

AUTOMATIC HEADLIGHT BEAM LEVEL CONTROL SYSTEM INITIALIZATION

Note:

- Synchronize the vehicle information when the headlight leveling ECU assembly is replaced with a new one.
 - Initialize the headlight leveling ECU assembly when the headlight leveling ECU assembly is replaced.
 - Initialize the headlight leveling ECU assembly (set the zero point of the height control sensor in the headlight leveling ECU assembly) after the vehicle height changes due to replacement of suspension components or after performing operations such as removal and reinstallation or replacement of the rear height control sensor sub-assembly.
 - Adjust the headlight aim after initializing the headlight leveling ECU assembly.
- When a malfunction is detected in the automatic headlight beam level control system, rear height control sensor sub-assembly signal initialization is impossible. Perform troubleshooting before initialization.

1. SYNCHRONIZE VEHICLE INFORMATION

a. When using the GTS:

- Turn the engine switch off.
- Connect the GTS to the DLC3.
- Turn the engine switch on (IG), and check that the headlight leveling warning light continuously blinks at 0.5 Hz.
- Enter the following menus: Body Electrical / HL AutoLeveling / Utility / ECU Information Sync.

Body Electrical > HL AutoLeveling > Utility

Tester Display
ECU Information Sync

- Check what is displayed on the screen of the GTS and press "Next".
- Check that the headlight leveling warning light continuously blinks 6 times at 2 Hz.
- Press "Exit" and turn the engine switch off.

Note:

After synchronizing vehicle information, initialize the headlight leveling ECU assembly.

b. When not using the GTS:

- Turn the engine switch on (IG), and check that the headlight leveling warning light continuously blinks at 0.5 Hz.
- Turn the low beam headlights on and off 8 times using the light control switch within 20 seconds after turning the engine switch on (IG).

Note:

Turn the low beam headlights on and off at less than 2-second intervals.

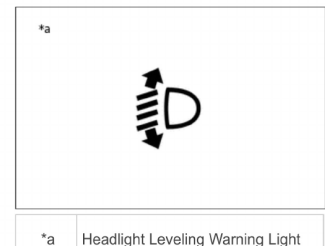
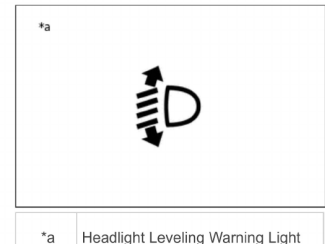
Tip:

If the light control switch operation cannot be finished within 20 seconds, turn the engine switch off. Then, turn the engine switch on (IG) and restart the procedure.

- Check that the headlight leveling warning light continuously blinks 6 times at 2 Hz.
- Turn the engine switch off.

Note:

After synchronizing vehicle information, initialize the headlight leveling ECU assembly.



2. HEADLIGHT LEVELING ECU ASSEMBLY INITIALIZATION

a. Prepare vehicle for initialization

- Unload the trunk and vehicle, ensuring that the spare tire, tools and jack are in their original positions.
- Check that there are no occupants in the vehicle.
- Turn off the headlights.
- Stop the vehicle on a level surface and keep the vehicle height unchanged.

b. Check headlight leveling warning light

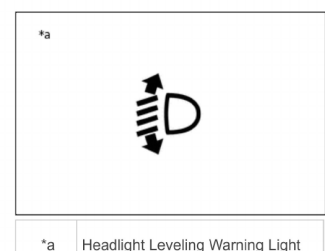
- Turn the engine switch on (IG), and check the headlight leveling warning light.

OK

Condition	Specified Condition
The headlight leveling ECU assembly has been replaced with a new one.	Headlight leveling warning light continuously blinks 6 times at 2 Hz.
Replacement of the rear height control sensor sub-assembly, removal and reinstallation of the rear height control sensor sub-assembly, replacement of the suspension, etc. have been performed.	Headlight leveling warning light comes on for approximately 3 seconds, and then goes off (bulb check function).

Tip:

If the headlight leveling warning light does not come on when turning the engine switch on (IG), perform troubleshooting according to Problem Symptoms Table.



c. Initialization (When using the GTS)

- Turn the engine switch off.
- Connect the GTS to the DLC3.
- Turn the engine switch on (IG).
- Enter the following menus: Body Electrical / HL AutoLeveling / Utility / Height Sensor Initialization.

Body Electrical > HL AutoLeveling > Utility

Tester Display
Height Sensor Initialization

- Check what is displayed on the screen of the GTS and press "Next".

vi. Check the proper "Position ID" by the fuel level according to the table below.

Tip:

The "Position ID" is determined by the present fuel level as shown below.

Fuel Level	Position ID	Number of Times Headlight Leveling Warning Light Blinks
Fuel level is within A range.	EMPTY	1
Fuel level is within B range.	1/4 to over EMPTY	2
Fuel level is within C range.	1/2 to over 1/4	3
Fuel level is within D range.	3/4 to over 1/2	4
Fuel level is within E range.	FULL to over 3/4	5

vii. Check what is displayed on the GTS, select the proper "Position ID" and press "Next".

viii. Press "Exit".

ix. Check the warning light.

Standard

Condition	Specified Condition
The headlight leveling ECU assembly has been replaced with a new one.	Blinks 6 times at 2 Hz → Continuously blinks N*1 times at 2 Hz.
Replacement of the rear height control sensor sub-assembly, removal and reinstallation of the rear height control sensor sub-assembly, replacement of the suspension, etc. have been performed.	Off → Continuously blinks N*1 times at 2 Hz.

Tip:

- *1: The number of times that the warning light blinks is determined by the "Position ID" selected.
- If initialization does not finish normally, restart initialization from procedure (a).

x. Check that initialization finishes normally and turn the engine switch off.

d. Initialization (When not using the GTS)

i. Turn the engine switch on (IG).

ii. Check the specified number of times to turn the low beam headlights on and off.

Tip:

The number of times the low beam headlights need to be turned on and off is determined by the present fuel level as shown below.

Fuel Level	Number of Times to Turn Low Beam Headlights On and Off
Fuel level is within A range.	1
Fuel level is within B range.	2
Fuel level is within C range.	3
Fuel level is within D range.	4
Fuel level is within E range.	5

iii. Turn the engine switch off.

iv. Turn the engine switch on (IG) with the light control switch off.

v. Turn and hold the dimmer switch in the FLASH position, and turn the taillights on and off using the light control switch 3 times.

Note:

Turn the taillights on and off within 5 seconds.

Tip:

When the switch operation is normal, the headlight leveling warning light blinks at 1 Hz.

vi. Turn the low beam headlights on and off according to the specified number of times using the light control switch within 20 seconds.

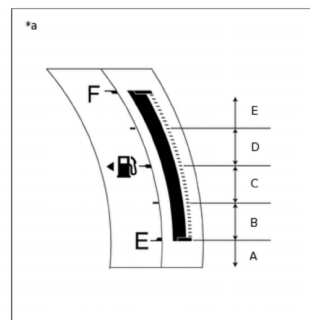
Tip:

Turn the low beam headlights on and off at less than 3-second intervals.

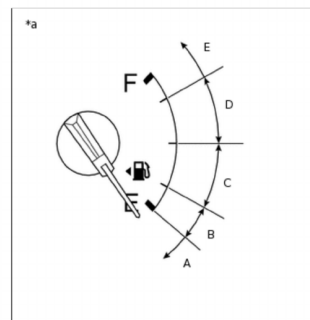
vii. Check the warning light.

Standard

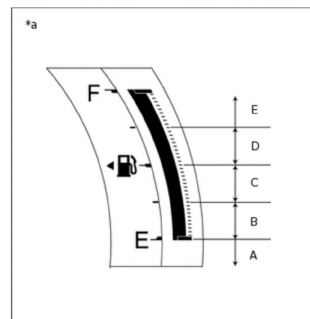
Condition	Specified Condition
The headlight leveling ECU assembly has been replaced with a new one.	Blinks 6 times at 2 Hz → Continuously blinks N*1 times at 2 Hz.



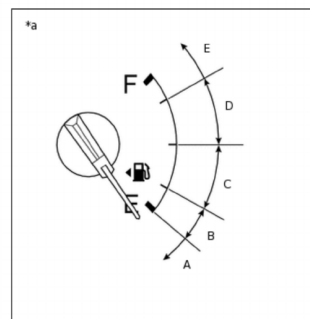
*a Fuel Receiver Gauge (for Sport Package)



*a Fuel Receiver Gauge (for Standard)



*a Fuel Receiver Gauge (for Sport Package)



*a Fuel Receiver Gauge (for Standard)

Condition	Specified Condition
Replacement of the rear height control sensor sub-assembly, removal and reinstallation of the rear height control sensor sub-assembly, replacement of the suspension, etc. have been performed.	Off → Continuously blinks N*1 times at 2 Hz.

Tip:

- *1: The number of times that the warning light blinks is determined by the number of times the low beam headlights are turned on and off.
- If initialization does not finish normally, disconnect SST from the DLC3 and turn the engine switch off. Then, restart initialization from procedure (a).

viii. Check that initialization finishes normally and turn the engine switch off.