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<b>Model Year Start:</b> 2024	<b>Model:</b> Land Cruiser	<b>Prod Date Range:</b> [02/2024 - ]
<b>Title:</b> LIGHTING (EXT): LIGHTING SYSTEM: REGISTRATION; 2024 MY Land Cruiser [02/2024 - ]		

## REGISTRATION

### CAUTION / NOTICE / HINT

#### NOTICE:

- The necessary procedures (adjustment, calibration, initialization or registration) that must be performed after parts are removed and installed, or replaced during No. 1 headlight ECU sub-assembly LH removal/installation are shown below.

REPLACED PART OR PERFORMED PROCEDURE	NECESSARY PROCEDURES	PROCEED TO
Replacement of the No. 1 headlight ECU sub-assembly LH	Synchronize the vehicle information	SYNCHRONIZE VEHICLE INFORMATION
	Perform No. 1 headlight ECU sub-assembly LH initialization	NO. 1 HEADLIGHT ECU SUB-ASSEMBLY LH INITIALIZATION
Replacement of the rear height control sensor sub-assembly RH, removal and reinstallation of the rear height control sensor sub-assembly RH, replacement of the suspension, etc. have been performed	Perform No. 1 headlight ECU sub-assembly LH initialization	NO. 1 HEADLIGHT ECU SUB-ASSEMBLY LH INITIALIZATION

- A new No. 1 headlight ECU sub-assembly LH cannot operate until the vehicle information is registered.
- After replacing the No. 1 headlight ECU sub-assembly LH, it is necessary to perform vehicle information registration and initialization.
- Even if the No. 1 headlight ECU sub-assembly RH is replaced with a new one, synchronize the vehicle information and initialization are not necessary.
- Adjust the headlight aim after initializing the No. 1 headlight ECU sub-assembly LH.

for Single Beam Headlight: Click here [INFO](#)

for Triple Beam Headlight: Click here [INFO](#)

Click here

- When a malfunction is detected in the lighting system, rear height control sensor sub-assembly RH signal initialization is impossible. Perform troubleshooting before initialization.
- The lighting system uses the CAN communication system. First, confirm that there are no malfunctions in the CAN communication system. Refer to the How to Proceed with Troubleshooting procedure.

Click here [INFO](#)

## PROCEDURE

### 1. SYNCHRONIZE VEHICLE INFORMATION (When using the GTS)

#### NOTICE:

- Make sure to synchronize the vehicle information before performing initialization.
- If synchronization fails, make sure to turn the ignition switch off then back ON before performing synchronization again.

(a) Turn the ignition switch off.

(b) Connect the GTS to the DLC3.

- (c) Turn the ignition switch to ON.
- (d) Check that the "Headlight System Unavailable Visit Your Dealer" warning message is displayed on the multi-information display.
- (e) Enter the following menus: Body Electrical / Headlight Control / Utility / Vehicle Information Registration.

**Body Electrical > Headlight Control > Utility**

- (f) Check the display on the GTS and press "Next".
- (g) Check that the "Headlight System Unavailable Visit Your Dealer" warning message continuously blinks 6 times at 2 Hz on the multi-information display.

**HINT:**

- If the "Headlight System Unavailable Visit Your Dealer" warning message does not start blinking on the multi-information display after performing the procedure again.
- If the "Headlight System Unavailable Visit Your Dealer" warning message changes from blinking to displayed on the multi-information display, the No. 1 headlight ECU sub-assembly LH may be malfunctioning.

- (h) Press "Exit".
- (i) Turn the ignition switch off.

**NOTICE:**

After synchronizing the vehicle information, initialize the No. 1 headlight ECU sub-assembly LH.

**2. SYNCHRONIZE VEHICLE INFORMATION (When not using the GTS)****NOTICE:**

- Make sure to synchronize the vehicle information before performing initialization.
- If synchronization fails, make sure to turn the ignition switch off then back ON before performing synchronization again.

- (a) Turn the ignition switch to ON.
- (b) Check that the "Headlight System Unavailable Visit Your Dealer" warning message is displayed on the multi-information display.
- (c) Using the headlight dimmer switch, turn the low beam headlights on and off 8 times within 20 seconds after turning the ignition switch to ON.

**NOTICE:**

If the low beam headlights illuminate when the ignition switch is ON, shine a light on the automatic light control sensor to turn the low beam headlights off before operating the headlight dimmer switch.

**HINT:**

If this step cannot be completed within 20 seconds, turn the ignition switch off. Then, turn the ignition switch to ON and restart the procedure.

- (d) Check that the "Headlight System Unavailable Visit Your Dealer" warning message continuously blinks 6 times at 2 Hz on the multi-information display.

**HINT:**

- If the "Headlight System Unavailable Visit Your Dealer" warning message does not start blinking on the multi-information display after performing the procedure again.

- If the "Headlight System Unavailable Visit Your Dealer" warning message changes from blinking to displayed on the multi-information display, turn the ignition switch off and then to ON. If "Headlight System Unavailable Visit Your Dealer" is displayed immediately after the ignition switch is turned to ON, the No. 1 headlight ECU sub-assembly LH may be malfunctioning.

(e) Turn the ignition switch off.

**NOTICE:**

After synchronizing the vehicle information, initialize the No. 1 headlight ECU sub-assembly LH.

**3. NO. 1 HEADLIGHT ECU SUB-ASSEMBLY LH INITIALIZATION (When using the GTS)**

**NOTICE:**

Make sure to synchronize the vehicle information before performing initialization.

(a) Prepare vehicle for initialization

- Unload the vehicle, ensuring that the spare tire, tools and jack are in their original positions.
- Check that there are no occupants in the vehicle.
- Stop the vehicle on a level surface and keep the vehicle height unchanged.
- Check that rear height control sensor sub-assembly RH is connected correctly.

(b) Check the warning message on the multi-information display.

(1) Turn the ignition switch to ON, and check the condition of the warning message on the multi-information display.

OK:

CONDITION	SPECIFIED CONDITION
The No. 1 headlight ECU sub-assembly LH has been replaced with a new one.	"Headlight Leveling System Uninitialized" blinks 6 times at 2 Hz.
Replacement of the rear height control sensor sub-assembly RH, removal and reinstallation of the rear height control sensor sub-assembly RH, replacement of the suspension, etc. have been performed.	"Headlight Leveling System Uninitialized" is not displayed.

**HINT:**

If the condition of the warning message is different than listed in the table above, the No. 1 headlight ECU sub-assembly LH or combination meter assembly may be malfunctioning.

(c) Perform initialization.

- (1) Turn the ignition switch off.
- (2) Connect the GTS to the DLC3.
- (3) Turn the ignition switch to ON.
- (4) Enter the following menus: Body Electrical / Headlight Control / Utility / Height Sensor Initialization.

**Body Electrical > Headlight Control > Utility**

TESTER DISPLAY
Height Sensor Initialization

- (5) Check the display on the GTS and press "Next".
- (6) Press "Exit".

- (7) Check the condition of the "Headlight Leveling System Uninitialized" warning message on the multi-information display.

Standard:

CONDITION	SPECIFIED CONDITION
The No. 1 headlight ECU sub-assembly LH has been replaced with a new one.	Blinks 6 times at 2 Hz → Blinks 3 times at 2 Hz continuously for 1.5 seconds and then turns off
Replacement of the rear height control sensor sub-assembly RH, removal and reinstallation of the rear height control sensor sub-assembly RH, replacement of the suspension, etc. have been performed.	Off → Blinks 3 times at 2 Hz continuously for 1.5 seconds and then turns off

**HINT:**

If initialization does not finish normally, restart the initialization procedure from step (i).

- (8) Check that initialization finishes normally and turn the ignition switch off.

**4. NO. 1 HEADLIGHT ECU SUB-ASSEMBLY LH INITIALIZATION (When not using the GTS)**

**NOTICE:**

Make sure to synchronize the vehicle information before performing initialization.

- (a) Prepare vehicle for initialization

- Unload the vehicle, ensuring that the spare tire, tools and jack are in their original positions.
- Check that there are no occupants in the vehicle.
- Stop the vehicle on a level surface and keep the vehicle height unchanged.
- Check that rear height control sensor sub-assembly RH is connected correctly.

- (b) Check the warning message on the multi-information display.

- (1) Turn the ignition switch to ON, and check the condition of the warning message on the multi-information display.

OK:

CONDITION	SPECIFIED CONDITION
The No. 1 headlight ECU sub-assembly LH has been replaced with a new one.	"Headlight Leveling System Uninitialized" blinks 6 times at 2 Hz.
Replacement of the rear height control sensor sub-assembly RH, removal and reinstallation of the rear height control sensor sub-assembly RH, replacement of the suspension, etc. have been performed.	"Headlight Leveling System Uninitialized" is not displayed.

- (c) Perform initialization.

- (1) Turn the ignition switch off.
- (2) Turn the light control switch to the AUTO position.
- (3) Shine a light on the automatic light control sensor.

**HINT:**

If troubleshooting is being performed in a bright area, such as outside on a sunny day, it will not be necessary to perform this step.

(4) Perform the following steps within 5 seconds.

1. Turn the ignition switch to ON.
2. With the dimmer switch in high flash position, turn it from AUTO to TAIL to AUTO again 3 times or more.
3. Turn the light control switch to the AUTO position and move the dimmer switch in low position.

**HINT:**

- Perform the above operation within 5 seconds.
- When initialization mode has been entered, "Headlight Leveling System Uninitialized" warning message on the multi-information display starts blinking at 1 Hz.

(5) Check the condition of the "Headlight Leveling System Uninitialized" warning message on the multi-information display.

Standard:

CONDITION	SPECIFIED CONDITION
The No. 1 headlight ECU sub-assembly LH has been replaced with a new one.	Blinks 6 times at 2 Hz → Blinks 3 times at 2 Hz continuously for 1.5 seconds and then turns off
Replacement of the rear height control sensor sub-assembly RH, removal and reinstallation of the rear height control sensor sub-assembly RH, replacement of the suspension, etc. have been performed.	Off → Blinks 3 times at 2 Hz continuously for 1.5 seconds and then turns off

**HINT:**

If initialization does not finish normally, restart the initialization procedure from step (i).

(6) Check that initialization finishes normally and turn the ignition switch off.

