GLOW CONTROL [SKYACTIV-D 2.2]

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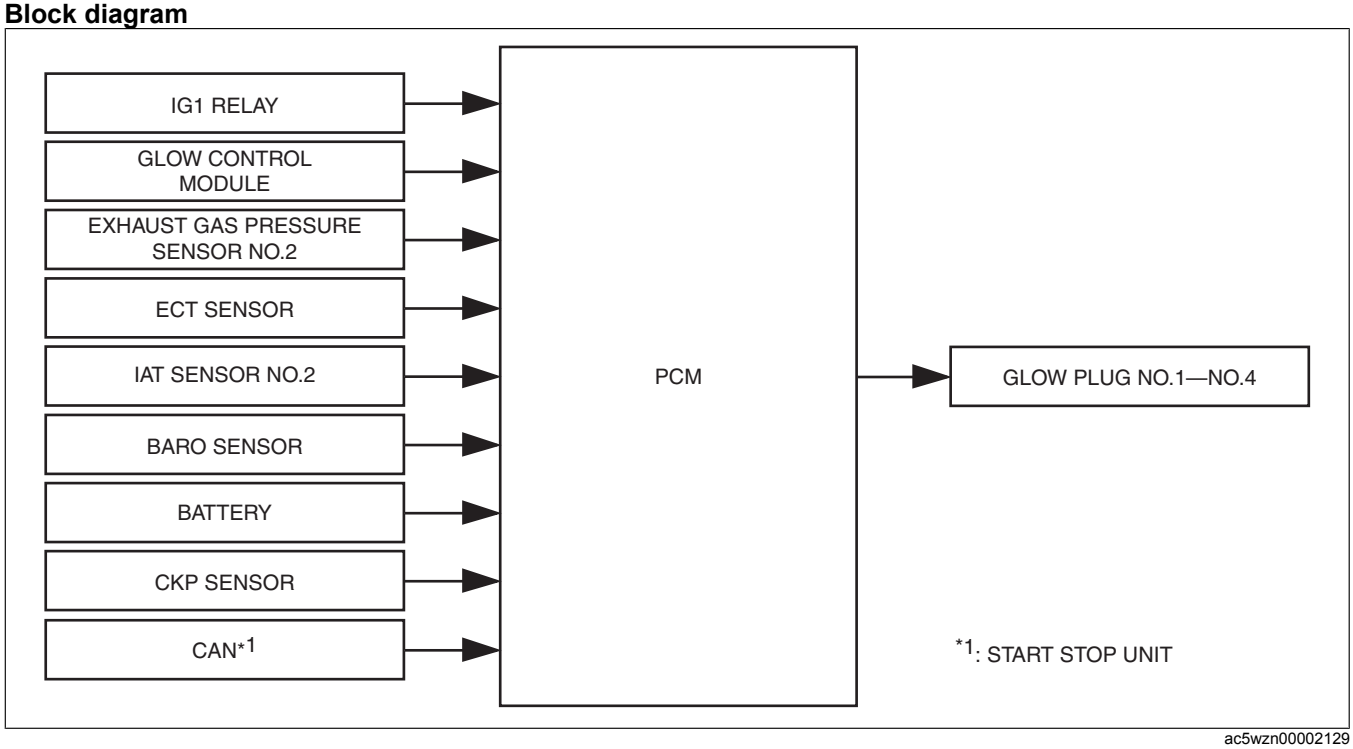
Outline

- Heating of the glow plug is controlled by the PCM through the glow control module to improve engine startability and DPF regeneration performance.
- Energization time to the glow plug is determined according to the engine coolant temperature and engine starting conditions.

Block diagram



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Operation

- The PCM operates the glow control module when any of the following conditions is met:
  - — During preheating timer operation
  - — While the engine is being cranked or running under engine coolant temperature conditions (after glow)
  - — During DPF regeneration control

Preheating Timer

- The PCM operates the glow control module for several seconds after the ignition is switched ON according to the engine coolant temperature. The higher the engine coolant temperature, the shorter the period of the timer operation.
- When the preheating timer is operated, engine starting is inhibited and the glow indicator light is illuminated. (See GLOW INDICATOR LIGHT [SKYACTIV-D 2.2].)
- Even after the glow indicator light is turned off, glow plug preheating is continued according to the engine coolant temperature before the engine is started.
- If the ignition is left switched ON (engine off) for a long time after the preheating is finished, preheating is performed again at engine start.

Engine coolant temperature condition (after glow)

- After the engine is started at an engine coolant temperature of **less than 40 °C {104 °F}**, the glow control module is operated to warm the intake air using the heat of the glow plug.
- After the glow control module is operated, when the engine coolant temperature reaches **40 °C {104 °F} or more**, the glow control module is stopped.