

## AIR CONDITIONER i-stop CONTROL [MANUAL AIR CONDITIONER]

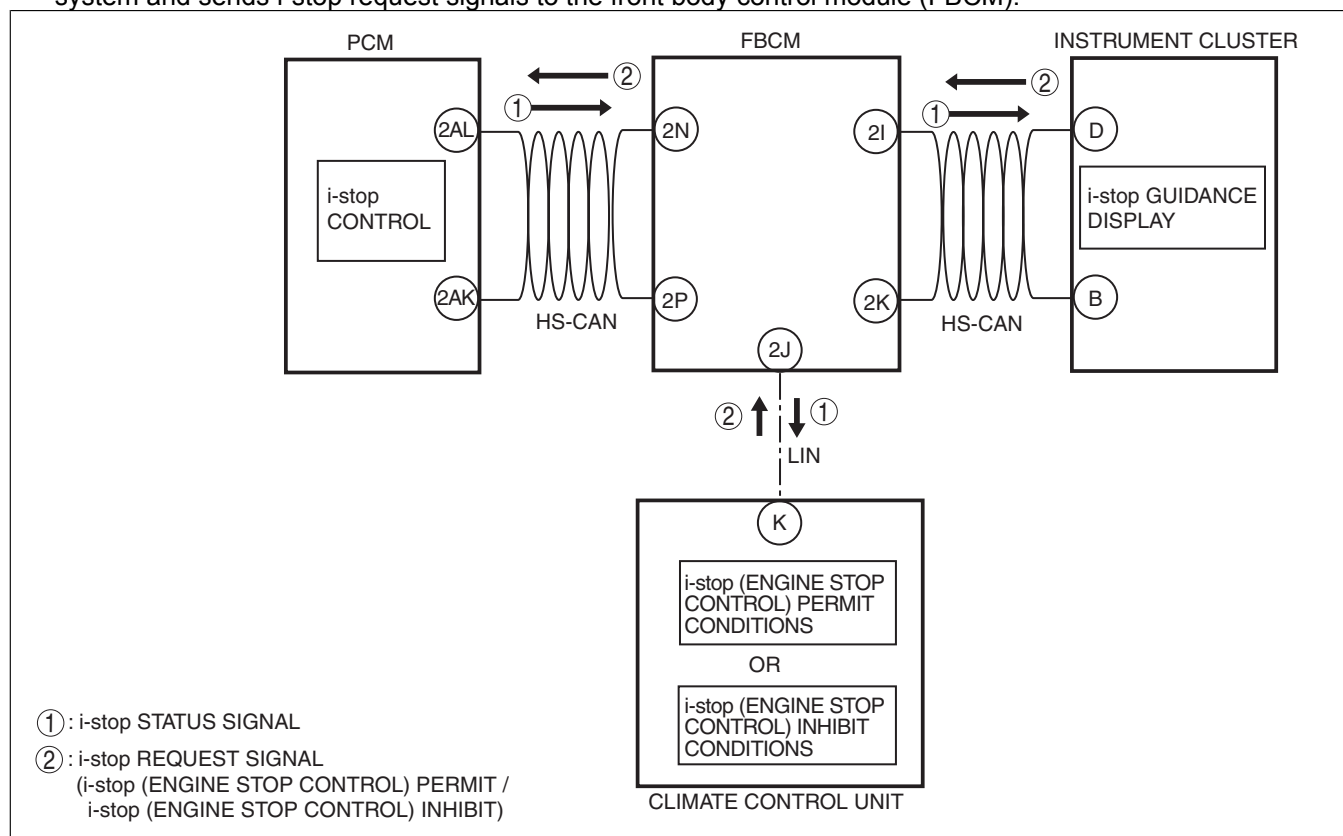
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### Purpose

- The heater control unit controls i-stop to permit/inhibit its operation (engine stop control) according to the air conditioner system operation conditions.

### Function

- The climate control unit determines i-stop control according to the operation condition of the air conditioner system and sends i-stop request signals to the front body control module (FBCM).



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### Operation

#### i-stop request control (i-stop (engine stop control) permit/ i-stop (engine stop control) inhibit)

- The climate control unit sends i-stop (engine stop control) permit or inhibit request signals to the front body control module (FBCM) according to the operation condition of the air conditioner system.

#### i-stop (engine stop control) inhibit request

- The climate control unit sends an i-stop (engine stop control) inhibit request signal to the front body control module (FBCM) when it detects any of the following conditions:

#### i-stop (engine stop control) inhibit conditions

No.	Item	Vehicle condition
1	<ul style="list-style-type: none"> <li>Airflow mode</li> <li>Blower motor</li> </ul>	When all of the following conditions have been met, i-stop (engine stop control) inhibit is determined: <ul style="list-style-type: none"> <li>Airflow mode during defrost</li> <li>Blower motor is ON</li> </ul>
2	Ambient temperature	Ambient temperature is <b>-10 °C {14 °F} or below</b> , or <b>50 °C {122 °F} or more</b>
3	Engine coolant temperature	When all of the following conditions are met, i-stop (engine stop control) inhibit is determined: <ul style="list-style-type: none"> <li>Engine coolant temperature signal is the specified value or less for i-stop (engine stop control) permit conditions</li> <li>Blower motor is ON</li> <li>Ambient temperature is <b>9 °C {48 °F} or less</b></li> </ul>

No.	Item	Vehicle condition
4	Evaporator temperature	When all of the following conditions have been met, i-stop (engine stop control) inhibit is determined: <ul style="list-style-type: none"> <li>• Evaporator signal is the specified value or less for i-stop (engine stop control) permit conditions</li> <li>• A/C is ON</li> <li>• Ambient temperature is <b>30 °C {86 °F} or more</b></li> </ul>

#### **i-stop (engine stop control) permit request**

- When the heater control unit sends an i-stop (engine stop control) permit signal to the front body control module (FBCM) if the i-stop (engine stop control) inhibit conditions are not detected.

#### **A/C control start during i-stop (engine stop control)**

- If the climate control unit determines that the engine is stopped based on an i-stop status signal sent from the PCM when A/C is stopped by i-stop control, the climate control unit starts A/C control in conjunction with the engine stop condition.
- If the engine is stopped during A/C control, the A/C compressor magnetic clutch turns off and the A/C indicator light remains in an illuminated condition. When the engine is restarted, the A/C compressor magnetic clutch turns on again.
- If the engine is stopped while the PTC heater is operating, the PTC heater turns off. When the engine is restarted, the PTC heater returns to normal control.