

Parking Lamp Circuit

Description

The IPDM E/R (intelligent power distribution module engine room) controls the tail lamp relay based on inputs from the BCM via the CAN communication lines. When the tail lamp relay is energized, power flows through fuse 37, located in the IPDM E/R. Power then flows to the front and rear combination lamps.

Component Function Check

1. CHECK PARKING LAMP OPERATION

⊗ WITHOUT CONSULT-III

1. Activate IPDM E/R auto active test.
2. Check that the parking lamp is turned ON.

Ⓜ CONSULT-III

1. Select "EXTERNAL LAMP" of IPDM E/R active test item.
2. With operating the test items, check that the parking lamp is turned ON.

TAIL : Parking lamp ON

OFF : Parking lamp OFF

Is the parking lamp turned ON?

YES >> Parking lamp circuit is normal.

NO >> Refer to ["Diagnosis Procedure"](#).

Diagnosis Procedure

1. CHECK PARKING LAMP FUSES

1. Turn the ignition switch OFF.
2. Check that the following fuses are not open.

Unit	Location	Fuse No.	Capacity
Parking lamps	IPDM E/R	37	10A

Is the fuse open?

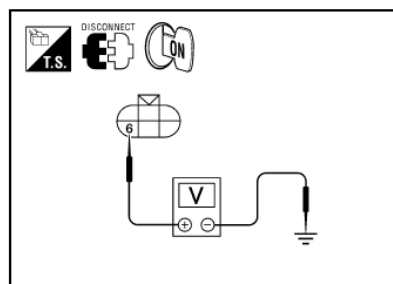
YES >> Repair the harness and replace the fuse.

NO >> GO TO 2

2. CHECK TAIL LAMP RELAY OUTPUT (VOLTAGE)

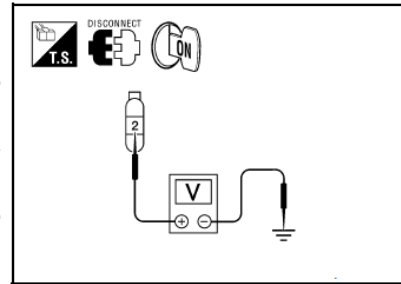
1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp connector, rear combination lamp connector and license plate lamp connector.
3. Turn the ignition switch ON.
4. Turn the parking lamps ON.
5. With the parking lamps ON, check voltage between the front combination lamp connectors and ground.

(+)		Terminal	(-)	Voltage
Connector				
LH	E11	6	Ground	Battery voltage
RH	E107			



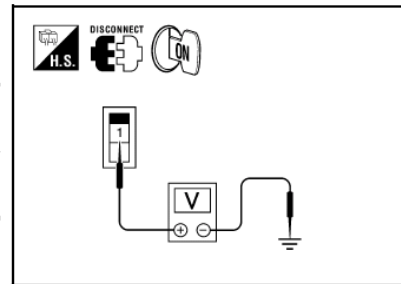
6. With the parking lamps ON, check voltage between the rear combination lamp connectors and ground.

(+)		Terminal	(-)	Voltage
Connector				
LH	B70	2	Ground	Battery voltage
RH	B130			



7. With the parking lamps ON, check voltage between the license plate lamp connector and ground

(+)		Terminal	(-)	Voltage
Connector				
LH	C106	1	Ground	Battery voltage
RH	C107			



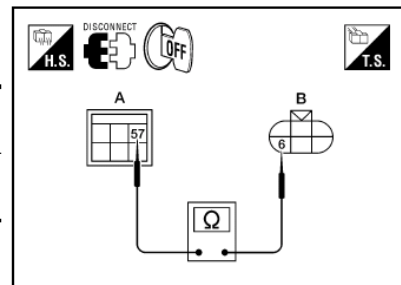
Are voltage readings as specified?

- YES >> GO TO 4
- NO >> GO TO 3

3. CHECK PARKING, LICENSE PLATE AND TAIL LAMP CIRCUIT (OPEN)

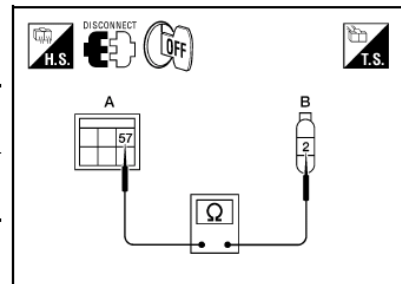
1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between the IPDM E/R harness connector (A) and the front combination lamp harness connector (B).

A			B		Continuity
Connector	Terminal	Connector	Terminal		
LH	E124	E11	6	Yes	
RH		E107			



4. Check continuity between the IPDM E/R harness connector (A) and the rear combination lamp harness connector (B).

A			B		Continuity
Connector	Terminal	Connector	Terminal		
LH	E124	B70	2	Yes	
RH		B130			



5. Check continuity between the IPDM E/R harness connector (A) and license plate lamp connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
E124	57	C106	1	Yes
		C107		

Are continuity test results as specified?

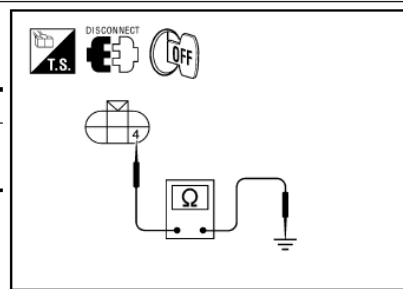
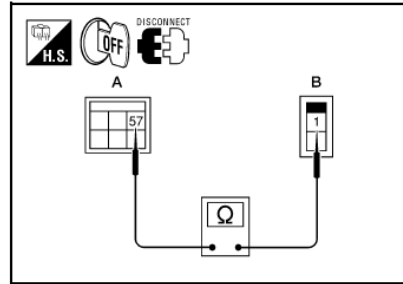
YES >> GO TO 4

NO >> Repair the harnesses or connectors.

4. CHECK PARKING, LICENSE AND TAIL LAMP GROUND CIRCUITS

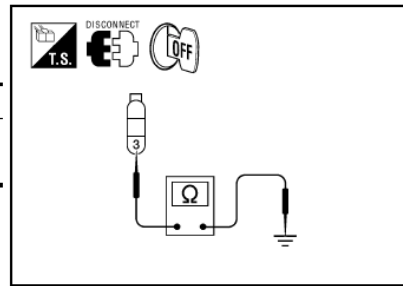
1. Check continuity between the front combination lamp harness connectors E11 and E107 terminal 4 and ground.

Connector	Terminal	—	Continuity
LH	E11	4	Ground
RH	E107		



2. Check continuity between the rear combination lamp harness connectors B70 and B130 terminal 3 and ground.

Connector	Terminal	—	Continuity
LH	B70	3	Ground
RH	B130		



3. Check continuity between the license plate lamp harness connectors and ground.

Connector	Terminal	—	Continuity
C106	2	Ground	Yes
C107			

Does continuity exist?

YES >> Inspect the parking lamp bulb.

NO >> Repair the harness.

