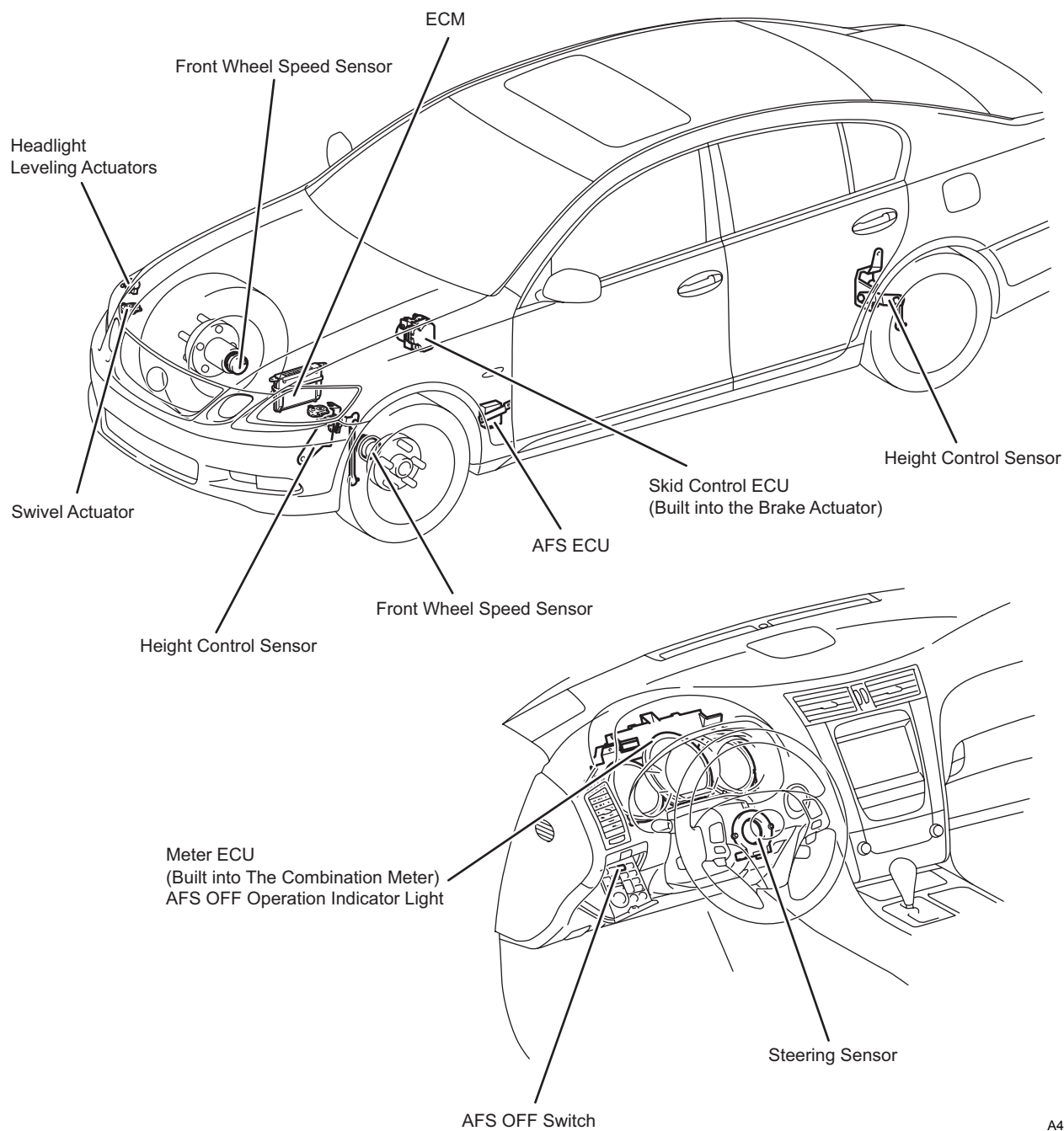


Components

- The intelligent AFS system consists of the following components:



The intelligent AFS system consists of the following components:

Component	Main Function
AFS ECU	• Upon receiving the signals from the height control sensor and the skid control ECU, the AFS ECU determines the vehicle posture and driving conditions, and controls the headlight leveling actuators (auto leveling function). • Upon receiving the signals from the height control sensor and the skid control ECU, the AFS ECU determines the vehicle posture and driving conditions, and controls the headlight leveling actuators (auto leveling function). • If a failure occurs in the swivel or auto leveling function, the AFS ECU will output a request to flash the AFS OFF operation indicator light in the combination meter. • When the driver presses the AFS OFF switch, the AFS ECU will prohibit the control of the swivel function, and output a request to illuminate the AFS OFF operation indicator light in the combination meter.
Swivel Actuators	• Upon receiving control signals from the AFS ECU, the swivel actuators control the direction of the optical axes by actuating the low-beam headlights in the horizontal direction.
Headlight Leveling Actuators	• Upon receiving control signals from the AFS ECU, the headlight leveling actuators control the direction of the optical axes by actuating the low-beam headlights in the vertical direction.
Steering Sensor	• Detects the operating angle of the steering and outputs a steering angle signal to the AFS ECU.
Front Wheel Speed Sensor	• Detects the wheel speed and outputs it to the skid control ECU.
Skid Control ECU	• Upon receiving signals input by the front wheel speed sensors, the skid control ECU outputs vehicle speed signals to the AFS ECU. • Outputs a steering correction signal in the form of a BEAN (Body Electronics Area Network) signal.
AFS OFF Switch	• When the AFS OFF switch is pressed, it cancels the control of the swivel function.
Meter ECU	• Upon receiving an illumination request signal from the AFS ECU, the meter ECU illuminates the AFS OFF operation indicator light in the combination meter. • Upon receiving a flashing request signal from the AFS ECU, the meter ECU flashes the AFS OFF operation indicator light (0.5 seconds ON, and 0.5 seconds OFF).
MPX Body ECU	• Outputs the ON or OFF signal of the headlights in the form of the BEAN (Body Electronics Area Network) signals.
Gateway ECU	• Exchanges data between the BEAN (Body Electronics Area Network) system and the CAN (Controller Area Network) system.
Engine ECU	• Outputs shift position signals via the CAN (Controller Area Network).
Height Control Sensor	• Detects the height of the vehicle and outputs height change signals to the height control ECU.
Height Control ECU	• Upon receiving the signals input by the height control sensor, the height control ECU outputs height change signals to the AFS ECU.