Turn Signal Lamp Circuit

Description

The BCM monitors inputs from the combination switch to determine when to activate the turn signals. The BCM outputs voltage direction to the left and right turn signals during turn signal operation or both during hazard warning operation. The BCM sends a turn signal indicator request to the combination meter via the CAN communication lines.
The BCM performs the fast flasher operation (fail-safe) if any bulb or harness of the turn signal lamp circuit is open.
NOTE:
Turn signal lamp blinks at normal speed when using the hazard warning lamp.

Component Function Check

1.CHECK TURN SIGNAL LAMP

CONSULT-III
1. Select "FLASHER" of BCM (FLASHER) active test item.
2. With operating the test items, check that the turn signal lamp blinks.

LH	**: Turn signal lamp LH blinking**
RH	**: Turn signal lamp RH blinking**
OFF	**: The turn signal lamp OFF**

Does the turn signal lamp blink?

YES >> Turn signal lamp circuit is normal.
NO >> Refer to "Diagnosis Procedure".

Diagnosis Procedure

1.CHECK TURN SIGNAL LAMP BULB

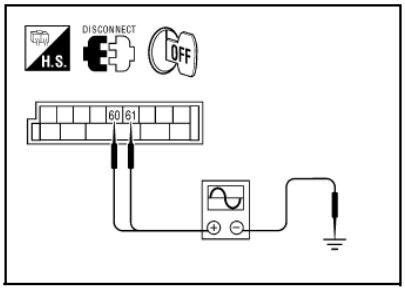
Check the applicable lamp bulb to be sure the proper bulb standard is in use and the bulb is not open.

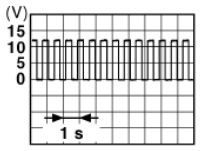
Is the bulb OK?

YES >> GO TO 2
NO >> Replace the bulb.

2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the front combination lamp connector or the rear combination lamp connector.
3. Turn the ignition switch ON.
4. With turn signal switch operating, check the voltage between the BCM harness connector M20 and ground.



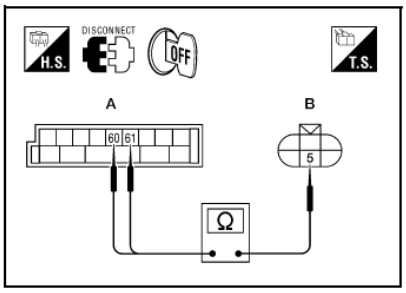
(+)			(−)	Voltage
Connector		Terminal		
M20	LH	60	Ground	
	RH	61		

Is voltage reading as specified?

YES >> GO TO 3
NO >> Replace BCM.

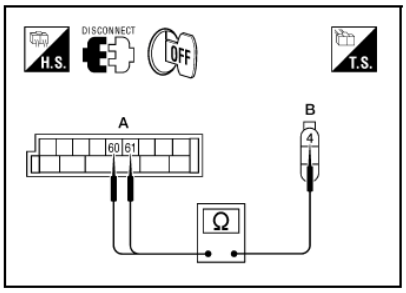
3.CHECK TURN SIGNAL LAMP CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect BCM connector M20.
3. Check continuity between the BCM harness connector M20 and the front combination lamps.



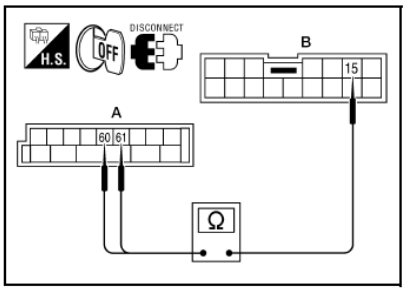
A			B		Continuity
Connector		Terminal	Connector	Terminal	
Front LH	M20	60	E11	5	Yes
Front RH		61	E107		

4. Check continuity between the BCM harness connector M20 and the rear combination lamp connectors.



A			B		Continuity
Connector		Terminal	Connector	Terminal	
Rear LH	M20	60	B35	4	Yes
Rear RH		61	B105	4	

5. Check continuity between the BCM harness connector M20 and the door mirror connectors (if equipped with turn signals in the mirrors).



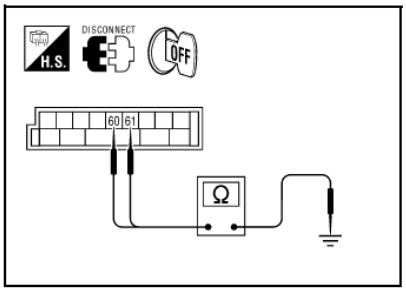
A			B		Continuity
Connector		Terminal	Connector	Terminal	
Door mirror LH	M20	60	D4	15	Yes
Door mirror RH		61	D107	15	

Are continuity test results as specified?

YES >> GO TO 4
NO >> Repair the harnesses or connectors.

4.CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector M20 and ground.



Connector		Terminal	—	Continuity
LH	M20	60	Ground	No
RH		61		

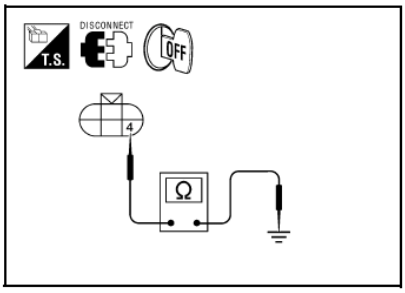
Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> GO TO 5

5.CHECK TURN SIGNAL LAMP GROUND CIRCUIT

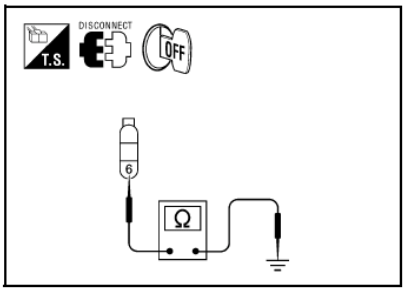
1. Check continuity between the front combination lamp harness connectors and ground.

Connector		Terminal	—	Continuity
Front LH	E11	4	Ground	Yes
Front RH	E107			



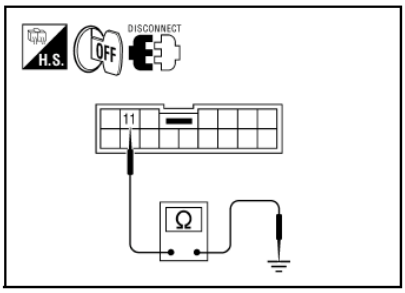
2. Check continuity between the rear combination lamp harnness connectors and ground.

Connector		Terminal	—	Continuity
Rear LH	B35	6	Ground	Yes
Rear RH	B105			



3. Check continuity between the door mirrors and ground (if equipped with turn signals in the mirrors).

Connector		Terminal	—	Continuity
Door mirror RH	D107	11	Ground	Yes
Door mirror LH	D4			



Are continuity test results as specified?

YES >> Replace the malfunctioning lamp.
NO >> Repair the harnesses or connectors.