

11. Auto Headlight Beam Leveler System

A: WIRING DIAGRAM

Refer to “Headlight Beam Leveler System” in the wiring diagram.

- Gasoline engine model: <Ref. to WI(w/o HEV)-136, WIRING DIAGRAM, Headlight Beam Leveler System.>
- HEV model: <Ref. to WI(HEV)-134, WIRING DIAGRAM, Headlight Beam Leveler System.>

B: SPECIFICATION

1. AUTO HEADLIGHT BEAM LEVELER CM

Refer to “Control Module I/O Signal” of “AUTO HEADLIGHT BEAM LEVELER SYSTEM (DIAGNOSTICS)” section. <Ref. to AL(diag)-6, ELECTRICAL SPECIFICATION, Control Module I/O Signal.>

C: INSPECTION

Refer to “Basic Diagnostic Procedure” of “AUTO HEADLIGHT BEAM LEVELER SYSTEM (DIAGNOSTICS)” section. <Ref. to AL(diag)-2, Basic Diagnostic Procedure.>

Auto Headlight Beam Leveler System

LIGHTING SYSTEM

D: PROCEDURE

When parts related to the auto headlight beam leveler system are removed or replaced, perform the following procedures to initialize or reinitialize.

NOTE:

Before performing initialization or reinitialization, check the following:

- Vehicle is parked on a level surface.
- The inflation pressure of tires is correct.
- Unload any cargo from the vehicle.
- Vehicle's fuel tank is fully filled.
- Refer to the following chart to determine whether to initialize or reinitialize.

Initialization	When the auto headlight beam leveler CM was replaced with a new module.
Reinitialization	<ul style="list-style-type: none">• When the auto headlight beam leveler CM was replaced with a part from another vehicle.• When suspension parts have been removed or replaced. (Crossmember, front arm, sub frame, lateral link, housing, strut etc.)• When the vehicle height sensor has been replaced or removed.

CAUTION:

If the indicator does not flash three times or the headlight beam does not operate, it can be assumed that there is an open circuit or faulty wiring in the harness of the auto headlight beam leveler CM, vehicle height sensors or headlight assembly. Perform inspection and repair according to the inspection results, then perform initialization/reinitialization again.

- Initialization: <Ref. to LI-20, INITIALIZATION, PROCEDURE, Auto Headlight Beam Leveler System.>
- Reinitialization: <Ref. to LI-20, REINITIALIZATION, PROCEDURE, Auto Headlight Beam Leveler System.>

1. INITIALIZATION

- 1) Check that the indicator in the meter is flashing twice repeatedly.
- 2) Bounce the vehicle several times to normalize the suspension.
- 3) Make certain that someone is seated in the driver's seat.
- 4) Turn the ignition switch to ON, and within 1.5 — 20 seconds, turn the headlight switch OFF → ON for three successive times.
- 5) Make sure that the indicator in the meter flashes three times and then turns OFF, indicating that initialization has been successfully completed. (At this time, the headlight beam drops once, and then returns to the original position.)
- 6) Perform beam adjustment for the headlight. <Ref. to LI-34, ADJUSTMENT, Headlight Assembly.>

2. REINITIALIZATION

- 1) Bounce the vehicle several times to normalize the suspension.
- 2) Make certain that someone is seated in the driver's seat.
- 3) Turn the ignition switch to ON, and, within 1.5 — 10 seconds, turn the headlight switch OFF → ON five or more successive times.
- 4) Check that the headlight beam drops once, then returns to normal.
- 5) After confirming 4), turn the ignition switch to OFF within 30 seconds.
- 6) Turn the ignition switch to ON again, and, within 1.5 — 10 seconds, turn the headlight switch OFF → ON five or more successive times.
- 7) Make sure that the indicator in the meter flashes three times and then turns OFF, indicating that reinitialization has been successfully completed. (At this time, the headlight beam drops once, and then returns to the original position.)
- 8) Perform beam adjustment for the headlight. <Ref. to LI-34, ADJUSTMENT, Headlight Assembly.>

E: NOTE

For operation procedures of each component of the auto headlight beam leveler system, refer to the respective section.

- Auto headlight beam leveler CM: <Ref. to LI-92, Auto Headlight Beam Leveler Control Module.>
- Vehicle height sensor: <Ref. to LI-94, Rear Height Sensor.>