4. Function and Construction of Component

Components	Function and Construction
Headlight Beam Level Control ECU	● Based on the signals that are transmitted by height control sensor, the occupant detection sensor and the combination meter, this ECU detects the amount of variance of the vehicle posture. ● Based on the detected value, this ECU outputs control signal to the height leveling actuator. ● When the ECU detects a malfunction, it outputs a request signal to illuminate the automatic headlight leveling system warning light to the combination meter. ● This ECU provides initial set control and fail-safe function.
Headlight Leveling Actuator	● Based on the signals received from the headlight beam level control ECU, each headlight leveling actuator moves the reflector in the headlight to vary its LO beam. ● This actuator uses a step motor to precisely regulate the angle of the reflector. ● The headlight leveling actuator is integrated with the headlight unit. In case of an actuator malfunction, the headlight unit must be replaced.
Height Control Sensor	The height control sensor detects the amount of variance of the vehicle height while the vehicle is stopping, and outputs this amount in the form of signal to the headlight beam level control ECU.
Occupant Detection Sensor and Seat Belt Buckle Switch	The ON/OFF signals of the occupant detection sensor that is built into the front passenger seat and the seat belt buckle switch determine whether the front passenger seat is occupied. The signals are then transmitted to the headlight beam level control ECU. The sensor and switch are shared with the seat belt warning system.
Combination Meter	● Outputs the vehicle speed signal to the headlight beam level control ECU. ● Lights up to alert the driver when the headlight beam level control ECU detects the malfunction in this system.
DLC3	Sets the headlight beam level control ECU in the initial mode.