Diagnostics

Ensure engine temperature is greater than 104 F (40 C). Depress auto amplifier OFF and AUTO switches simultaneously and turn ignition on. Auto amplifier will enter DIAGNOSTIC STEP 1. See DIAGNOSTIC STEP 1.

Exiting Self-Diagnostics & Clearing Trouble Codes

To exit self-diagnostics, system must be in DIAGNOSTIC STEP 2. Turn ignition off. To clear trouble codes, depress auto amplifier OFF and DEF switches simultaneously and turn ignition on. AUTO switch LED and -88 in temperature display will flash 3 times. All trouble codes are now cleared and system will exit self-diagnostics.

DIAGNOSTIC STEP 1

Display Indicator Inspection

- 1) Indicator lights should be on and temperature display should indicate -88 (all segments on).
- 2) If indicators are not on, or temperature display does not indicate -88, check auto amplifier power supply and ground circuits.

If indicator lights and temperature display segments are okay, after approximately 9 seconds, self-diagnostics will proceed to DIAGNOSTIC STEP 2.

DIAGNOSTIC STEP 2

Sensor Circuit & Door Motor Inspection

- 1) If a malfunction has occurred in a monitored circuit, temperature display will indicate a trouble code. If monitored circuits are functioning properly, temperature display will show "00" indicating no system malfunctions.
- 2) If a trouble code is indicated, proceed to appropriate code testing procedure under TESTING. If all sensors are okay (Code 00 displayed), depress AUTO switch to proceed to DIAGNOSTIC STEP 3 or depress DEF for a minimum of 4 seconds to proceed to DIAGNOSTIC STEP 4. Diagnostic step 3 checks A/C output components. Diagnostic step 4 is used to adjust display temperature.

SENSOR CIRCUIT TROUBLE CODES (1)

Code No. Diagnosis

00	.....	No Malfunctions
11/21	.....	Open/Short In In-Vehicle Sensor Circuit
12/22	.....	Open/Short In Ambient Sensor Circuit
13/23	.....	Open/Short In Sunload Sensor Circuit
14/24	.....	Open/Short In Evaporator Sensor Circuit
15/25	.....	Open/Short In Refrigerant Temp. Sensor Circuit
16/26	.....	Open/Short In Water Temp. Sensor Circuit
31	.....	Faulty Air Mix Door Motor Circuit
32	.....	Faulty Mode Door Motor Circuit
33	.....	Faulty Air Mix Door Motor Circuit
34	.....	Faulty Mode Door Motor Circuit
35	.....	Faulty Intake Door Motor Circuit

(1) - If malfunction is currently occurring, code will be circled in the display.

DIAGNOSTIC STEP 3

Actuator Inspection

- 1) Temperature display should read 41. Check compressor and blower operation and positioning of mode door motor, intake door motor and air mix door motor.
- 2) To advance to next code, press DEF switch. Ensure all actuators operate as specified. If any actuators do not function as specified, test appropriate circuit.

ACTUATOR OPERATION SPECIFICATIONS

Actuator Test Results

Code 41

Mode Door Defrost
Intake Door Fresh/Recirculation
Air Mix Door Full Hot
Blower Motor 5 Volts
Compressor On
Compressor Solenoid Zero Amps

Code 42

Mode Door Heat
Intake Door Fresh
Air Mix Door Full Hot
Blower Motor 7 Volts
Compressor On
Compressor Solenoid65 Amps

Code 43

Mode Door Bi-Level
Intake Door Fresh
Air Mix Door 50% Hot
Blower Motor 11 Volts
Compressor Off
Compressor Solenoid Zero Amps

Code 44

Mode Door Vent
Intake Door Fresh
Air Mix Door Full Cold
Blower Motor Fan High
Compressor Off
Compressor Solenoid Zero Amps

Code 45

Mode Door Vent
Intake Door Recirculation
Air Mix Door Full Cold
Blower Motor Fan High
Compressor Off
Compressor Solenoid Zero Amps

DIAGNOSTIC STEP 4

Display Temperature Correction

- 1) This procedure is used to adjust display temperature when small differences between temperature setting and actual temperature felt by passengers exist.
- 2) Once DIAGNOSTIC STEP 4 has been activated, temperature display will show one of the following. A "10" indicates that temperature has previously been adjusted to read a higher temperature.
- 3) A "00" indicates that temperature display has previously been adjusted to read a lower temperature. A "05" indicates that temperature has not been previously adjusted and is at the standard (default) position.
- 4) Press temperature LO or HI switches as necessary to adjust temperature display. Each time LO or HI switch is pressed, temperature setting will change. If vehicle battery is disconnected, temperature setting will default to standard position.