RVM WARNING INDICATOR LIGHT DOES NOT ILLUMINATE UNDER ILLUMINATION CONDITIONS [REAR VEHICLE MONITORING SYSTEM]

id0903z7014300

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 flashes/does not illuminate while under the illumination conditions (**Vehicle speed above 30 km/h {19 mph}**, turn-signals off, and vehicle in detection area).

Possible malfunction
- Rear vehicle monitoring control modules false-detect that a vehicle is outside detection area when it is actually inside of it, or cannot determine that no 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 installation 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
  - — Rear vehicle monitoring control module radar does not receive echo-back correctly
    - Rear vehicle monitoring control module malfunction
    - 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 disabled
  - — RVM warning indicator light malfunction
  - — Rear vehicle monitoring control module (LH) malfunction (RVM warning indicator light illumination circuit malfunction)

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	**DETERMINE IF MALFUNCTION CAUSE IS RVM WARNING LIGHT (ORANGE) OR RVM WARNING INDICATOR LIGHT ILLUMINATION CIRCUIT** • Turn the following rear vehicle monitoring system simulation items on and off using the M-MDS. (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 3.
		No	Go to the next step.

Step	Inspection		Action
2	**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.)
3	**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.)
4	**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.
5	**VERIFY IF MALFUNCTION CAUSE IS AFTER-MARKET ELECTRONIC DEVICE INSTALLATION** • 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.
6	**INSPECT REAR VEHICLE MONITORING CONTROL MODULES** • Inspect the malfunctioning rear vehicle monitoring control module. • 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.)