2005 Nissan-Datsun 350Z V6-3.5L (VQ35)

Vehicle > Sensors and Switches > Sensors and Switches - Lighting and Horns > Combination Switch > Testing and Inspection > Component Tests and General Diagnostics

COMPONENT TESTS

Combination Switch Inspection (Steps 1 - 2)

Combination Switch Inspection   AKS00APB

1. SYSTEM CHECK

1. Referring to table below, check which system malfunctioning switch belongs to.

System 1	System 2	System 3	System 4	System 5
—	FR WASHER	FR WIPER LO	TURN LH	TURN RH
FR WIPER HI	—	FR WIPER INT	PASSING	HEAD LAMP 1
INT VOLUME 1	RR WASHER	—	HEAD LAMP 2	HI BEAM
RR WIPER INT	INT VOLUME 3	—	—	LIGHT SW 1ST
INT VOLUME 2	RR WIPER ON	—	—	—

>> Check the system to which malfunctioning switch belongs, and GO TO 2.

2. SYSTEM CHECK

Ⓐ With CONSULT-II

CAUTION:
If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Connect CONSULT-II, and select "COMB SW" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR".
3. Select "START", and confirm that other switches in malfunctioning system operate normally.
    Example: When the HI BEAM switch is malfunctioning, confirm that "TURN RH", "HEAD LAMP 1" and "LIGHT SW 1 ST" in System 5, to which the HI BEAM switch belongs, turn ON-OFF normally.


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                DATA MONITOR

  MONITOR

  TURN SIGNAL R        OFF
  TURN SIGNAL L        OFF
  HIBEAM SW            OFF
  HEAD LAMP SW1        OFF
  HEAD LAMP SW2        OFF
  LIGHT SW 1ST         OFF
  PASSING SW           OFF
  AUTO LIGHT SW        OFF
  FR FOG SW            OFF

                       Page Down
                       RECORD
  MODE  BACK  LIGHT  COPY
                                   SKIA7075E
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Ⓧ Without CONSULT-II
Operating combination switch, and confirm that other switches in malfunctioning system operate normally.
Example: When the HI BEAM switch is malfunctioning, confirm that "TURN RH", "HEAD LAMP 1" and "LIGHT SW 1 ST" in System 5, to which HI BEAM switch belongs, turn ON-OFF normally.
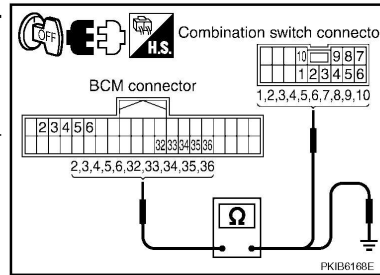
Check results

Other switches in malfunctioning system operate normally.>>Replace lighting switch or wiper switch.
Other switches in malfunctioning system do not operate normally.>>GO TO 3.

Combination Switch Inspection (Step 3)

3. HARNESS INSPECTION

1. Turn ignition switch OFF.
2. Disconnect BCM and combination switch connectors.
3. Check for continuity between BCM harness connector of the suspect system and the corresponding combination switch connector terminals.

Suspect system	Terminal					Continuity
	BCM			Combination switch		
	Connector	Terminal (Wire color)		Connector	Terminal (Wire color)	
1	M90	Input 1	6 (YG)	M29	6 (YG)	Yes
		Output 1	36 (W/R)		1 (W/R)	
2		Input 2	5 (Y/R)		7 (Y/R)	
		Output 2	35 (W/G)		2 (W/G)	
3		Input 3	4 (PU/W)		10 (PU/W)	
		Output 3	34 (W/L)		3 (W/L)	
4		Input 4	3 (L/W)		9 (L/W)	
		Output 4	33 (G)		4 (G)	
5		Input 5	2 (GY)		8 (GY)	
		Output 5	32 (G/B)		5 (G/B)	

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4. Check for continuity between each terminal of BCM harness connector in suspect malfunctioning system and ground.

Suspect system	Terminal				Continuity
	BCM				
	Connector	Terminal (Wire color)			
1	M90	Input 1	6 (YG)	Ground	No
		Output 1	36 (W/R)		
2		Input 2	5 (Y/R)		
		Output 2	35 (W/G)		
3		Input 3	4 (PU/W)		
		Output 3	34 (W/L)		
4		Input 4	3 (L/W)		
		Output 4	33 (G)		
5		Input 5	2 (GY)		
		Output 5	32 (G/B)		

OK or NG

OK   >> GO TO 4.
NG   >> Check harness between BCM and combination switch for open or short circuit.

Combination Switch Inspection (Steps 4 - 5)
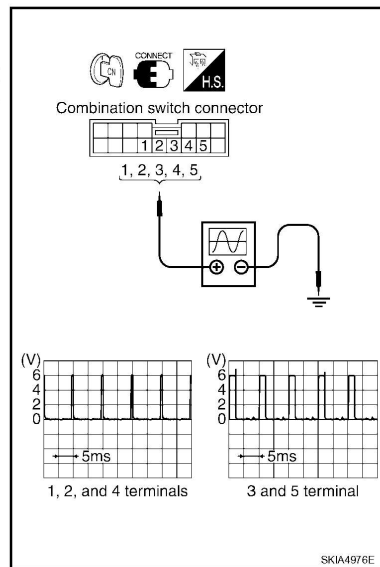
4. BCM OUTPUT TERMINAL INSPECTION

1. Turn lighting switch and wiper switch OFF.
2. Set wiper dial position 4.
3. Connect BCM and combination switch connectors, and check BCM output terminal voltage waveform of suspect malfunctioning system.

Suspect system	Terminal		
	Combination switch (+)		(-)
	Connector	Terminal (Wire color)	
1		1 (W/R)	
2		2 (W/G)	
3	M29	3 (W/L)	Ground
4		4 (G)	
5		5 (G/B)	

OK or NG

OK >> Open circuit in combination switch, GO TO 5.
NG >> Replace BCM. Refer to "Removal and Installation of BCM".

Combination switch connector

1, 2, 3, 4, 5,

1, 2, and 4 terminals

3 and 5 terminal

SKIA4976E

5. COMBINATION SWITCH INSPECTION

Referring to table below, perform combination switch inspection.

Procedure									
1	2		3	4		5	6		7
Replace lighting switch	Confirm check results	OK	INSPECTION END	Confirm check results	OK	INSPECTION END	Confirm check results	OK	INSPECTION END
		NG	Replace wiper switch		NG	Replace switch base		NG	Confirm symptom again

>> INSPECTION END