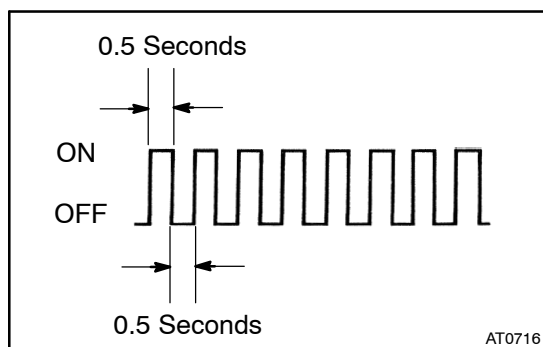




PRE-CHECK

1. Warning for A/C compressor lock

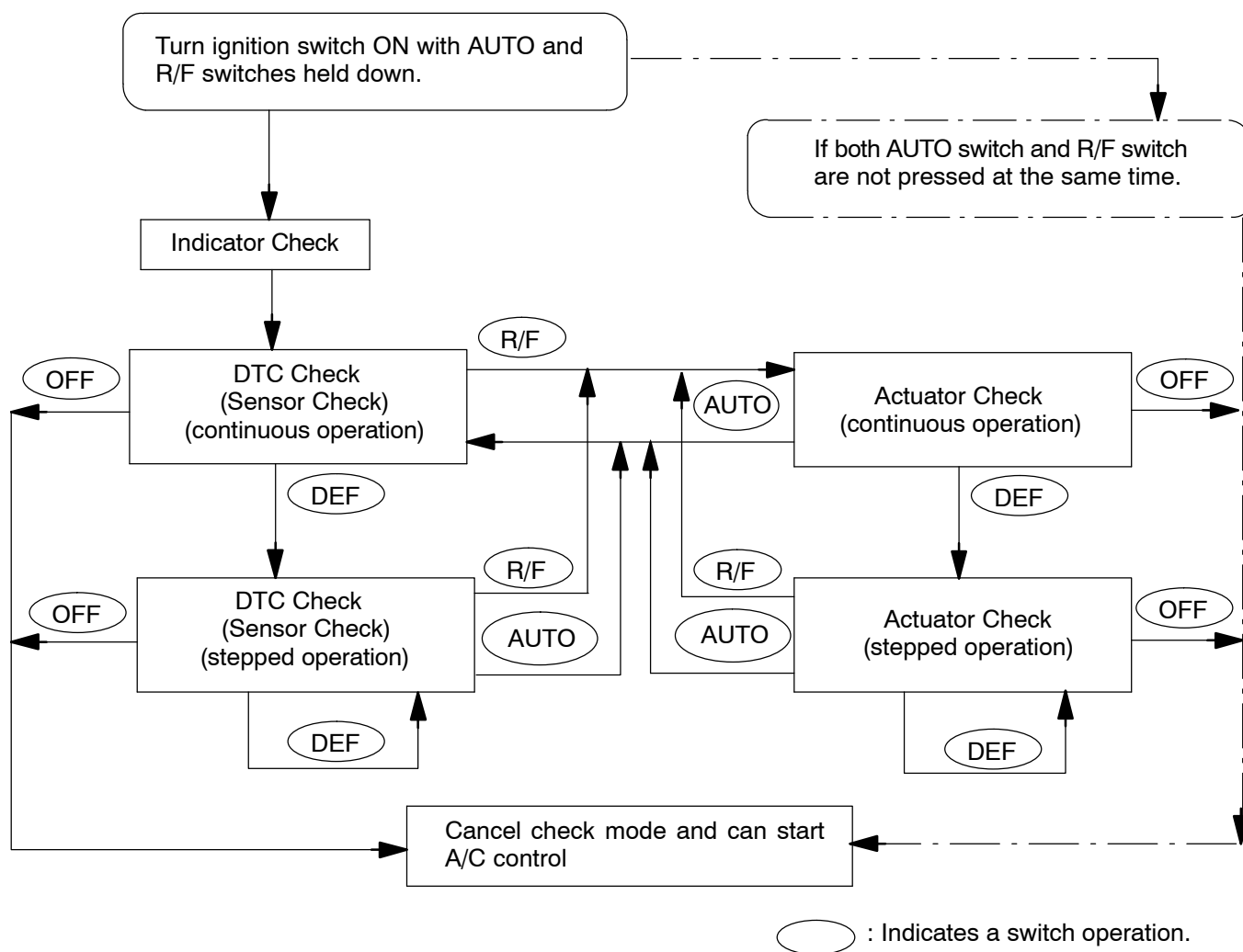
If compressor lock occurs during A/C operation, the A/C switch indicator on the A/C control assembly starts blinking.

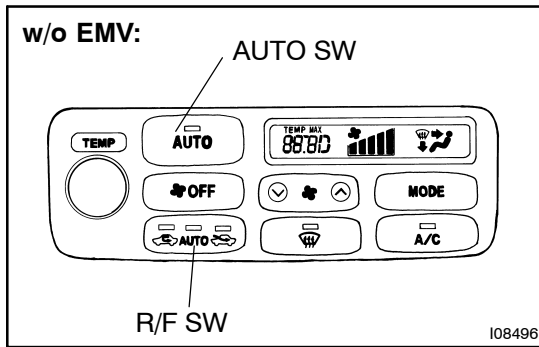
When this occurs, check for compressor lock (DTC 22) using diagnosis trouble code check, and then proceed to inspect the circuit or the component.

Compressor lock sensor circuit. → (See page [DI-1555](#))

2. LIST OF OPERATION METHODS

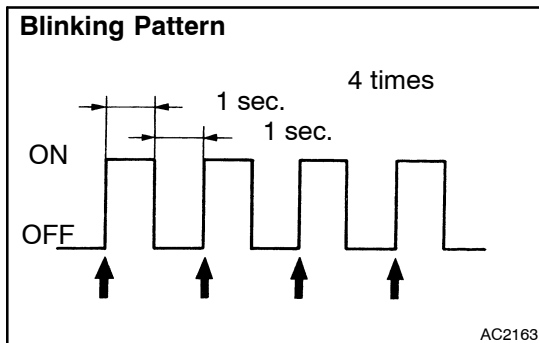
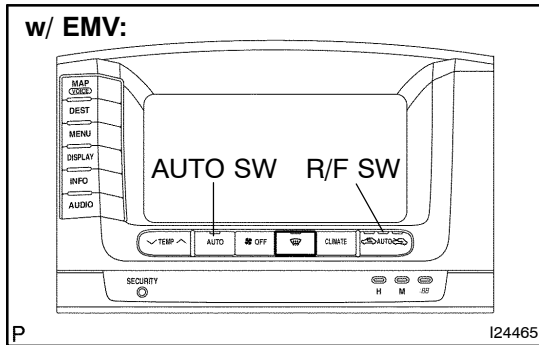
By operating each of the A/C control switches as shown in the diagram below, it is possible to enter the diagnosis check mode.





3. INDICATOR CHECK

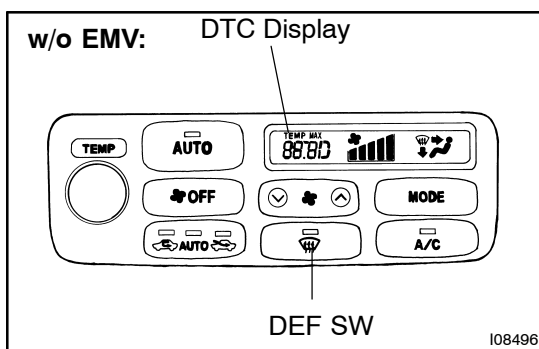
- (a) Turn the ignition switch to on while pressing the A/C control AUTO SW and R/F SW simultaneously.



- (b) Check that all the indicators light up and go off 4 times in succession at 1 second intervals.

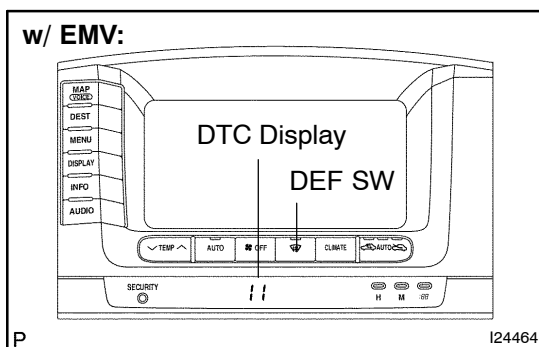
HINT:

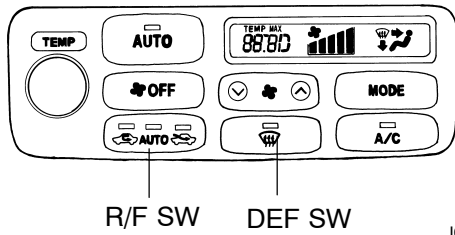
- After the indicator check ends, the diagnostic trouble code check begins automatically.
- Press the OFF SW when desiring to cancel the check mode.



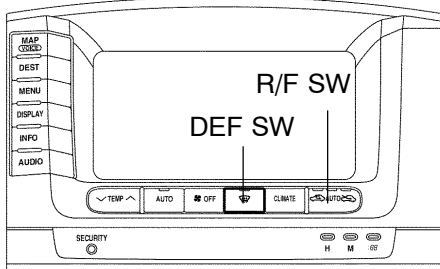
4. DTC CHECK (SENSOR CHECK)

- (a) Perform an indicator check. After the indicator check is completed, the system enters the DTC check mode automatically.
- (b) Read the DTC displayed on the panel. Refer to the list of DTCs on page [DI-1523](#) when reading the DTCs. If the slower display is desired, press the DEF SW and change it to step operation. Every time the DEF SW is pressed, the display changes by 1 step.



w/o EMV:

I08496

w/ EMV:

I24465

5. ACTUATOR CHECK

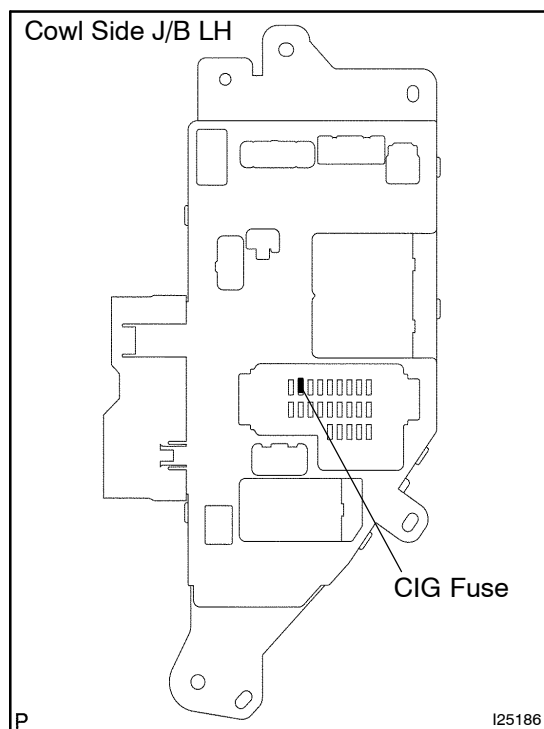
- After entering the sensor check mode, press the R/F SW.
- Since each damper, motor and relay automatically operates at 1 second intervals beginning in order from 20 in the temperature display, check the temperature and air flow visually and manually.

If a slower display is desired, press the DEF SW and change it to step operation. Every time the DEF SW is pressed, the display changes by 1 step.

HINT:

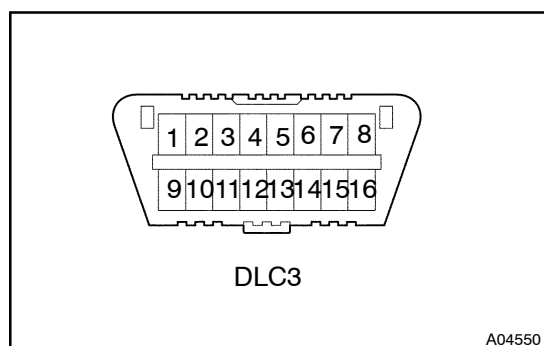
- The buzzer sounds when the display trouble code changes.
- Code are displayed in order from the smaller to the larger numbers.
- To cancel the check mode, press the OFF SW.

Step No.	Display code	Conditions					
		Blower motor	Air flow vent	Air inlet damper	Magnetic clutch	Air mix damper	Rr. Heater blower motor
1	0	OFF	FACE	FRESH	OFF	Cool side (0% open)	OFF
2	1	LO	↑	↑	↑	↑	↑
3	2	MED	↑	R/F (50% open)	ON	↑	LO
4	3	↑	BI-LEVEL	RECIRC	↑	Cool / Hot (50% open)	↑
5	4	↑	FOOT	FRESH	↑	↑	↑
6	5	↑	↑	↑	↑	Hot side (100% open)	HI
7	6	↑	FOOT/DEF	↑	↑	↑	↑
8	7	HI	DEF	↑	↑	↑	↑



6. CLEARING DTC

- Pull out the CIG fuse in cowl side J/B LH for 10 sec. or longer to clear diagnostic the DTC's memory.
- After reinserting the fuse, check that the normal code is output.



7. CHECK DLC3

The vehicle's ECM uses the ISO 9141-2 communication protocol. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 9141-2 format.

Terminal No.	Connection/Voltage or Resistance	Condition
7	Bus + Line/Pulse generation	During transmission
4	Chassis Ground ↔ Body Ground/1 Ω or less	Always
5	Signal Ground ↔ Body Ground/1 Ω or less	Always
16	Battery Positive ↔ Body Ground/9 – 14 V	Always

8. DATA LIST

HINT:

According to the DATA LIST displayed by LEXUS hand-held tester, you can read the value of the switch, sensor, actuator and so on without parts removal. Reading the DATA LIST as a first step of troubleshooting is one of the method to shorten the labor time.

- Connect the LEXUS hand-held tester to the DLC3.
- Turn the ignition switch ON.
- According to the display on tester, read the "DATA LIST".

Item	Measurement Item/ Display (Range)	Normal Condition	Diagnostic Note
A/C SIG	A/C SW Status/ ON or OFF	- A/C SW Push: ON - A/C SW Release: OFF	←
A/C MAG CLUTCH	A/C magnet clutch status/ ON or OFF	- A/C SW Push: ON - A/C SW Release: OFF	←

9. ACTIVE TEST**HINT:**

Performing the ACTIVE TEST using LEXUS hand-held tester allows the relay, VSV, actuator and so on to operate without parts removal. Performing the ACTIVE TEST as a first step of troubleshooting is one of the method to shorten the labor time.

It is possible to display the DATA LIST during the ACTIVE TEST.

- (a) Connect the LEXUS hand-held tester to the DLC3.
- (b) Turn the ignition switch ON.
- (c) According to the display on tester, read the "ACTIVE TEST".

Item	Test Details	Diagnostic Note
A/C MAG CLUTCH	Control the A/C magnet clutch ON/OFF	—