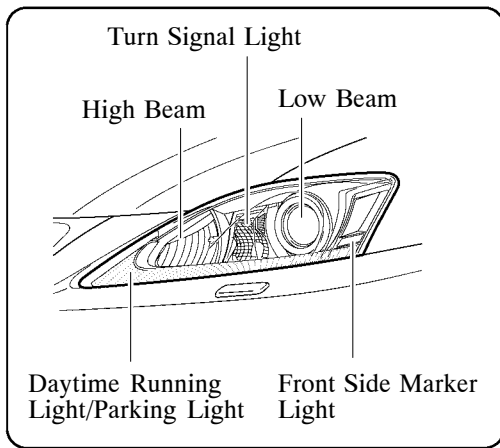


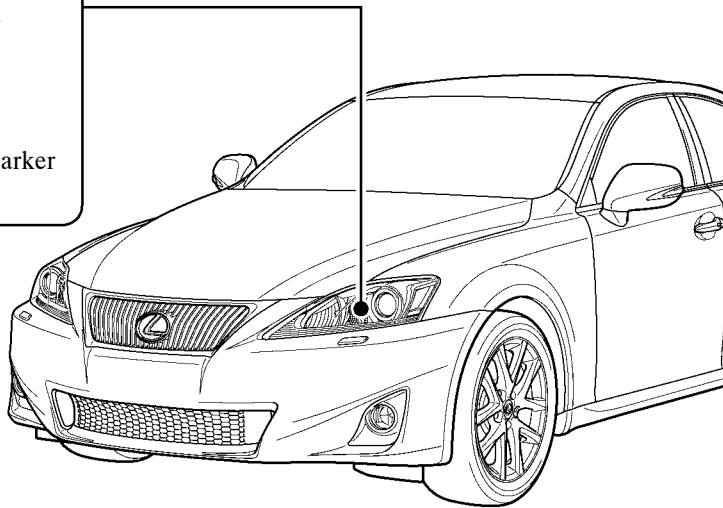
■ LIGHTING

1. Design

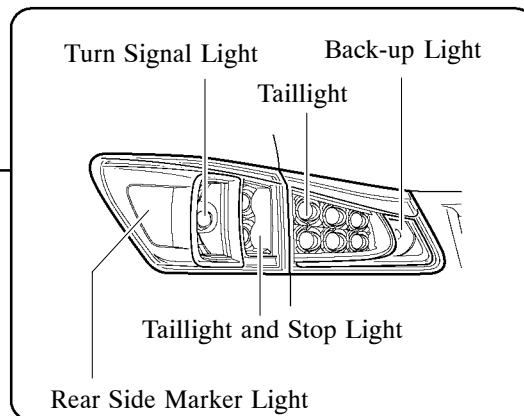
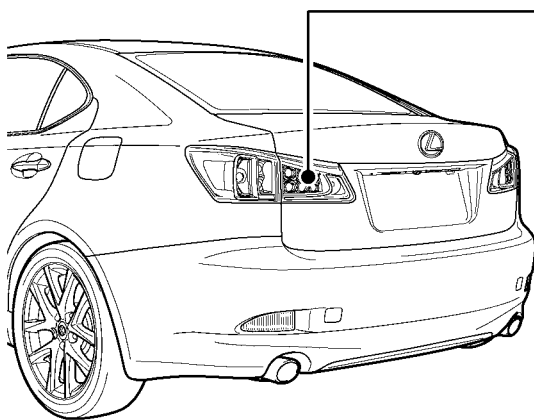
The design of the High Intensity Discharge (HID) headlights and rear combination lights has been changed.



Headlight Assembly (HID)



1660NF18C



Rear Combination Light

1660NF19C

## ► Specification ◀

	Light	Type	W
Headlight Unit	High Beam	Halogen Bulb	65
	Low Beam	Halogen Bulb	55
		Discharge Bulb*1	35
	Turn Signal Light	Wedge Base Bulb (Amber)	21
	Parking Light	Wedge Base Bulb (Clear)	5
		LED	11.3*2/0.7*3
	Front Side Marker Light	LED (2)	0.3
	Fog Light	Halogen Bulb	51
Rear Combination Light	Taillight and Stop Light	LED (2)	0.3/4.0
	Taillight	LED (18)	0.7
	Turn Signal Light	Wedge Base Bulb (Clear)	21
	Rear Side Marker Light	LED (4)	0.3
	Back-up Light	Wedge Base Bulb (Clear)	16
	License Plate Light	LED (1)	0.8

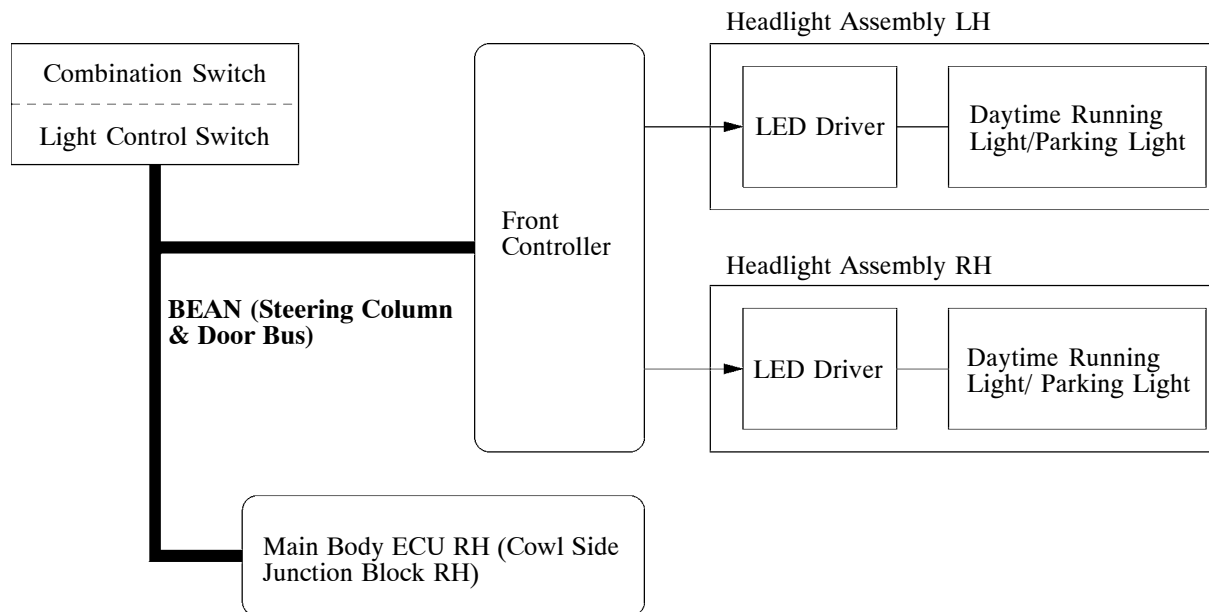
\*1: Models with High Intensity Discharge (HID) Headlight System

\*2: Models with Daytime Running Lights

\*3: Models without Daytime Running Lights

## 2. Daytime Running Light

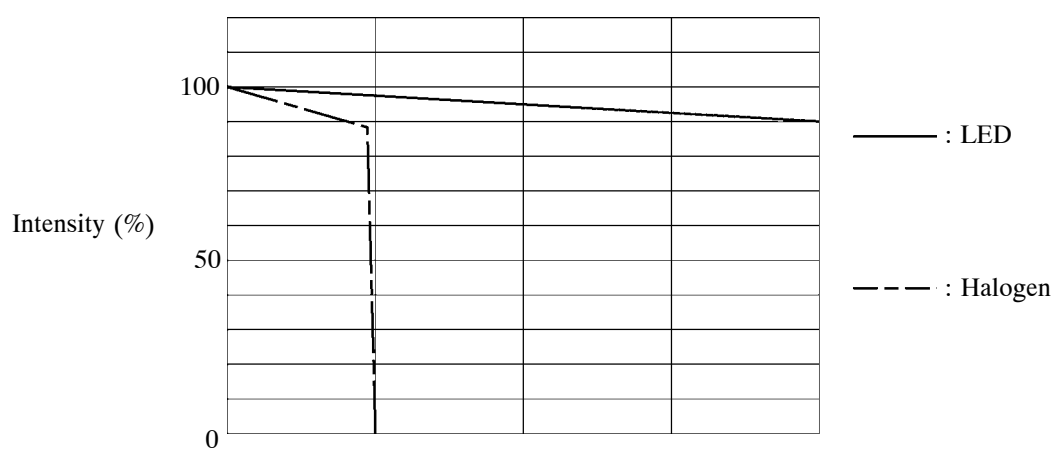
### System Diagram



1670NF25C

### LED Daytime Running Light

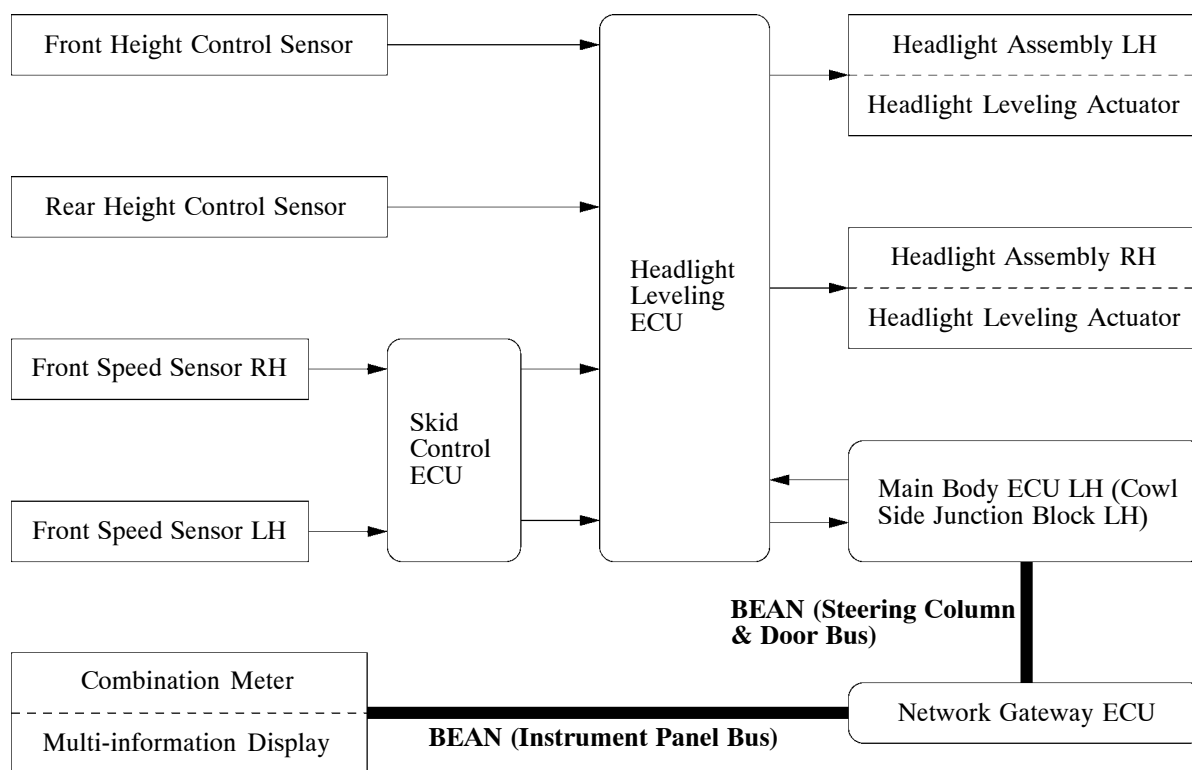
- Specially designed Light Emitting Diode (LED) type daytime running lights/parking lights are used.
- In addition, the use of LED lights enables reduced power consumption compared to halogen lights.
- Compared to a halogen light, even if an LED light is used for a long time, the reduction of brightness over its lifetime is less. In addition, there is almost no possibility of an LED having an open circuit because of vibration. Together, these attributes realize maintenance-free lighting.



1660NF13C

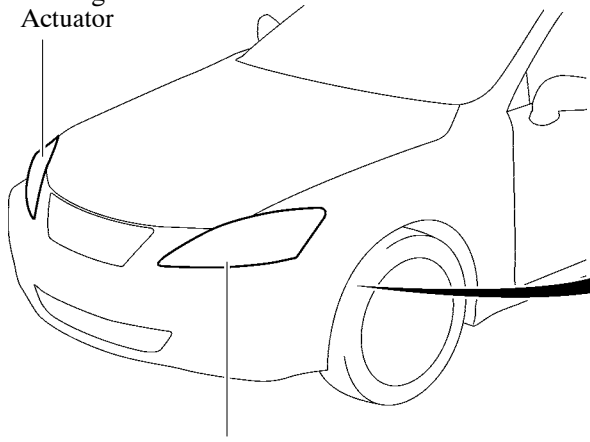
### 3. Automatic Headlight Beam Level Control System

#### System Diagram

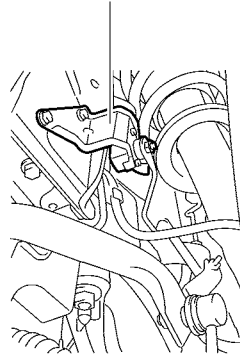


**Layout of Main Component**

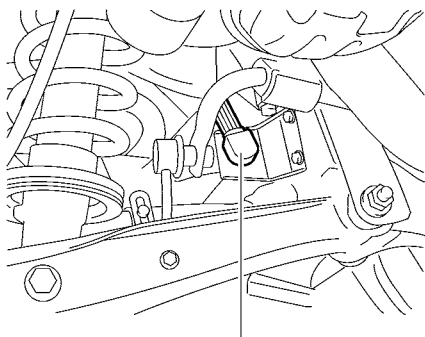
Headlight Assembly  
 • Headlight Level Actuator



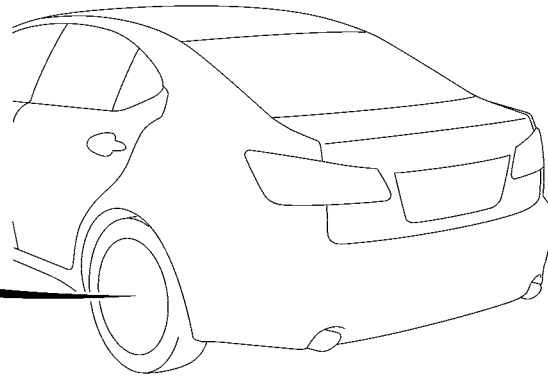
Front Height Control Sensor



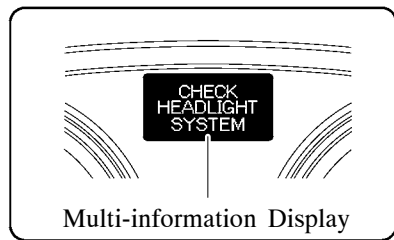
Headlight Assembly  
 • Headlight Level Actuator



Rear Height Control Sensor



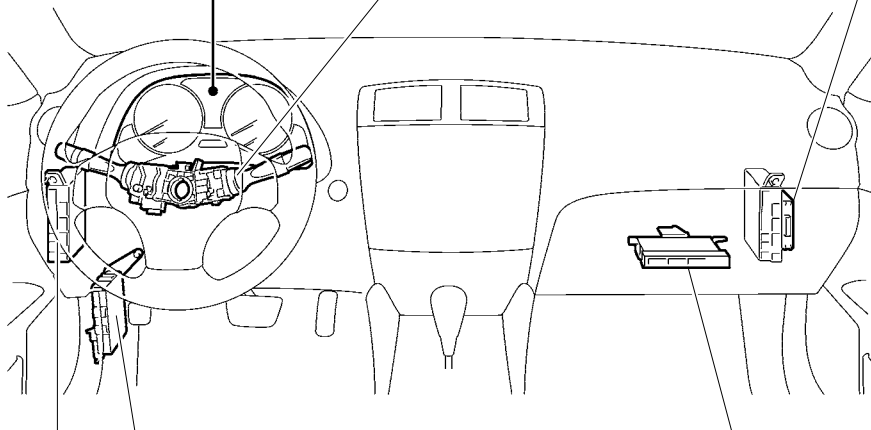
1660NF14C



Multi-information Display

Combination Switch  
 • Light Control Switch

Network Gateway ECU



Main Body ECU LH (Cowl Side Junction Block LH)

Headlight Leveling ECU

Skid Control ECU

1660NF15C

### Function and Construction of Main Components

Component		Function and Construction
Headlight Leveling ECU		<ul style="list-style-type: none"> <li>Based on the signals (front and rear height control sensors, and front RH and LH speed sensors), the headlight leveling ECU detects the changes of the movement of the vehicle.</li> <li>Based on the detected value, the headlight leveling ECU sends an output control signal to the headlight level actuators.</li> </ul>
Headlight Assembly	Headlight Level Actuator	<ul style="list-style-type: none"> <li>Based on the signals received from the headlight leveling ECU, each actuator moves the reflector in the headlight to vary the angle of its low beam.</li> <li>This actuator uses a stepper motor to precisely regulate the angle of the projector.</li> </ul>
Height Control Sensors (Front and Rear LH)		Detects the movement of the vehicle.
Skid Control ECU		Transmits the vehicle speed sensor signal to the headlight leveling ECU.
Speed Sensors (Front RH and LH)		Detects the wheel speed and outputs signals.
Combination Meter	Multi-information Display	The multi-information display displays a warning message to inform the driver when the headlight leveling ECU detects a malfunction in this system.
Main Body ECU LH (Cowl Side Junction Block LH)		<ul style="list-style-type: none"> <li>The main body ECU LH (cowl side junction block LH) receives a malfunction signal from the headlight leveling ECU and transmits it to the combination meter assembly.</li> <li>Transmits the generator signal to the headlight leveling ECU.</li> </ul>