RVM WARNING INDICATOR LIGHT ILLUMINATES WHILE NOT UNDER ILLUMINATION CONDITIONS [REAR VEHICLE MONITORING SYSTEM]

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Note
- If there is any vehicle malfunction complaint lodged by a customer, perform FOREWORD [REAR VEHICLE MONITORING SYSTEM] malfunction diagnosis according to the troubleshooting procedure.

Description
- The RVM warning indicator light illuminates without satisfying its illumination conditions (**vehicle speed is 30 km/h {19 mph} or more**, turn-signals are off, and a vehicle is in the detection area).

Possible malfunction
- Rear vehicle monitoring control modules false-detect that a vehicle is inside detection area when it is actually outside of it, or cannot determine that a vehicle is entering blind-spot area.
  - — Rear vehicle monitoring control module radar is not emitted inside detection area (deviates from blind-spot area or adjacent lanes)
    - Damage, deformity or looseness to rear vehicle monitoring bracket or vehicle frame (including moderate impacts)
    - Incorrect installation of rear bumper, soiling to radar emitting/receiving area, application of stickers (including transparent types), repairs using putty application
  - — Effect of non-genuine, after-market electronic device installation

Note
- The radar sensor cannot receive echo-back correctly if there is a thick moisture film (such as condensation) or excessive soiling covering the rear bumper radar emitting/receiving areas.
- Non-genuine rear bumper or paint, or installation of after-market parts may negatively affect radar echo-back ability.

- RVM warning indicator light illumination circuit disabled
  - — Rear vehicle monitoring control module (LH) internal malfunction (RVM warning indicator light illumination circuit disabled)
  - — Rear vehicle monitoring control module (RH) malfunction (outputs incorrect illumination request)

Diagnostic Procedure

Warning
- **When performing a road test, always verify the safety of the surrounding area before performing the test.**
- **Do not perform a road test at a speed which exceeds the legal speed limit.**
- **To assure safety, perform a road test using two people when the vehicle is being driven. (One drives the vehicle and the other operates the M-MDS.)**

Step	Inspection		Action
1	**VERIFY REAR BUMPER CONDITION** • Inspect the rear bumper at the rear vehicle monitoring control modules installation areas for the following: — Installation condition — Application of stickers (including transparent types) — Excessive soiling — Repairs using putty • Is the rear bumper condition normal?	Yes	Go to the next step.
		No	Repair or replace the malfunctioning part, or replace the rear bumper. (See REAR BUMPER REMOVAL/INSTALLATION.)

Step	Inspection		Action
2	**VERIFY INSTALLATION CONDITION OF REAR VEHICLE MONITORING CONTROL MODULES** • Remove the rear bumper. (See REAR BUMPER REMOVAL/ INSTALLATION.) • Inspect the installation condition of the rear vehicle monitoring control modules for the following: — Looseness — Damage or deformity to the bracket — Distortion at vehicle installation surface • Is the rear vehicle monitoring control modules installation condition normal?	Yes	Go to the next step.
		No	Repair or replace the malfunctioning location.
3	**VERIFY IF MALFUNCTION CAUSE IS AFTER-MARKET ELECTRONIC DEVICE INSTALLATION** • Disconnect the non-genuine, after-market electronic device connectors. • Verify if malfunction symptom recurs as stated by customer. • Does the malfunction recur?	Yes	Go to the next step.
		No	Explain to the customer that the malfunction occurred due to the after-market electronic device installation.
4	**VERIFY IF MALFUNCTION CAUSE IS RVM PROXIMITY INDICATOR LIGHT ILLUMINATION CIRCUIT RELATED** • Turn the following rear vehicle monitoring system simulation function items on and off using the M-MDS simulation function. (See ACTIVE COMMAND MODES INSPECTION [REAR VEHICLE MONITORING SYSTEM].) — WRN_IND_R — WRN_IND_L • Does the RVM warning indicator light illuminate/turn off?	Yes	Go to Step 6.
		No	Go to the next step.
5	**DETERMINE IF MALFUNCTION CAUSE IS REAR VEHICLE MONITORING CONTROL MODULES OR RVM WARNING INDICATOR LIGHTS** • Inspect the following: **RVM warning indicator light (RH) related:** — RVM warning indicator light (RH) — Wiring harness between RVM warning indicator light (RH) terminal G and rear vehicle monitoring control module (LH) terminal D — Wiring harness between RVM warning indicator light (RH) terminal H and rear vehicle monitoring control module (LH) terminal C **RVM warning indicator light (LH) related:** — RVM warning indicator light (LH) — Wiring harness between RVM warning indicator light (LH) terminal G and rear vehicle monitoring control module (LH) terminal K — Wiring harness between RVM warning indicator light (LH) terminal H and rear vehicle monitoring control module (LH) terminal G • Is any malfunction verified?	Yes	Repair or replace the malfunctioning location.
		No	Replace the rear vehicle monitoring control module (LH). (See REAR VEHICLE MONITORING CONTROL MODULE REMOVAL/INSTALLATION.)
6	**INSPECT REAR VEHICLE MONITORING CONTROL MODULES** • Inspect the malfunctioning rear vehicle monitoring control module. (See REAR VEHICLE MONITORING CONTROL MODULE INSPECTION.) • Is the rear vehicle monitoring control module normal?	Yes	Temporary malfunction with the radar echo-back. If the same symptom recurs repeatedly, replace the rear vehicle monitoring control module. (See REAR VEHICLE MONITORING CONTROL MODULE REMOVAL/INSTALLATION.)
		No	Replace the applicable rear vehicle monitoring control module. (See REAR VEHICLE MONITORING CONTROL MODULE REMOVAL/INSTALLATION.)