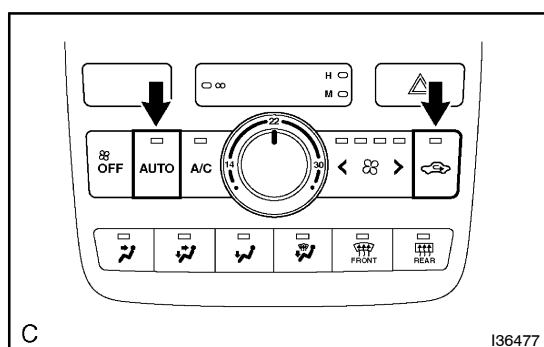
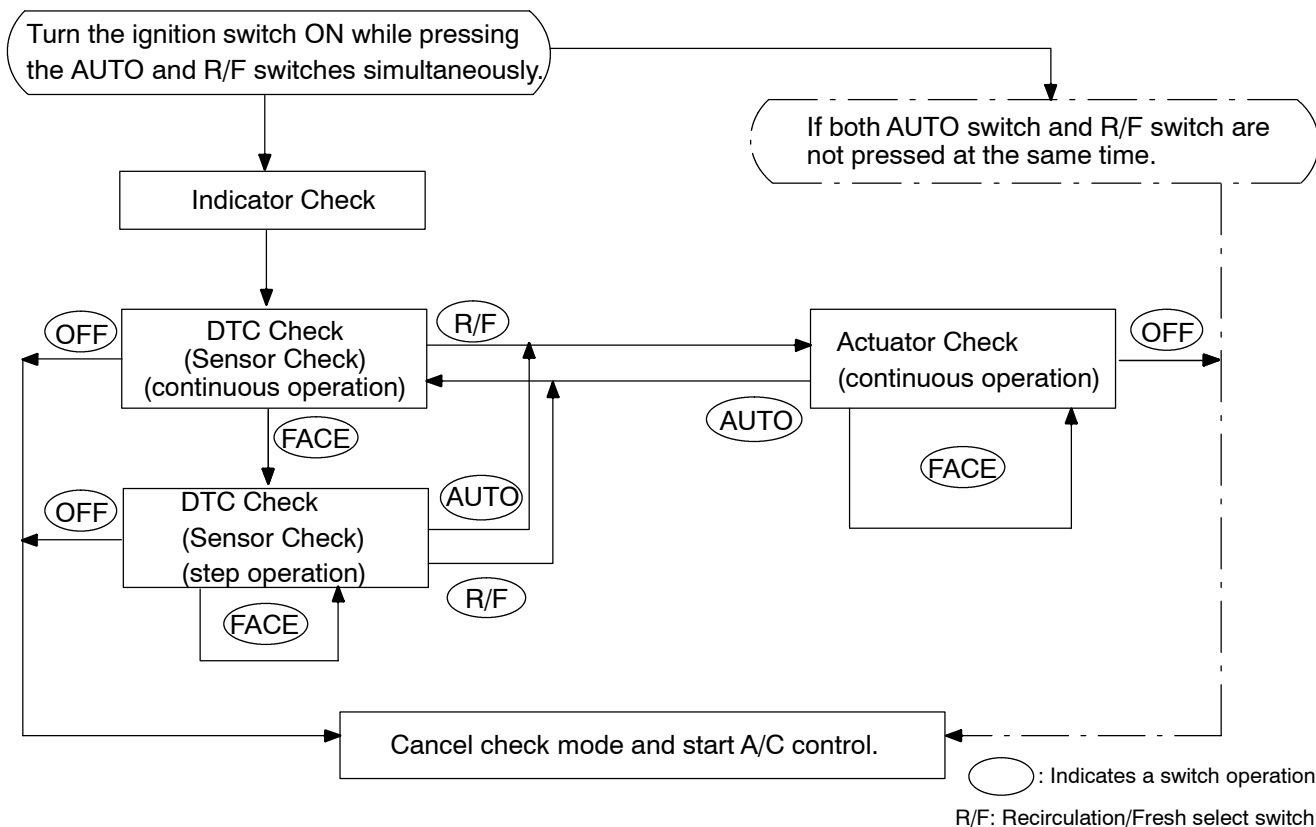


## PRE-CHECK

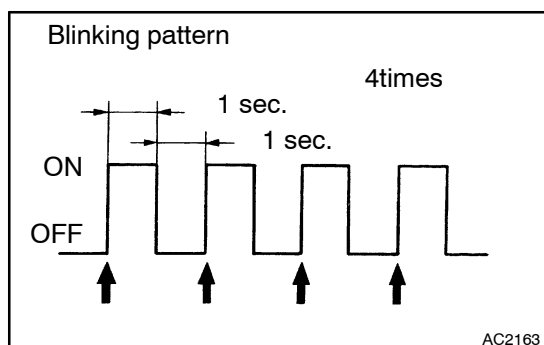
### 1. LIST OF OPERATION METHODS

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



### 2. INDICATOR CHECK

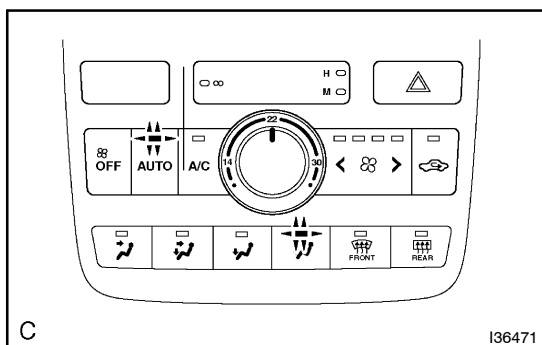
- (a) Turn the ignition switch ON while pressing the A/C control AUTO switch and R/F (Recirculation/Fresh) switch simultaneously.



- (b) Check that the indicators come on and go off 4 times in succession at an interval of a second.

#### HINT:

- After the indicator check is completed, the system enters the DTC mode automatically.
- Press the OFF switch to cancel the check mode.
- In the sensor check mode, which is automatically transferred from the indicator check mode, troubleshooting may be partially performed. Be sure to perform the actuator check, and then the sensor check again.



### 3. DTC CHECK (SENSOR CHECK)

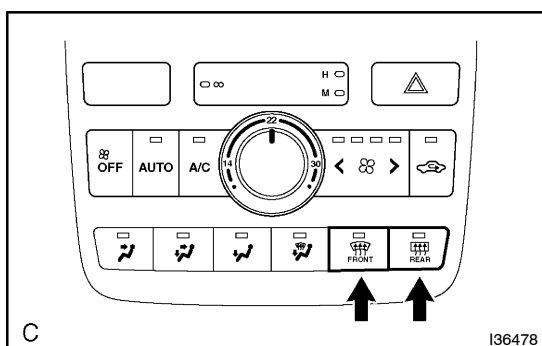
- After the indicator check is completed, the system enters the DTC check mode automatically.
- Read the codes displayed on the panel. Refer to the list of codes on [page 05-854](#) when reading the codes.

#### HINT:

- Indicator display, such as switches, substitutes DTC indication.
- DTC will be output according to the combination of two indicators.

Example: When "AUTO" and "F/D" come on, there may be problem with the ambient temperature sensor.

- The illumination is an example when the code "AUTO, F/D" is output.
  - If more than 2 DTCs are output, the corresponding indicator lamps come on simultaneously.
  - When there are no problems, "AUTO, RrDEF" is output.
- When more than 2 DTCs are output and they are difficult to read, press the "FACE" switch and hold the DTCs indication (step operation). The DTCs are displayed step by step by pressing the "FACE" switch.

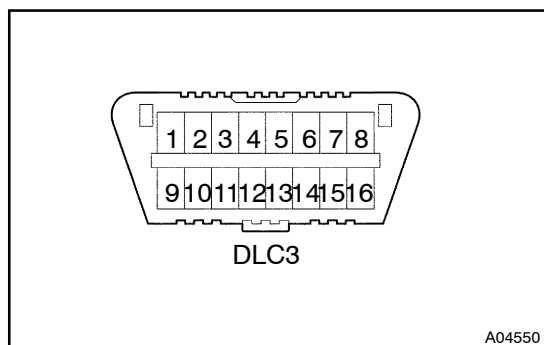


### 4. CLEARING DTC

- During sensor check, press the "DEF" switch and "Rr. DEF" switch at the same time.

#### HINT:

Pull out the ECU-B fuse in engine room relay block No.2 for 20 seconds or longer to clear the DTC memory.



## 5. CHECK DLC3

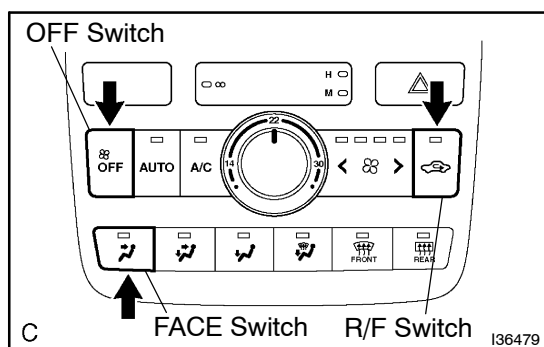
- (a) The vehicle's ECM uses the ISO 9141-2 (Euro-OBD)/ISO 14230 (M-OBD) communication protocol. The terminal arrangement of the DLC3 complies with ISO 15031-3 and matches the ISO 9141-2/ISO 14230 format.

Symbols (Terminal No.)	Terminal Description	Condition	Specified condition
SIL (7) – SG (5)	Bus "+" line	During transmission	Pulse generation
CG (4) – Body ground	Chassis ground	Always	Below 1 $\Omega$
SG (5) – Body ground	Signal ground	Always	Below 1 $\Omega$
BAT (16) – Body ground	Battery positive	Always	10 to 14 V

### HINT:

If the display shows "UNABLE TO CONNECT TO VEHICLE" after connecting the intelligent tester II cable to the DLC3 and turning the ignition switch to the ON position, there is a problem either with the vehicle or the tester.

- If communication is normal when connecting the tester to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when connecting the tester to another vehicle, the problem is probably in the tester itself. Consult the Service Department listed in the tester's operator's manual.



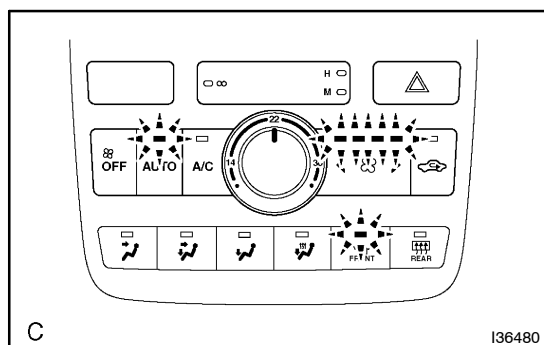
## 6. ACTUATOR CHECK

- After entering the DTC check mode (Sensor Check Mode), press the R/F (Recirculation/Fresh) switch.
- As each damper, motor and relay automatically operate the actuator check at 1 second intervals from step No.1 to No.5 continuously. Check the temperature and air flow visually and by hand.

If a slower display is desired, press the FACE switch and change it to step operation. Each time the FACE switch is pressed, the display changes by 1 step.

HINT:

- To cancel the check mode, press the "OFF" switch.
- The illustration is an example when the step No.5 is out-put.



Step No.	The number of indicated blower speed indicator	Conditions				
		Blower level	Air flow vent	Air inlet damper	Magnetic clutch	Air mix damper
1	0	1	FACE (-10%)	RECIRCULATION	OFF	"COOL" side (-9.0% open)
2	1 (LO)	10	B/L (18.0%)	RECIRCULATION	ON	"COOL"/"HOT" (50.0% open)
3	2 (M1)	17	FOOT (54.5%)	FRESH	ON	"HOT" side (80.0% open)
4	3 (M2)	23	F/D (72.0%)	FRESH	ON	"HOT" side (80.0% open)
5	4 (HI)	31	DEF (110.0%)	FRESH	ON	"HOT" side (80.0% open)

## 7. DATA LIST

HINT:

From the DATA LIST displayed on the intelligent tester II you can read the values of the display, sensor, actuator and so on without parts removal. Reading the DATA LIST as the first step of troubleshooting is one way to shorten labor time.

- Connect the intelligent tester II to the DLC3.
- Turn the ignition switch to the ON position.
- From the display on the tester, select "DATA LIST".

ALL:

Item	Measurement Item/Display (Range)	Normal Condition	Diagnostic Note
A/C Signal (A/C Sig)	A/C signal/ ON or OFF	A/C ON: ON	-