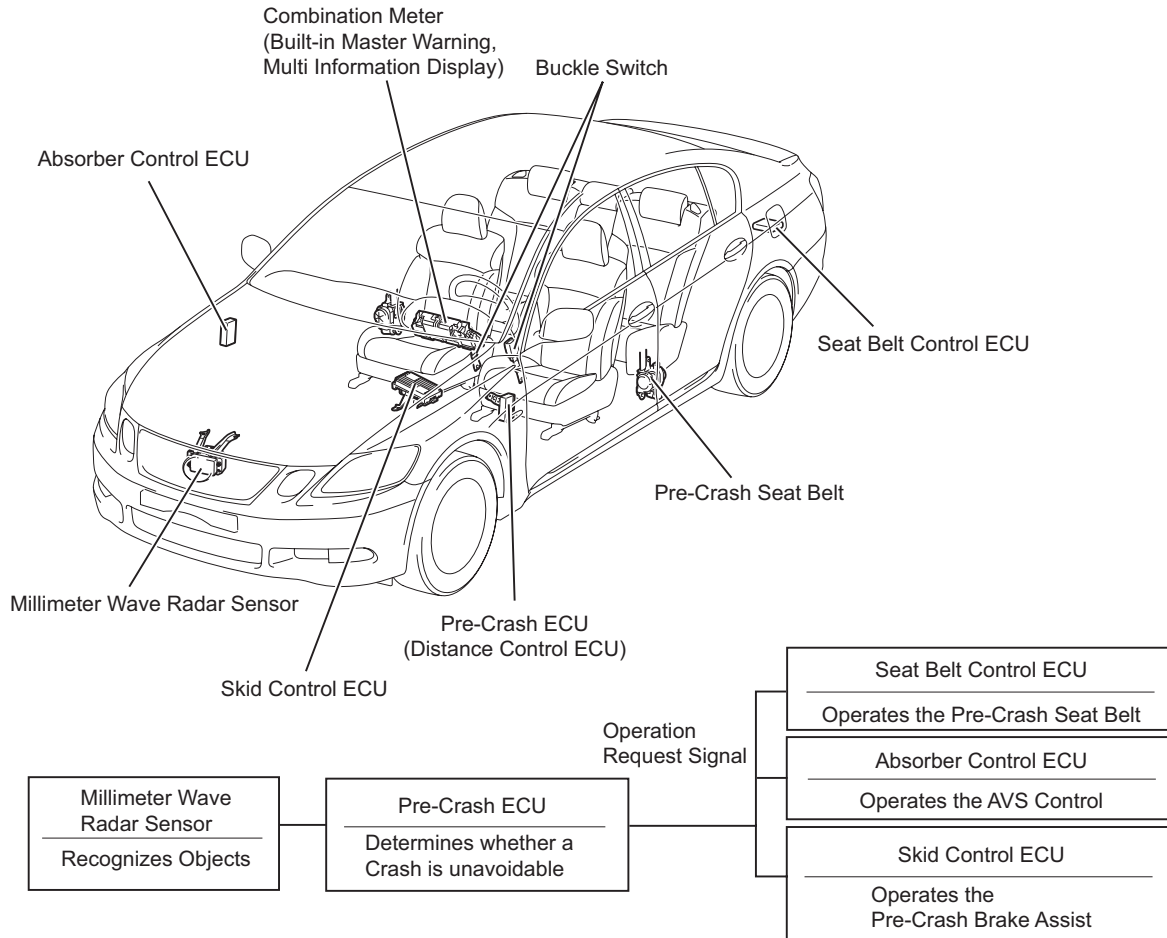


PRE-CRASH SAFETY

Pre-Crash Safety System Outline

- On all models, a (radar type) Pre-Crash Safety System with a millimeter wave radar sensor is available as an optional equipment.
- The Pre-Crash Safety System predicts a crash with a vehicle or obstacle in front of the driven vehicle, retracts the seat belts before a crash, and effects brake assist control, in order to lighten the impact in case of a crash.



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Main Components and Functions

Components	Functions
Millimeter Wave Radar Sensor	Transmits and receives millimeter waves to recognize obstacles.
Pre-Crash ECU(Distance Control ECU)	Determines whether a crash is unavoidable based on information provided by various sensors, and sends an operation request signal.
Skid Control ECU	Sends a control signal to the brake actuator, based on a signal received from the Pre-Crash ECU.
Master Warning, Multi Information Display	Informs the driver of the state of the system.
Absorber Control ECU	Effects AVS control based on a signal received from the Pre-Crash ECU.

Components	Functions
Seat Belt Control ECU	Effects pre-crash seat belt control based on a signal received from the Pre-Crash ECU.
Pre-Crash Seat Belt	Operates a motor to retract the seat belt before a crash.
Buckle Switch	Detects whether the seat belt is buckled or not.

Pre-Crash Safety System Operation Outline

- The millimeter wave radar sensor recognizes a vehicle or an obstacle along the course of the vehicle. The Pre-Crash ECU determines whether a collision is unavoidable based on the position, speed, and course of the object.
- The Pre-Crash ECU transmits this information to the seat belt control ECU, absorber control ECU, and skid control ECU through the CAN (Controller Area Network), in order to operate the respective controls of the Pre-Crash Safety System.

