

## DIAGNOSTIC TROUBLE CODE CHART

If malfunction code is displayed during the DTC check, check the circuit listed for that code in the table below (Proceed to the page given for that circuit.)

**w/o Navigation system:**

Blinking light	Detection Item	Trouble Area	Memory
RrDEF	Normal	–	–
RrDEF <sub>1</sub> FACE* (DI-132)	Front room temperature sensor circuit	<ul style="list-style-type: none"> <li>Room temp. sensor</li> <li>Harness or connector between room temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrDEF <sub>2</sub> B/L* (DI-135)	Ambient temperature sensor circuit	<ul style="list-style-type: none"> <li>Ambient temp. sensor</li> <li>Harness or connector between ambient temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrDEF FOOT (DI-138)	Front evaporator temperature sensor circuit	<ul style="list-style-type: none"> <li>Evaporator temp. sensor</li> <li>Harness or connector between evaporator temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrACSW, FOOT (DI-144)	Rear evaporator temperature sensor circuit	<ul style="list-style-type: none"> <li>Rear evaporator temp. sensor</li> <li>Harness or connector between Rear evaporator temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrACSW <sub>1</sub> FACE* (DI-147)	Rear room temperature sensor circuit	<ul style="list-style-type: none"> <li>Rear room temp. sensor</li> <li>Harness or connector between rear room temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrDEF F/D (DI-141)	Engine coolant temperature sensor circuit	<ul style="list-style-type: none"> <li>Engine coolant temp. sensor</li> <li>Harness or connector between engine coolant temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	–
RrDEF <sub>3</sub> DEF* (DI-150)	Solar sensor circuit (Open)	<ul style="list-style-type: none"> <li>Solar sensor</li> </ul>	–
	Solar sensor circuit (Short)	<ul style="list-style-type: none"> <li>Harness or connector between solar sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrDEF FRS (DI-156)	Open in pressure sensor circuit Abnormal refrigerant pressure [below 196 kPa (2.0 kgf/cm <sup>2</sup> , 28 psi) over 3, 140 kPa (32.0 kgf/cm <sup>2</sup> , 455 psi)]	<ul style="list-style-type: none"> <li>Pressure switch</li> <li>Harness or connector between pressure switch and A/C amplifier</li> <li>Refrigerant pipe line</li> <li>A/C amplifier</li> </ul>	–
RrACSW, HI (DI-160)	Rear inlet air temperature sensor circuit	<ul style="list-style-type: none"> <li>Rear inlet air temp. sensor</li> <li>Harness or connector between rear inlet air temp. sensor and A/C amplifier</li> <li>A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
RrDEF REC (DI-163)	Front air mix damper position sensor circuit	<ul style="list-style-type: none"> <li>Air mix damper position sensor</li> <li>A/C amplifier</li> <li>Harness or connector between air mix damper position sensor and A/C amplifier</li> </ul>	<input type="checkbox"/> (1 min. or more)
RrDEF LO (DI-167)	air inlet damper position sensor circuit	<ul style="list-style-type: none"> <li>Air inlet damper position sensor circuit</li> <li>A/C amplifier</li> <li>Harness or connector between air inlet damper position sensor and A/C amplifier</li> </ul>	<input type="checkbox"/> (1 min. or more)

RrDEF M1 (DI-163 DI-174)	Front air mix damper position sensor circuit	<ul style="list-style-type: none"> <li>• Air mix damper control servomotor</li> <li>• Air mix damper position sensor</li> <li>• Harness and connector between A/C amplifier and air mix position sensor</li> <li>• Harness and connector between A/C amplifier and air mix damper control servomotor</li> <li>• A/C amplifier</li> </ul>	<div>□</div> (15secs. or more)
RrDEF M2 (DI-167 DI-177)	Air inlet damper position sensor circuit	<ul style="list-style-type: none"> <li>• Air mix damper control servomotor</li> <li>• Air mix damper position sensor</li> <li>• Harness and connector between A/C amplifier and air mix position sensor</li> <li>• Harness and connector between A/C amplifier and mix damper control servomotor</li> <li>• A/C amplifier</li> </ul>	<div>□</div> (15secs. or more)

## HINT:

- \*<sup>1</sup> If the room temp. is approx. –20° C (–4° F) or lower, RrDEF and FACE indicator may be light up even though the system is normal.
- \*<sup>2</sup> If the ambient temperature is approx. –50° C (–58° F) or lower, a DTC may be output even though the system is normal.
- \*<sup>3</sup> If the check is being performed in a dark place, RrDEF and DEF (solar sensor circuit abnormal) could be light up. In this case, perform DTC check again while shining a light, such as an inspection light, on the solar sensor. If RrDEF and DEF is still light up, there could be trouble in the solar sensor circuit.

## w/ Navigation system:

DTC No. (See page)	Detection Item	Trouble Area	Memory
00	Normal	–	–
11 * <sup>1</sup> (DI-132)	Front room temperature sensor circuit	<ul style="list-style-type: none"> <li>• Front room temp. sensor</li> <li>• Harness or connector between front room temp. sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
12 *2 (DI-135)	Ambient temperature sensor circuit	<ul style="list-style-type: none"> <li>• Ambient temp. sensor</li> <li>• Harness or connector between ambient temp. sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
13 (DI-138)	Front evaporator temperature sensor circuit	<ul style="list-style-type: none"> <li>• Front evaporator temp. sensor</li> <li>• Harness or connector between front evaporator temp. sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
14 (DI-141)	Engine coolant temperature sensor circuit	<ul style="list-style-type: none"> <li>• Engine coolant temp. sensor</li> <li>• Harness or connector between engine coolant temp. sensor and A/C amplifier</li> <li>• A/C amplifier</li> </ul>	–
21 * <sup>3</sup> (DI-150)	Solar sensor circuit (Open)	<ul style="list-style-type: none"> <li>• Solar sensor</li> <li>• Harness or connector between solar sensor and A/C amplifier</li> </ul>	–
	Solar sensor circuit (Short)	<ul style="list-style-type: none"> <li>• A/C amplifier</li> </ul>	<input type="checkbox"/> (8.5 min. or more)
22 * <sup>4</sup> (DI-153)	All conditions below are detected for 3 sec. or more (a) Engine speed: 450 rpm or more (b) Ratio between engine and compressor rpm deviates 20% or more in comparison to normal operation.	<ul style="list-style-type: none"> <li>• Compressor drive belt</li> <li>• Compressor lock sensor</li> <li>• Compressor</li> <li>• Harness and connector between A/C amplifier and compressor, compressor lock sensor</li> <li>• A/C amplifier</li> </ul>	–
23 (DI-156)	Open in pressure sensor circuit Abnormal refrigerant pressure [below 196 kPa (2.0 kgf/cm <sup>2</sup> , 28 psi) over 3, 140 kPa (32.0 kgf/cm <sup>2</sup> , 455 psi)]	<ul style="list-style-type: none"> <li>• Pressure switch</li> <li>• Harness or connector between pressure switch and A/C amplifier</li> <li>• Refrigerant pipe line</li> <li>• A/C amplifier</li> </ul>	–
31 (DI-163)	Front air mix damper position sensor circuit	<ul style="list-style-type: none"> <li>• Front air mix damper position sensor</li> <li>• A/C amplifier</li> <li>• Harness or connector between front air mix damper position sensor and A/C amplifier</li> </ul>	<input type="checkbox"/> (1 min. or more)
32 (DI-163)	Air inlet damper position sensor circuit	<ul style="list-style-type: none"> <li>• Air inlet damper position sensor circuit</li> <li>• A/C amplifier</li> <li>• Harness or connector between air inlet damper position sensor and A/C amplifier</li> </ul>	<input type="checkbox"/> (1 min. or more)

41 (DI-163 DI-174)	Front air mix damper position sensor circuit	<ul style="list-style-type: none"> <li>• Front air mix damper control servomotor</li> <li>• Front air mix damper position sensor</li> <li>• Harness and connector between A/C amplifier front and air mix position sensor</li> <li>• Harness and connector between A/C amplifier and front air mix damper control servomotor</li> <li>• A/C amplifier</li> </ul>	<div style="text-align: center;">□</div> (15 secs. or more)
42 (DI-167 DI-177)	Air inlet damper position sensor circuit	<ul style="list-style-type: none"> <li>• Air mix damper control servomotor</li> <li>• Air mix damper position sensor</li> <li>• Harness and connector between A/C amplifier and air mix position sensor</li> <li>• Harness and connector between A/C amplifier and mix damper control servomotor</li> <li>• A/C amplifier</li> </ul>	<div style="text-align: center;">□</div> (15 secs. or more)

## HINT:

- \*<sup>1</sup> If the room temp. is approx.  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) or lower, DTC 11 may be light up even though the system is normal.
- \*<sup>2</sup> If the ambient temperature is approx.  $-50^{\circ}\text{C}$  ( $-58^{\circ}\text{F}$ ) or lower, a DTC may be output even though the system is normal.
- \*<sup>3</sup> If the check is being performed in a dark place, DTC 11 (solar sensor circuit abnormal) could be displayed. In this case, perform DTC check again while shining a light, such as an inspection light, on the solar sensor. If DTC 11 is still displayed, there could be trouble in the solar sensor circuit.
- \*<sup>4</sup> Compressor lock (DTC 22) is indicated only for a current malfunction. (See page DI-153)

To confirm DTC 22, perform the following steps.

- (1) With the engine ON, enter the DTC check mode.
- (2) Press the R/F switch to enter actuator check mode, and set the operation to Step No. 3.
- (3) Press the AUTO switch to return to DTC check mode.
- (4) The DTC is displayed after approx. 3 secs.