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PRECAUTIONS

[CAN]

PRECAUTIONS PFP:00001

Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

Precautions When Using CONSULT-II

AKS0058H

When connecting CONSULT-II to data link connector, connect them through CONSULT-II CONVERTER.

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.

CHECK POINTS FOR USING CONSULT-II

- 1. Has CONSULT-II been used without connecting CONSULT-II CONVERTER on this vehicle?
- If YES, GO TO 2.
- If NO, GO TO 5.
- 2. Is there any indication other than indications relating to CAN communication system in the self-diagnosis results?
- If YES, GO TO 3.
- If NO, GO TO 4.
- Based on self-diagnosis results unrelated to CAN communication, carry out the inspection.
- Malfunctions may be detected in self-diagnosis depending on control units carrying out CAN communication. Therefore, erase the self-diagnosis results.
- Diagnose CAN communication system. Refer to <u>LAN-7</u>, "TROUBLE DIAGNOSES WORK FLOW".

Precautions For Trouble Diagnosis CAN SYSTEM

AKS00581

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

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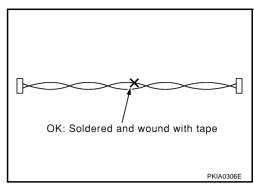
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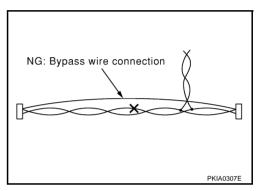
Precautions For Harness Repair CAN SYSTEM

AKS0058J

• Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



• Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



[CAN]

TROUBLE DIAGNOSES WORK FLOW

PFP:00004

When Displaying CAN Communication System Errors WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM

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- CAN communication line is open. (CAN H, CAN L, or both)
- CAN communication line is shorted. (Ground, between CAN lines, or other harnesses)
- The areas related to CAN communication of unit is malfunctioning.

WHEN A MALFUNCTION IS DETECTED EXCEPT CAN COMMUNICATION SYSTEM

- Removal and installation of parts: When the units that perform CAN communication or the sensors related to CAN communication are removed and installed, malfunction may be detected (or DTC other than CAN communication may be detected).
- Fuse blown out (removed): CAN communication of the unit may be stopped at such time.
- Low voltage: If the voltage decreases because of battery discharge when IGN is ON, malfunction may be detected by self-diagnosis according to the units.

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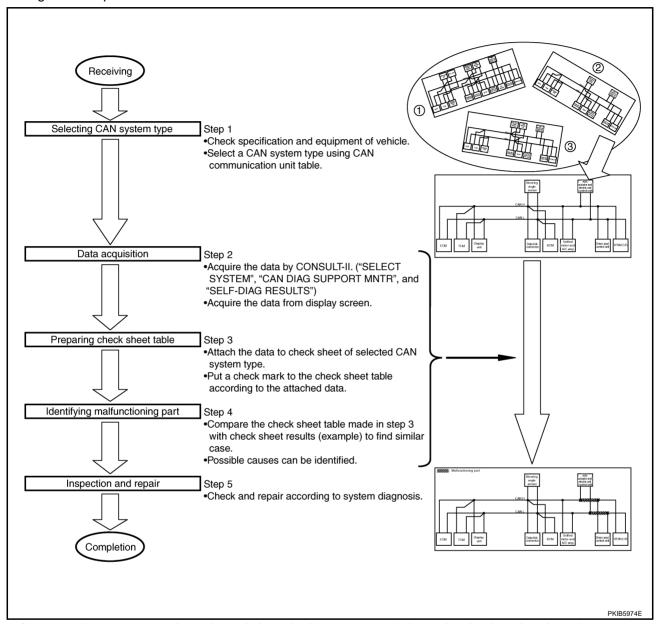
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TROUBLE DIAGNOSIS FLOW CHART

Depending on the control unit which performs CAN communication, "U1010" may be indicated as the result of self-diagnosis. Replace the control unit if "U1010" is indicated.



- Step 1: Refer to <u>LAN-9</u>, "<u>SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)</u>".
- Step 2: Refer to LAN-10, "ACQUISITION OF DATA BY CONSULT-II".
- Step 3: Refer to <u>LAN-11</u>, "HOW TO USE CHECK SHEET TABLE".
- Step 4: Refer to LAN-12, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced".
- Step 5: Check and repair according to system diagnosis.

[CAN]

Diagnosis Procedure SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)

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Determine CAN system type from the equipment of the vehicle to select applicable check sheet.

(Example) Wagon/2WD/V Without lane de						_		•			t ICC system/Without Intelligent Key system/ ioner
CAN Communication Ur	nit										
Go to CAN system, when	seled	cting y	your (CAN:	syste	m typ	e froi	m the	follo	wing	table.
Body type					Wa	gon					<u>-</u>)
Axle			2WD					AWD			- (
Engine		١	/Q35D	E			VQ35	DE/VK	45DE		Check basic specifications of the vehicle.
Transmission					A	/T					
Brake control					V	С					⁻)
Navigation system				×	×				×	×	Select "x" if it is model with navigation system.
ICC system				×	×				×	×	Select "x" if it is model with ICC system.
Intelligent Key system				×	×				×	×	Select "x" if it is model with Intelligent Key system.
Lane departure warning system			×		×			×		×	Select "x" if it is model with lane departure warning.
Automatic drive positioner		×	×	×	×		×	×	×	×	Select "x" if it is model with automatic drive positioner.
CAN system type	9	1	2	3	4	10	5	6	7	8	- _
CAN system trouble diagnosis	XX:XX	XX:XX	XXXXX	XXXXX	XXXXX	XX±XX	XX:XX	XX:XX	XX:XX	XX:XX	Which number is selected when sequentially selecting from the top of the specification table?
×: Applicable											The number is "CAN system type" of the applicable vehicle.
											In the case of this example: It corresponds to type 1.

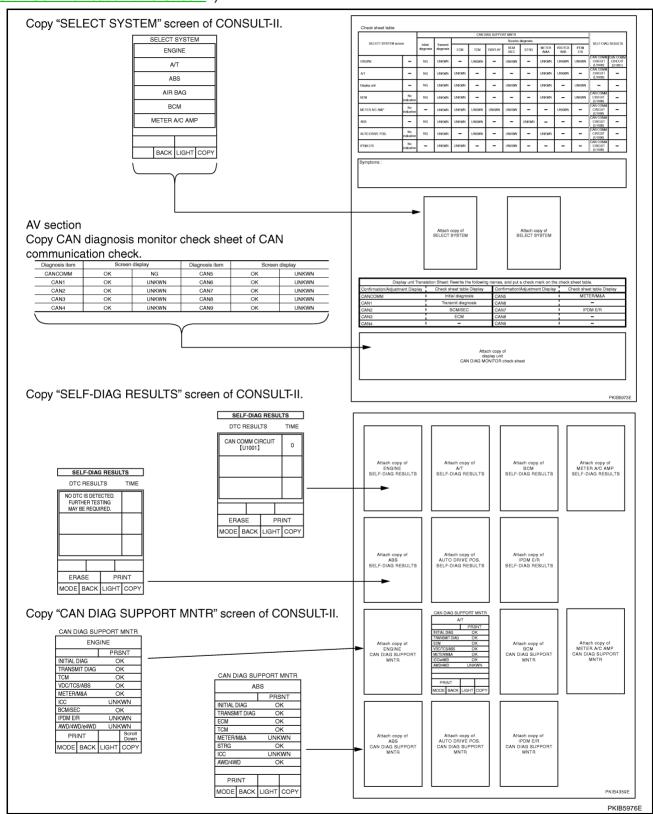
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ACQUISITION OF DATA BY CONSULT-II

Attach the data acquired by CONSULT-II on the check sheet determined according to CAN system type. (Transfer the data from the display screen of the vehicle to the CAN diagnosis monitor check sheet. For display unit: Refer to AV-85, "CAN Communication Line Inspection". For display control unit: Refer to AV-155, "CAN Communication Line Check".)



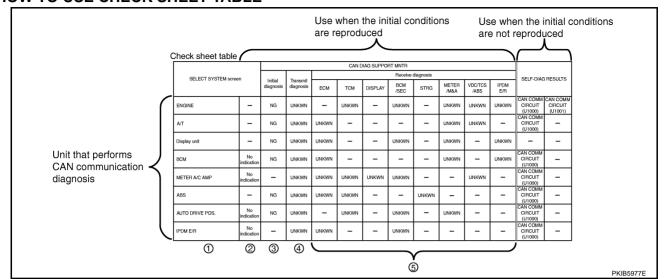
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HOW TO USE CHECK SHEET TABLE



- 1. Unit names displayed on CONSULT-II
- 2. "No indication": Put a check mark to it if the unit name described in step 1 is not displayed on "SELECT SYSTEM" screen of CONSULT-II. (Unit communicating with CONSULT-II via CAN communication line) "—": Column not used (Unit communicating with CONSULT-II excluding CAN communication line)
- 3. "NG": Display "NG" when malfunction is detected in the initial diagnosis of the diagnosed unit. Replace the unit if "NG" is displayed.
 - "-": Column not used (Initial diagnosis is not performed.)
- 4. "UNKWN": Display "UNKWN" when the diagnosed unit does not transmit the data normally. Put a check mark to it if "UNKWN" is displayed on CONSULT-II.
- 5. "UNKWN": Display "UNKWN" when the diagnosed unit does not receive the data normally. Put a check mark to it if "UNKWN" is displayed on CONSULT-II.
 - "-": Column not used (It is not necessary for CAN communication trouble diagnosis.)

NOTE

CAN communication diagnosis checks if CAN communication works normally. (Contents of data are not diagnosed.)

- When the initial conditions are reproduced. Refer to <u>LAN-12</u>, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced".
- When the initial conditions are not reproduced. Refer to <u>LAN-16</u>, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced".

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CAN DIAG SUPPORT MNTR ENGINE Check sheet table PRSNT CAN DIAG SUPPORT MNTR ΙΝΙΤΙΔΙ DΙΔΟ ΩK Receive diagnosis SELECT SYSTEM screen SELE-DIAG RESULTS TRANSMIT DIAG OK Transmit METER /M&A VDC/TCS IPDM E/R BCM /SEC diagnos diagnosis FCM тсм DISPLAY STRG ОК Ok CAN COMM I CAN COMM UNKWN METER/M&A ΩK ENGINE _ NG HNKWN LINIKWN HINIKWA HNKWN LINKWN (U1000) CAN COMM (U1001) UNKWN BCM/SEC OK A/T _ NG UNKWN LINIKANA LINIKAWA UNKWN UNKWN (U1000) AWD/4WD/e4WD UNKWN Display unit _ NG HNKWN IINKWN _ _ UNKWN HNKWN IINKWN PRINT AN COMA No MODE BACK LIGHT COPY всм NG UNKWN UNKWN UNKWN UNKWN No _ UNKWN UNKWN UNKWN UNKW UNKWN UNKWN AUTO DRIVE POS UNKWN UNKWN UNKWN UNKWN IPDM E/B UNKWN UNKWN UNKWN CIRCUIT (U1000) CAN DIAG SUPPORT MNTR A/T PRSN⁻ SELECT SYSTEM INITIAL DIAG ENGINE TRANSMIT DIAG ΩK ECM OK A/T VDC/TCS/ABS OK METER/M&A OK ABS ICC/e4WD OK AIR BAG AWD/4WD UNKWN BCM METER A/C AME MODE BACK LIGHT COPY BACK LIGHT COPY

Example of Filling in Check Sheet When Initial Conditions Are Reproduced

 Put a check mark to "No indication" if some of unit names listed on the column of diagnosis system selection screen of a check sheet table are not displayed on "SELECT SYSTEM" screen attached to the check sheet.

NOTF:

Put a check mark to "No indication" of AUTO DRIVE POS. and IPDM E/R because AUTO DRIVE POS. and IPDM E/R is not displayed on "SELECT SYSTEM" screen.

2. Confirm the unit name that "UNKWN" is displayed from the copy of "CAN DIAG SUPPORT MNTR" screen of "ENGINE" attached to the check sheet, and then put a check mark to the check sheet table.

NOTE

In "CAN DIAG SUPPORT MNTR" screen, "UNKWN" is displayed on "ICC", "IPDM E/R" and "AWD/4WD/e4WD". But put a check mark to "IPDM E/R" because "UNKWN" is listed on the column of reception diagnosis of the check sheet table.

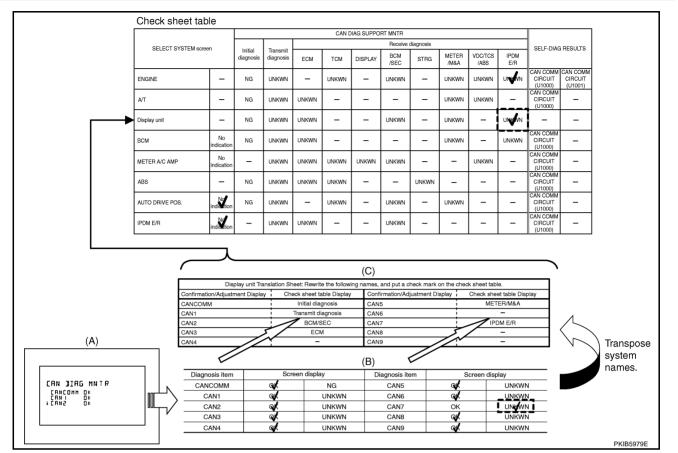
3. Confirm the unit name that "UNKWN" is displayed on the copy of "CAN DIAG SUPPORT MNTR" screen of "A/T" as well as "ENGINE". And then, put a check mark to the check sheet table.

NOTE:

 For "A/T", "UNKWN" is displayed on "AWD/4WD". But, do not put a check mark to their columns of reception diagnosis of the check sheet table because "UNKWN" is not listed.

[CAN]

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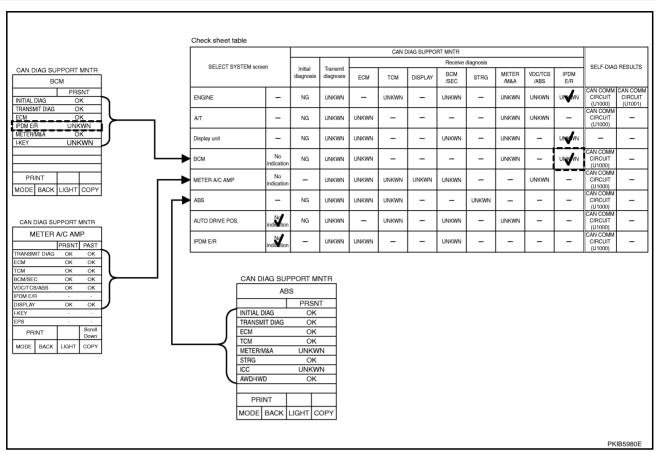
4. Display unit reads the CAN diagnosis monitor check sheet (B) AV-85, "CAN Communication Line Inspection" transferred from the display screen (A). The transferred CAN diagnosis monitor check sheet is copied to the Check sheet, and conversed according to the Display unit Translation Sheet. And then put a check mark to the check sheet table.

NOTE:

In the CAN diagnosis monitor check sheet (B), check marks are put to "CAN7". But, in the column of the check sheet table indication in Display unit Translation Sheet (C), "IPDM E/R" is listed only for "CAN7". Therefore, put a check mark to "IPDM E/R" because "UNKWN" is listed on the column of reception diagnosis of the check sheet table.

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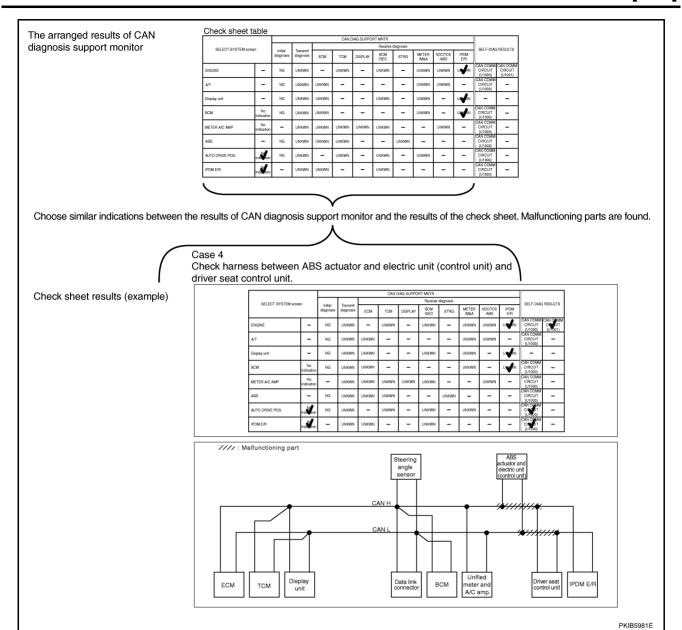


5. Confirm the unit name that "UNKWN" is displayed on the copy of "CAN DIAG SUPPORT MNTR" screen of "BCM", "METER A/C AMP" and "ABS" as well as "ENGINE". And then, put a check mark to the check sheet table.

NOTE:

- For "BCM", "UNKWN" is displayed on "IPDM E/R" and "I-KEY". But put a check mark to "IPDM E/R" because "UNKWN" is listed on the column of reception diagnosis on the check sheet table.
- For "METER A/C AMP", "UNKWN" is not displayed. Do not put a check to it.
- For "ABS", "UNKWN" is displayed on "METER/M&A" and "ICC". But, do not put a check mark to their columns of reception diagnosis of the check sheet table because "UNKWN" is not listed.

[CAN]



NOTE:

There is a case that some of "CAN DIAG SUPPORT MNTR" and "SELF-DIAG RESULTS" are not needed for diagnosis. In the case, "UNKWN" and "CAN COMM CIRCUIT(U1000)" in "Check sheet results (example)" change to "—". Then, ignore check marks on the Check sheet table.

- 6. Perform system diagnosis for possible causes identified.
- 7. Perform diagnosis again after inspection and repair. Make sure that repair is completely performed, and then end the procedure.

Start CAN system trouble diagnosis if this procedure can be confirmed. Refer to <u>LAN-30, "CAN Communication Unit"</u> .

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Check sheet table SELF-DIAG RESULTS METER AIC AME NG _ _ _ SYSTEM A/T SYSTEM METER A/C AMP SYSTEM ENGINE SYSTEM BCM SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS DTC RESULTS TIME DTC RESULTS TIME DTC RESULTS TIME DTC RESULTS CAN COMM CIRCUIT CAN COMM CIRCUIT NO DTC IS DETECTED. CAN COMM CIRCUIT 0 [U1001] [U1000] **FURTHER TESTING** [U1000] MAY BE REQUIRED. SYSTEM ABS SYSTEM AUTO DRIVE POS. SYSTEM IPDM E/B SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS TIME DTC RESULTS DTC RESULTS TIME DTC RESULTS TIME

Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced

See "SELF-DIAG RESULTS" of all units attached to the check sheet. If "CAN COMM CIRCUIT [U1000]" or "CAN COMM CIRCUIT [U1001]" is displayed, put a check mark to the applicable column of self-diagnostic results of the check sheet table.

CAN COMM CIRCUIT

[U1000]

PAST

PAST

CAN COMM CIRCUIT

[U1000]

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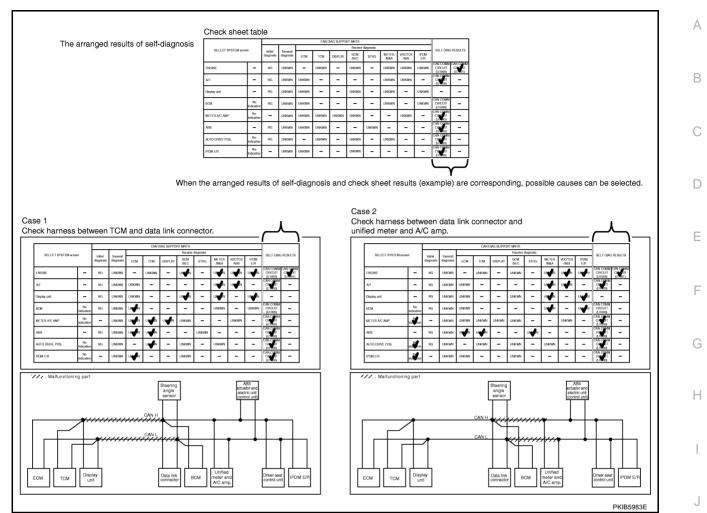
- For "ENGINE", "CAN COMM CIRCUIT [U1001]" are displayed. Put a check mark to it.
- For "A/T", "CAN COMM CIRCUIT [U1000]" are displayed. Put a check mark to it.

CAN COMM CIRCUIT

[U1000]

- For "BCM", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
- For "METER A/C AMP", "CAN COMM CIRCUIT [U1000]" are displayed. Put a check mark to it.
- For "ABS", "CAN COMM CIRCUIT [U1000]" are displayed. Put a check mark to it.
- For "AUTO DRIVE POS.", "CAN COMM CIRCUIT [U1000]" are displayed. Put a check mark to it.
- For "IPDM E/R", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.

[CAN]



NOTE:

There is a case that some of "CAN DIAG SUPPORT MNTR" and "SELF-DIAG RESULTS" are not needed for diagnosis. In the case, "UNKWN" and "CAN COMM CIRCUIT(U1000)" in "Check sheet results (example)" change to "-". Then, ignore check marks on the Check sheet table.

2. For the selected possible causes, it is expected that malfunctions have been found in the past.

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CAN Diagnostic Support Monitor DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ECM

AKS00CB

(Example)	CAN DIAG SUPPORT MNTR	CAN DIAG SUPPORT MNTR
. ,	ENGINE	ENGINE
	PRSNT	PRSNT
	INITIAL DIAG OK	TRANSMIT DIAG OK
	TRANSMIT DIAG OK	TCM OK
	TCM OK	VDC/TCS/ABS OK
	VDC/TCS/ABS OK	METER/M&A OK
	METER/M&A OK	ICC UNKWN
	ICC UNKWN	BCM/SEC OK
	BCM/SEC OK	IPDM E/R OK
	IPDM E/R OK	AWD/4WD/e4WD UNKWN
	AWD/4WD/e4WD UNKWN	EPS UNKWN
	PRINT Scroll Down	PRINT Scroll Up
	MODE BACK LIGHT COPY	MODE BACK LIGHT COPY SKIB0591E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	TCM	Make sure of normal reception from TCM.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	ICC	Make sure of normal reception from ICC unit.	OK/UNKWN
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN
	IPDM E/R	Make sure of normal reception from IPDM E/R.	OK/UNKWN
	AWD/4WD/e4WD	AWD/4WD/e4WD is not diagnosed.	UNKWN
	EPS	EPS is not diagnosed.	UNKWN

Display Results (Present)

OK: Normal

NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR TCM

(Example)	CAND	IAG SU			
, ,		Α			
			PRS	SNT	
	INITIAL	DIAG	0	K	
	TRANS	/IT DIAG	0	K	
	ECM		0	K	
	VDC/TC	S/ABS	K		
	METER/	M&A	0	K	
	ICC/e4W	/D			
	AWD/4W	/D			
	PR	INT			
	MODE	BACK	LIGHT	COPY	PKIA9892E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
TRANSMI ECM A/T VDC/TCS/ METER/M	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	ICC/e4WD	Make sure of normal reception from ICC unit.	OK/UNKWN
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN

Display Results (Present)

OK: Normal

• NG: Malfunction

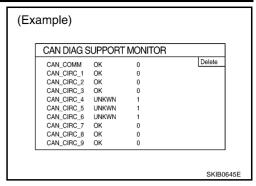
• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DISPLAY CONTROL UNIT



Unit name	Diagnosis item	Description	"CAN DIAG SUPPORT MONITOR" screen	Error counter (Reference)
	CAN COMM	Make sure that microcomputer in ECU works normally.	OK/NG	
	CAN CIRC 1	Make sure of normal transmission.	OK/UNKWN	
	CAN CIRC 2	Make sure of normal reception from BCM.	OK/UNKWN	
	CAN CIRC 3	Make sure of normal reception from ECM.		
Display control unit	CAN CIRC 4	CAN CIRC 4 is not diagnosed.	OK/UNKWN	0/1~50
Display Control unit	CAN CIRC 5	RC 5 Make sure of normal reception from unified meter and A/C amp.		0/1~30
	CAN CIRC 6	N CIRC 6 CAN CIRC 6 is not diagnosed.		
	CAN CIRC 7	CIRC 7 Make sure of normal reception from IPDM E/R.		
	CAN CIRC 8	CIRC 8 CAN CIRC 8 is not diagnosed.		
	CAN CIRC 9	CAN CIRC 9 is not diagnosed.	OK/UNKWN	

Display Results (Present)

- OK: Normal
- NG: Malfunction
- UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

Display Results: Error Counter (Reference)

- 0: It is normal now.
- 1 ~ 50: Displays when it finds malfunction in the past even if it is normal or there is a malfunction at present. Also, displays when diagnosis is not performed. It increase like 0→1→2...49→50 after returning to the normal condition whenever IGN OFF→ON. If it is over 50, it is fixed to 50 until the self-diagnostic results are erased. Keep this condition until resetting it.

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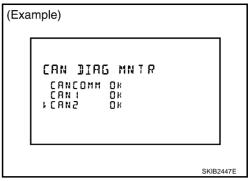
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DESCRIPTION OF "CAN DIAG MNTR" SCREEN FOR DISPLAY UNIT



Unit name	Diagnosis item	Description	"CAN DIAG MNTR" screen
CANCO	CANCOMM	Make sure that microcomputer in ECU works normally.	OK/NG
	CAN1	Make sure of normal transmission.	OK/UNKWN
	CAN2	Make sure of normal reception from BCM.	OK/UNKWN
CAN4 CAN5 CAN6 CAN7	Make sure of normal reception from ECM.	OK/UNKWN	
	CAN CIRC 4 is not diagnosed.	OK/UNKWN	
	CAN5	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	CAN6	CAN CIRC 6 is not diagnosed.	OK/UNKWN
	CAN7	Make sure of normal reception from IPDM E/R.	OK/UNKWN
	CAN8	CAN CIRC 8 is not diagnosed.	OK/UNKWN
	CAN9	CAN CIRC 9 is not diagnosed.	OK/UNKWN

Display Results (Present)

OK: Normal

NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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[CAN]

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR AWD CONTROL UNIT

(Example)	CAN D	IAG SU			
` ′	ALI	MODE			
			PRS	SNT	
	INITIAL	DIAG	С	K	
	TRANS	/IIT DIAG	С	K	
	VDC/TC	S/ABS	С	K	
	ECM				
	TCM		С	ΙK	
	METER/M&A OK				
	PRINT				
	MODE	BACK	LIGHT	COPY	PKIB5966E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
TRANSMIT [INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	ТСМ	Make sure of normal reception from TCM. (Not available for CAN system diagnosis.)	ОК
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN

Display Results (Present)

• OK: Normal

• NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ICC UNIT

(Example)	CAN DIAG SUPPORT MNTR		CAN DIAG SUF	PORT MNTR	
	ICC		ICO		
	PRSNT]		PRSNT	
	INITIAL DIAG OK]	LANE KEEP	UNKWN	
	TRANSMIT DIAG OK		ECM(1)	OK	
	ECM OK		ICC SENSOR	OK	
	VDC/TCS/ABS OK		STRG	UNKWN	
	TCM OK		METER/M&A(1)	OK	
	METER/M&A UNKWN]	ERROR(I)	OK	
	LANE KEEP UNKWN		LANE DETECTOR	UNKWN	
	ECM(I) OK		TCM(I)	UNKWN	
	ICC SENSOR OK	_	BCM/SEC	UNKWN	
	PRINT Scroll Down		PRINT S	Scroll Up	
	MODE BACK LIGHT COPY		MODE BACK	LIGHT COPY	PKIB5985E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN
	TCM	Make sure of normal reception from TCM.	OK/UNKWN
	METER/M&A	METER/M&A is not diagnosed.	UNKWN
ICC	LANE KEEP	LANE KEEP is not diagnosed.	UNKWN
	ECM(I)	Make sure of normal reception from ECM (as a laser radar sensor). (Not available for CAN system diagnosis.)	
	ICC SENSOR	Make sure of normal reception from ICC sensor.	OK/UNKWN
	STRG	STRG is not diagnosed.	UNKWN
	Make sure of normal reception from combination meter (as a laser radar sensor). (Not available for CAN system diagnosis.)		OK/UNKWN
	ERROR(I)	Make sure that the initial diagnosis and transmit diagnosis of laser radar sensor work normally. (Not available for CAN system diagnosis.)	OK/UNKWN
	LANE DETECTOR	LANE DETECTOR is not diagnosed.	UNKWN
	TCM(I)	TCM(I) is not diagnosed.	UNKWN
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN

Display Results (Present)

OK: Normal

NG: Malfunction

UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR INTELLIGENT KEY UNIT

(F	CAN	DIAC OII	DDODT M	NTD	
(Example)	CAN	DIAG SU	i		
		INTELLIG	ENT KEY		
			PRSNT	PAST	
	TRANSM	IIT DIAG	OK	OK	
	ECM		OK	OK	
	METER/I	M&A	OK	OK	
	BCM/SEC OK			OK	
	PRINT				
	MODE	BACK	LIGHT	COPY	SKIB2359E

"SELECT SYSTEM" screen	"CAN DIAG SUP- PORT MNTR" screen	Description	Present	Past
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN/-	
INTELLIGENT KEY	ECM	Make sure of normal reception from ECM.	OK/UNKWN/-	
	METER/M&A Make sure of normal reception from unified meter and amp.		OK/UNKWN/-	OK/0/1~39/-
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/-	

Display Results (Present)

- OK: Normal
- UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.
- -: There is no received unit or the unit is not in the condition that reception diagnosis is performed.

Display Results (Past)

- OK: Normal
- 0: There is malfunction now.
- 1 ~ 39: Displays when it is normal at present and finds malfunction in the past. It increases like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. It returns to 0 when malfunction is detected again in the process.
- · -: Undiagnosed

[CAN]

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR BCM

CAN D	IAG SU			
	ВС	CM		
		PRS	SNT	
INITIAL	DIAG	0	K	
TRANSA	/IT DIAG	0	K	
ECM		0	K	
IPDM E/	IPDM E/R OK			
METER/	METER/M&A UNKWN			
I-KEY	I-KEY OK			
		1		
PRINT				
MODE	BACK	LIGHT	COPY	SKIB0593E
	INITIAL I TRANSN ECM IPDM E/ METER/ I-KEY	INITIAL DIAG TRANSMIT DIAG ECM IPDM E/R METER/M&A I-KEY PRINT	BCM PRS INITIAL DIAG O TRANSMIT DIAG O ECM O IPDM E/R O METER/M&A UNK I-KEY O	PRSNT INITIAL DIAG OK TRANSMIT DIAG OK ECM OK IPDM E/R OK METER/M&A UNKWN I-KEY OK

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
ВСМ	IPDM E/R	Make sure of normal reception from IPDM E/R.	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	I-KEY	Make sure of normal reception from Intelligent Key unit. (Not available for CAN system diagnosis.)	ОК

Display Results (Present)

OK: Normal

NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR LDW CAMERA UNIT

(Example)	CAN	DIAG SU			
. ,		LE	W		
			PRSNT	PAST	
	TRANS	/IT DIAG	-	_	
	ECM		OK	OK	
	VDC/TC	S/ABS	OK	OK	
	BCM/SE	С	OK	OK	
	TCM		OK	OK	
	PRINT				
	MODE	BACK	LIGHT	COPY	PKIB5965E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present	Past
	TRANSMIT DIAG	TRANSMIT DIAG is not diagnosed.	_	
	ECM	Make sure of normal reception from ECM.	OK/UNKWN/-	
LDW	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN/-	OK/0/1~39/-
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/-	
	TCM	Make sure of normal reception from TCM.	OK/UNKWN/-	

Display Results (Present)

- OK: Normal
- UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.
- -: There is no received unit or the unit is not in the condition that reception diagnosis is performed.

Display Results (Past)

- OK: Normal
- 0: There is malfunction now.
- 1 ~ 39: Displays when it is normal at present and finds malfunction in the past. It increases like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. It returns to 0 when malfunction is detected again in the process.
- -: Undiagnosed

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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR UNIFIED METER AND A/C AMP.

Example)	CAN DIAG SUPPORT MNTR	CAN DIAG SUPPORT MNTR
	METER A/C AMP	METER A/C AMP
	PRSNT PAST	PRSNT PAST
	TRANSMIT DIAG OK OK	IPDM E/R
	ECM OK OK	DISPLAY OK OK
	тсм ок ок	I-KEY
	BCM/SEC OK OK	EPS
	VDC/TCS/ABS OK OK	AWD/4WD
	IPDM E/R	e4WD
	DISPLAY OK OK	ICC
	I-KEY	LANE KEEP
	EPS -	TIRE-P OK OK
	PRINT Scroll Down	PRINT Scroll Up
	MODE BACK LIGHT COPY	MODE BACK LIGHT COPY

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present	Past
	TRANSMIT DIAG	Make sure of normal transmission.		
	ECM	Make sure of normal reception from ECM.	OK/UNKWN/-	
	TCM	Make sure of normal reception from TCM.	OK/UNKWN/-	
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/-	
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN/-	
	IPDM E/R	M E/R IPDM E/R is not diagnosed.		
	DISPLAY	Make sure of normal reception from display control unit.	OK/UNKWN/-	OK/0/1~39/-
METER A/C AMP		Make sure of normal reception from display unit.	OK/UNKWN/-	
7 T T T T T T T T T T T T T T T T T T T	I-KEY	Make sure of normal reception from Intelligent Key unit.	OK/UNKWN/-	
	EPS	EPS is not diagnosed.	_	
	AWD/4WD	Make sure of normal reception from AWD control unit.		
	e4WD	e4WD is not diagnosed.	_	
	ICC	Make sure of normal reception from ICC unit.	OK/UNKWN/-	
	LANE KEEP	LANE KEEP is not diagnosed.	_	
	TIRE-P	Make sure of normal reception from BCM. (Not available for CAN system diagnosis.)	OK/UNKWN	

Display Results (Present)

- OK: Normal
- UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.
- -: There is no received unit or the unit is not in the condition that reception diagnosis is performed.

Display Results (Past)

- OK: Normal
- 0: There is malfunction now.
- 1 ~ 39: Displays when it is normal at present and finds malfunction in the past. It increases like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. It returns to 0 when malfunction is detected again in the process.
- –: Undiagnosed

[CAN]

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

(Example)	CAN E	IAG SU			
` ′	ABS				
			PRS	SNT	
	INITIAL	DIAG	С	ΙK	
	TRANS	/IIT DIAG	С	ΙK	
	ECM		C	ΙK	
	TCM		OK		
	METER/	M&A	UNF	(WN	
	STRG		OK		
	ICC		UNKWN		
	AWD/4W	/D	OK		
	PRINT				
	MODE	BACK	LIGHT	COPY	SKIB2442E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
ABS	TCM	Make sure of normal reception from TCM.	OK/UNKWN
ADS	METER/M&A	METER/M&A is not diagnosed.	UNKWN
	STRG	Make sure of normal reception from steering angle sensor.	OK/UNKWN
	ICC	ICC is not diagnosed.	UNKWN
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN

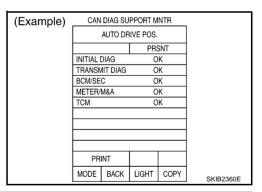
Display Results (Present)

OK: Normal

NG: Malfunction

• UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DRIVER SEAT CONTROL UNIT



"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
AUTO DRIVE POS.	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	TCM	Make sure of normal reception from TCM.	OK/UNKWN

Display Results (Present)

OK: Normal

NG: Malfunction

UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.

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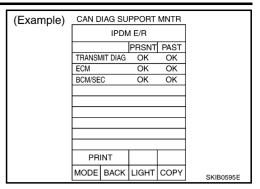
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DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR IPDM E/R



"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present	Past
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN/-	
IPDM E/R	ECM	Make sure of normal reception from ECM.	OK/UNKWN/-	OK/0/1~39/-
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/-	

Display Results (Present)

- OK: Normal
- UNKWN: The diagnosed unit does not transmit or receive the applicable data normally.
- -: There is no received unit or the unit is not in the condition that reception diagnosis is performed.

Display Results (Past)

- OK: Normal
- 0: There is malfunction now.
- 1 ~ 39: Displays when it is normal at present and finds malfunction in the past. It increases like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. It returns to 0 when malfunction is detected again in the process.
- –: Undiagnosed

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CAN COMMUNICATION

System Description

PFP:23710

AKS007GA

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

AKS007Z4

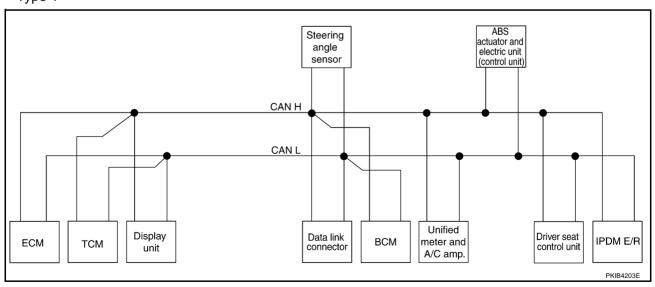
Go to CAN system, when selecting your CAN system type from the following table.

Body type		Wagon											
Axle		2WD AWD											
Engine			VQ35DE				VQ	35DE/VK4	5DE				
Transmission		A/T											
Brake control		VDC											
Navigation system				×	×				×	×			
ICC system				×	×				×	×			
Intelligent Key system				×	×				×	×			
Lane departure warning system			×		×			×		×			
Automatic drive positioner		×	×	×	×		×	×	×	×			
CAN system type	9	1	2	3	4	10	5	6	7	8			
CAN system trouble diagnosis	<u>LAN-</u> <u>400</u>	<u>LAN-47</u>	<u>LAN-85</u>	<u>LAN-</u> <u>126</u>	<u>LAN-</u> <u>171</u>	<u>LAN-</u> <u>434</u>	<u>LAN-</u> <u>219</u>	<u>LAN-</u> <u>260</u>	<u>LAN-</u> <u>304</u>	<u>LAN-</u> <u>351</u>			

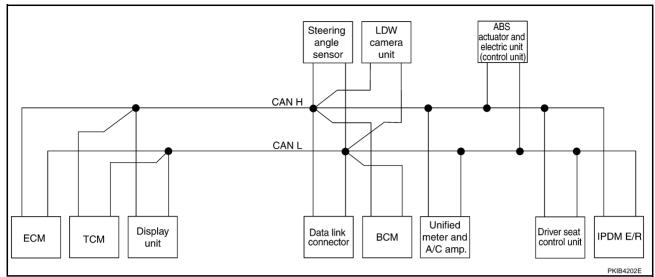
^{×:} Applicable

TYPE 1/TYPE 2/TYPE 9 System Diagram

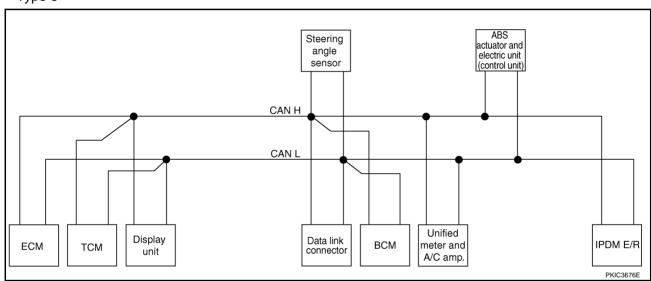
Type 1







• Type 9



Input/Output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Dis- play unit	ВСМ	Steer- ing angle sensor	LDW cam- era unit	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Engine speed signal	Т	R	R				R	R		
Engine status signal	Т			R						
Engine coolant temperature signal	Т						R			
A/T self-diagnosis signal	R	Т								
Accelerator pedal position signal	Т	R						R		
Closed throttle position signal	Т	R								
Wide open throttle position signal	Т	R								
Battery voltage signal	Т	R								
Key switch signal				Т					R	

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Signals	ECM	ТСМ	Dis- play unit	всм	Steer- ing angle sensor	LDW cam- era unit	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Ignition switch signal				Т					R	R
P range signal		Т						R	R	
Stop lamp switch signal		R					Т			
Fuel consumption monitor signal	Т		R				R T			
Turbine revolution signal	R	Т	Γ\				'			
Output shaft revolution signal	R	T				R				
	R	ı		Т		K				
A/C switch signal A/C compressor request signal	T			l						
										R
A/C compressor feedback signal	T			-			R			
Blower fan motor switch signal	R			Т						
A/C switch/indicator signal			T				R			
0 11 ()			R				Т			
Cooling fan speed request signal	Т			_						R
Position light request signal			R	T			R			R
Low beam request signal	_			Т						R
Low beam status signal	R									Т
High beam request signal				Т			R			R
High beam status signal	R									Т
Front fog light request signal				Т						R
Day time running light request signal				Т			R			
Turn LED burnout status signal				R			Т			
Vehicle speed signal						R	R	Т		
veriicie speed signal	R	R	R	R			Т		R	
Sleep wake up signal				Т			R			R
Door switch signal			R	Т			R		R	R
Turn indicator signal				Т		R	R			
Key fob ID signal				Т					R	
Key fob door unlock signal				Т					R	
Oil pressure switch signal				R T			R			Т
Buzzer output signal				Т			R			
Fuel level sensor signal	R			-			T			
Fuel level low warning signal			R				T			
ASCD SET lamp signal	Т						R			
ASCD CRUISE lamp signal							R			
Malfunction indicator lamp signal							R			
ASCD operation signal		R					11			
ASCD OD cancel request signal		R								

CAN COMMUNICATION

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Signals	ECM	ТСМ	Dis- play unit	всм	Steer- ing angle sensor	LDW cam- era unit	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Front wiper request signal				Т						R
Front wiper stop position signal				R						Т
Rear window defogger switch signal				Т						R
Rear window defogger control signal	R		R	R						Т
Hood switch signal				R						Т
Theft warning horn request signal				Т						R
Horn chirp signal				Т						R
Steering angle sensor signal					Т			R		
ABS warning lamp signal							R	Т		
VDC OFF indicator lamp signal							R	Т		
SLIP indicator lamp signal							R	Т		
Brake warning lamp signal							R	Т		
0 1			Т	R					R	
System setting signal			R	Т					Т	
A/T CHECK indicator lamp signal		Т					R			
A/T position indicator lamp signal		Т					R			
A/T shift schedule change demand signal		R						Т		
Manual mode signal		R					Т			
Not manual mode signal		R					Т			
Manual mode shift up signal		R					Т			
Manual mode shift down signal		R					Т			
Manual mode indicator signal		Т					R			
Distance to empty signal			R				Т			
Parking brake switch signal				R			Т			
Snow mode switch signal	R						Т			
Tire pressure signal				Т			R			

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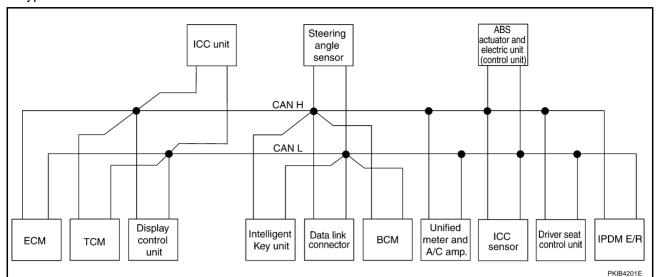
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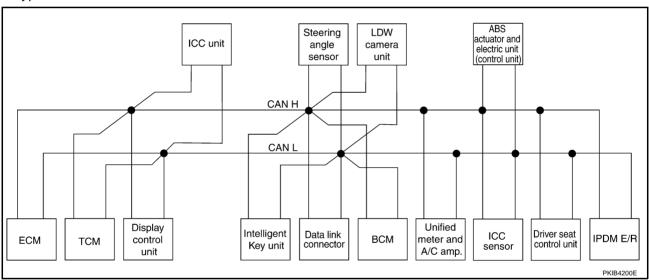
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TYPE 3/TYPE 4 System Diagram

• Type 3



Type 4



Input/Output Signal Chart

T: Transmit R: Receive

Signals	ECM	тсм	Dis- play con- trol unit	ICC unit	Intelli- gent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Unified meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Engine speed signal	Т	R	R	R					R		R		
Engine status signal	Т					R							
Engine coolant tempera- ture signal	Т								R				
A/T self-diagnosis signal	R	Т											
Accelerator pedal position signal	Т	R		R							R		

CAN COMMUNICATION

[CAN]

Signals	ECM	тсм	Dis- play con- trol unit	ICC unit	Intelli- gent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Closed throttle position signal	Т	R		R									
Wide open throttle position signal	Т	R											
Battery voltage signal	Т	R											
Key switch signal						Т						R	
Ignition switch signal						Т						R	R
P range signal		Т		R							R	R	
Stop lamp switch signal		R							Т				
ABS operation signal				R							Т		
TCS operation signal				R							Т		
VDC operation signal				R							Т		
Fuel consumption moni-	Т								R				
tor signal			R						Т				
Turbine revolution signal	R	Т		R									
Output shaft revolution signal	R	Т		R				R					
A/C switch signal	R					Т							
A/C compressor request signal	Т												R
A/C compressor feed- back signal	Т								R				
Blower fan motor switch signal	R					Т							
A/C switch/indicator signal			T R						R T				
Cooling fan speed request signal	Т												R
Position light request signal						Т			R				R
Low beam request signal						Т							R
Low beam status signal	R												T
High beam request signal						Т			R				R
High beam status signal	R												T
Front fog light request signal						Т							R
Day time running light request signal						Т			R				
Turn LED burnout status signal						R			Т				

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Signals	ECM	тсм	Dis- play con- trol unit	ICC unit	Intelli- gent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Vehicle speed signal				R				R	R		Т		
	R	R	R		R	R			Т	R		R	
Sleep wake up signal					Т	T R			R				R
Door switch signal			R		R	Т			R			R	R
Turn indicator signal						Т		R	R				
Key fob ID signal						Т						R	
Key fob door unlock sig- nal						Т						R	
Oil pressure switch sig-						R							Т
nal						Т			R				
						Т			R				
Buzzer output signal					Т				R				
Fuel level sensor signal	R			Т					R T				
Fuel level low warning signal			R						Т				
Malfunctioning indicator lamp signal	Т								R				
ICC operation signal	R			Т									
Front wiper request signal				R		Т							R
Front wiper stop position signal						R							Т
Rear window defogger switch signal						Т							R
Rear window defogger control signal	R		R			R							Т
Hood switch signal						R							Т
Theft warning horn request signal						Т							R
Horn chirp signal						Т							R
Steering angle sensor signal							Т				R		
Tire pressure signal						Т			R				
ABS warning lamp signal									R		Т		
VDC OFF indicator lamp signal									R		Т		
SLIP indicator lamp signal									R		Т		
Brake warning lamp sig- nal									R		Т		

CAN COMMUNICATION

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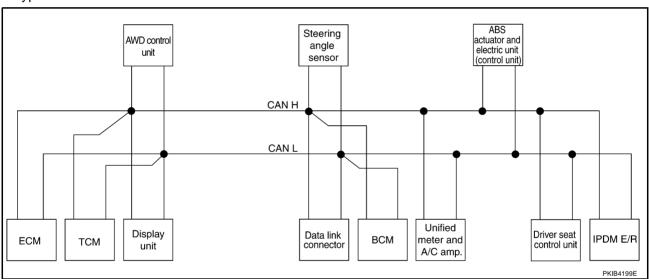
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Signals	ECM	ТСМ	Dis- play con- trol unit	ICC unit	Intelli- gent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Unified meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
System setting signal			T		R							R	
Distance to amonty signal			R R		Т				Т			Т	
Distance to empty signal Parking brake switch signal			- K			R			Т				
Door lock/unlock request signal					Т	R							
Door lock/unlock status signal					R	Т							
Starter permission signal					Т	R							
Back door open request signal					Т	R							
Power window open request signal					Т	R							
Alarm request signal					Т	R							
Key warning signal					Т				R				
ICC sensor signal				R						Т			
ICC warning lamp signal				Т					R				
ICC system display signal				T					R				
Current gear position signal		Т		R							R		
ICC steering switch signal	Т			R									
ASCD operation signal	Т	R											
ASCD OD cancel request signal	Т	R											
ICC OD cancel request signal		R		T									
A/T CHECK indicator lamp signal		Т							R				
A/T position indicator lamp signal		Т							R				
A/T shift schedule change demand signal		R									Т		
Manual mode signal		R							Т				
Not manual mode signal		R							Т				
Manual mode shift up signal		R							Т				
Manual mode shift down signal		R							Т				
Manual mode indicator signal		Т		R					R				

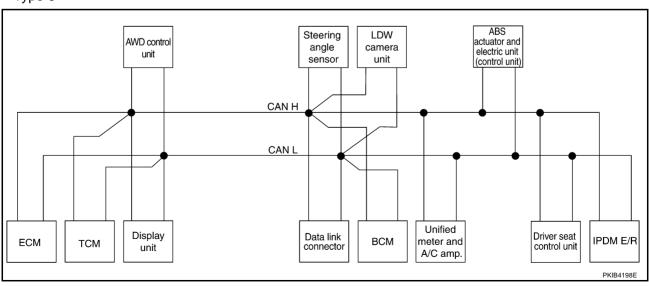
Signals	ECM	тсм	Dis- play con- trol unit	ICC unit	Intelli- gent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Ignition knob switch signal					Т	R							
Snow mode switch signal	R								Т				
Onow mode switch signal	Т			R									
VDC OFF switch signal				R							Т		

TYPE 5/TYPE 6/TYPE 10 System Diagram

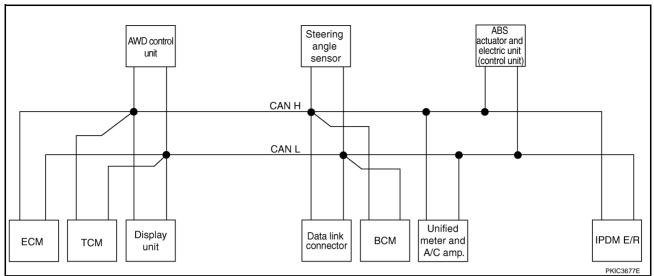
• Type 5



Type 6







Input/Output Signal Chart

T: Trar	nsmit R:	Receive
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									T: Tra	nsmit R	Receive
Signals	ECM	ТСМ	Dis- play unit	AWD con- trol unit	всм	Steer- ing angle sensor	LDW cam- era unit	Uni- fied meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
A/T self-diagnosis signal	R	Т									
Stop lamp switch signal		R		R				Т			
Battery voltage signal	Т	R									
Key switch signal					Т					R	
Ignition switch signal					Т					R	R
P range signal		Т							R	R	
Closed throttle position signal	Т	R									
Wide open throttle position signal	Т	R									
Engine speed signal	Т	R	R	R				R	R		_
Engine status signal	Т				R						_
Engine coolant temperature signal	Т							R			
Accelerator pedal position signal	Т	R		R					R		
Fuel consumption monitor sig-	Т							R			_
nal			R					Т			_
Turbine revolution signal	R	Т									
Output shaft revolution signal	R	Т					R				
A/C switch signal	R				Т						
A/C compressor request signal	Т										R
A/C compressor feedback signal	Т							R			
Blower fan motor switch signal	R				Т						

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Signals	ECM	тсм	Dis- play unit	AWD con- trol unit	всм	Steer- ing angle sensor	LDW cam- era unit	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
A/C switch/indicator signal			Т					R			
			R					Т			
Cooling fan speed request sig- nal	Т										R
Position light request signal			R		Т			R			R
Low beam request signal					Т						R
Low beam status signal	R										Т
High beam request signal					Т			R			R
High beam status signal	R										T
Front fog light request signal					Т						R
Day time running light request signal					Т			R			
Turn LED burnout status signal					R			Т			
Vahiala anaad aignal				R			R	R	Т		
Vehicle speed signal	R	R	R		R			Т		R	
Sleep wake up signal					Т			R			R
Door switch signal			R		Т			R		R	R
Turn indicator signal					Т		R	R			
Key fob ID signal					Т					R	
Key fob door unlock signal					Т					R	
					R						Т
Oil pressure switch signal					Т			R			
Buzzer output signal					Т			R			
Fuel level sensor signal	R							Т			
Fuel level low warning signal			R					Т			
ASCD SET lamp signal	Т							R			
ASCD CRUISE lamp signal	Т							R			
Malfunction indicator lamp signal	Т							R			
Front wiper request signal					Т						R
Front wiper stop position signal					R						Т
Rear window defogger switch signal					Т						R
Rear window defogger control signal	R		R		R						Т
Hood switch signal					R						Т
Theft warning horn request signal					Т						R
Horn chirp signal					Т						R
Steering angle sensor signal						Т			R		

CAN COMMUNICATION

[CAN]

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Signals	ECM	тсм	Dis- play unit	AWD con- trol unit	всм	Steer- ing angle sensor	LDW cam- era unit	Uni- fied meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
ABS warning lamp signal								R	Т		
VDC OFF indicator lamp signal								R	Т		
SLIP indicator lamp signal								R	Т		
Brake warning lamp signal								R	Т		
System setting signal			Т		R					R	
Cystom soung signal			R		Т					Т	
AWD warning lamp signal				Т				R			
Distance to empty signal			R					Т			
Parking brake switch signal				R	R			Т			
ASCD operation signal	T	R									
ASCD OD cancel request signal	Т	R									
A/T CHECK indicator lamp signal		Т						R			
A/T position indicator lamp signal		Т						R			
A/T shift schedule change demand signal		R							Т		
Manual mode signal		R						Т			
Not manual mode signal		R						Т			
Manual mode shift up signal		R						Т			
Manual mode shift down signal		R						Т			
Manual mode indicator signal		Т						R			
Snow mode switch signal	R							Т			
Current gear position signal*	R	Т									
Next gear position signal*	R	Т									
Shift change signal*	R	Т									
Shift pattern signal*	R	Т									
Tire pressure signal					Т			R			
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^{*:} VK45DE engine model only

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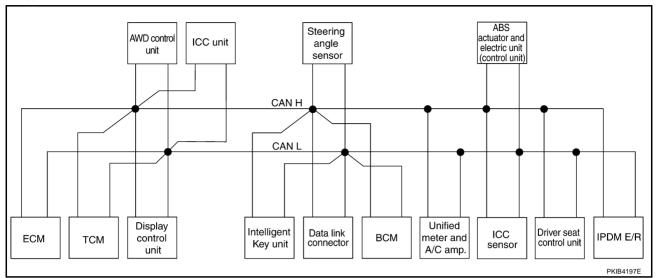
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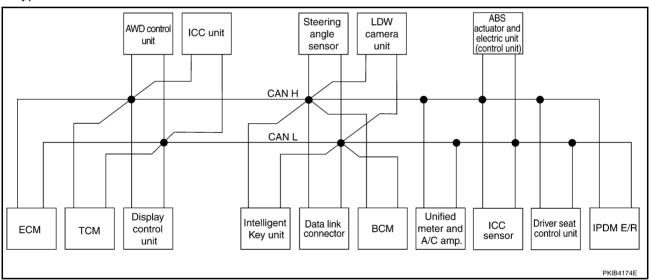
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TYPE 7/TYPE 8 System Diagram

• Type 7



Type 8



Input/Output Signal Chart

T: Transmit R: Receive

Signals	ECM	тсм	Dis- play con- trol unit	AWD con- trol unit	ICC unit	Intel- ligent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Unified meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
A/T self-diagnosis signal	R	Т												
ABS operation signal					R							Т		
TCS operation signal					R							Т		
VDC operation signal					R						R	Т		
Stop lamp switch signal		R		R						Т				

CAN COMMUNICATION

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Signals	ECM	ТСМ	Dis- play con- trol unit	AWD con- trol unit	ICC unit	Intel- ligent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Battery voltage sig-	Т	R												
Key switch signal							Т						R	
Ignition switch signal							Т						R	R
P range signal		Т			R							R	R	
Closed throttle position signal	Т	R			R									
Wide open throttle position signal	Т	R												
Engine speed signal	Т	R	R	R	R					R		R		
Engine status signal	Т						R							
Engine coolant tem- perature signal	Т									R				
Accelerator pedal position signal	Т	R		R	R							R		
Fuel consumption monitor signal	Т		R							R T				
Turbine revolution signal	R	Т			R									
Output shaft revolution signal	R	Т			R				R					
A/C switch signal	R						Т							
A/C compressor request signal	Т													R
A/C compressor feedback signal	Т									R				
Blower fan motor switch signal	R						Т							
A/C switch/indicator signal			T R							R T				
Cooling fan speed request signal	Т		IX.											R
Position light request signal			R				Т			R				R
Low beam request signal							Т							R
Low beam status signal	R													Т
High beam request signal							Т			R				R
High beam status signal	R													Т
Front fog light request signal							Т							R

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Signals	ECM	тсм	Dis- play con- trol unit	AWD con- trol unit	ICC unit	Intel- ligent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
Day time running light request signal							Т			R				
Turn LED burnout status signal							R			Т				
Vehicle speed signal	R	R	R	R	R	R	R		R	R T	R	Т	R	
Sleep wake up signal						Т	T R			R				R
Door switch signal			R			R	T			R			R	R
Door switch signal			κ			K			-				K	ĸ
Turn indicator signal							T		R	R			-	
Key fob ID signal							Т						R	
Key fob door unlock signal							Т						R	
Oil pressure switch signal							R T			R				Т
							Т			R				
Buzzer output signal					Т	Т				R R				
Fuel level sensor signal	R				•					Т				
Fuel level low warn- ing signal			R							Т				
Malfunction indicator lamp signal	Т									R				
ICC operation signal	R				Т									
Front wiper request signal					R		Т							R
Front wiper stop position signal							R							Т
Rear window defog- ger switch signal							Т							R
Rear window defog- ger control signal	R		R				R							Т
Hood switch signal							R							Т
Theft warning horn request signal							Т							R
Horn chirp signal							Т							R
Steering angle sensor signal								Т				R		
Tire pressure signal							Т			R				
ABS warning lamp signal										R		Т		

CAN COMMUNICATION

[CAN]

Signals	ECM	тсм	Dis- play con- trol unit	AWD con- trol unit	ICC unit	Intel- ligent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Unified meter and A/C amp.	ICC sen- sor	ABS actuator and electric unit (control unit)	Driver seat con- trol unit	IPDM E/R
VDC OFF indicator lamp signal										R		Т		
SLIP indicator lamp signal										R		Т		
Brake warning lamp signal										R		Т		
System setting signal			T R			R T							R T	
AWD warning lamp signal				Т		•				R			•	
Distance to empty signal			R							Т				
Parking brake switch signal				R			R			Т				
Door lock/unlock request signal						Т	R							
Door lock/unlock sta- tus signal						R	Т							
Starter permission signal						Т	R							
Back door open request signal						Т	R							
Power window open request signal						Т	R							
Alarm request signal						Т	R							
Key warning signal						Т				R				
ICC sensor signal					R						Т			
ICC warning lamp signal					Т					R				
ICC system display signal					Т					R				
Current gear position signal		Т			R							R		
ICC steering switch signal	Т				R									
ASCD operation signal	Т	R												
ASCD OD cancel request signal	Т	R												
ICC OD cancel request signal		R			Т									
A/T CHECK indicator lamp signal		Т								R				
A/T position indicator lamp signal		Т								R				

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Signals	ECM	тсм	Dis- play con- trol unit	AWD con- trol unit	ICC unit	Intel- ligent Key unit	всм	Steer- ing angle sen- sor	LDW cam- era unit	Uni- fied meter and A/C amp.	ICC sen- sor	ABS actu- ator and elec- tric unit (con- trol unit)	Driver seat con- trol unit	IPDM E/R
A/T shift schedule change demand signal		R										Т		
Manual mode signal		R								Т				
Not manual mode signal		R								Т				
Manual mode shift up signal		R								Т				
Manual mode shift down signal		R								Т				
Manual mode indicator signal		Т								R				
Ignition knob switch signal						Т	R							
Snow mode switch	R									Т				
signal	Т									R				
Current gear position signal*	R	Т												
Next gear position signal*	R	Т												
Shift change signal*	R	Т												
Shift pattern signal*	R	Т												
VDC OFF switch signal					R							Т		

^{*:} VK45DE engine model only

CAN SYSTEM (TYPE 1)

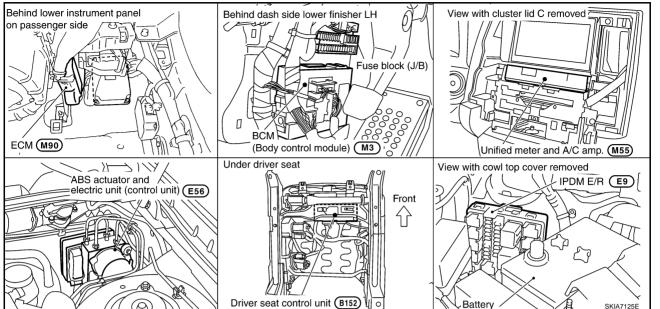
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CAN SYSTEM (TYPE 1)

PFP:23710

Component Parts and Harness Connector Location

AKS00CFK



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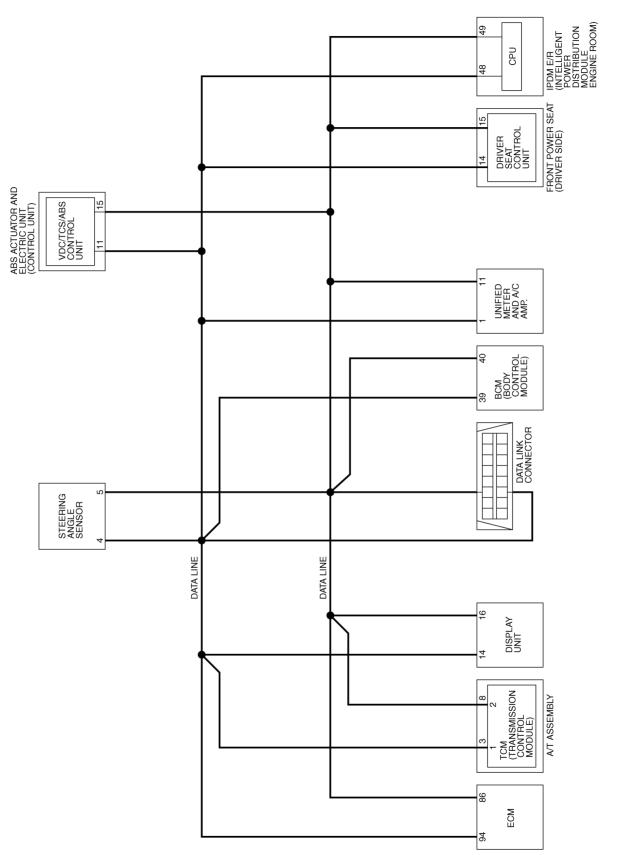
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Schematic



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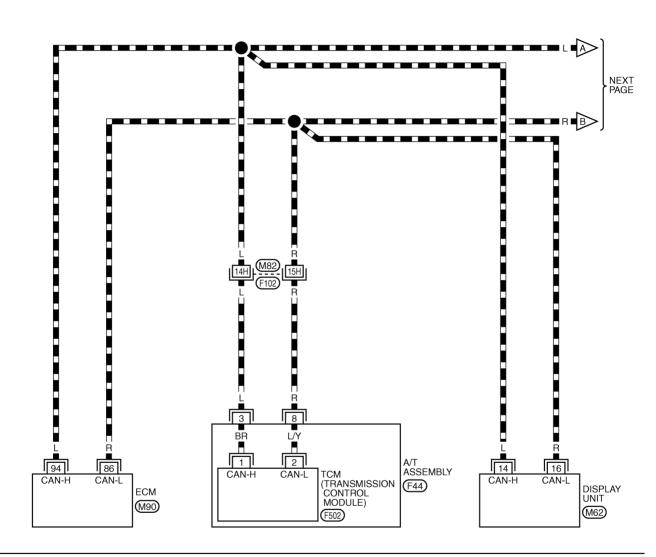
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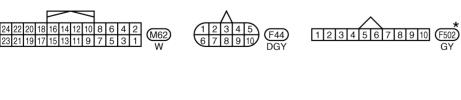
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LAN-CAN-01

DATA LINE





REFER TO THE FOLLOWING.

(F102) -SUPER MULTIPLE
JUNCTION (SMJ)

M90 -ELECTRICAL UNITS

*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWM2090E

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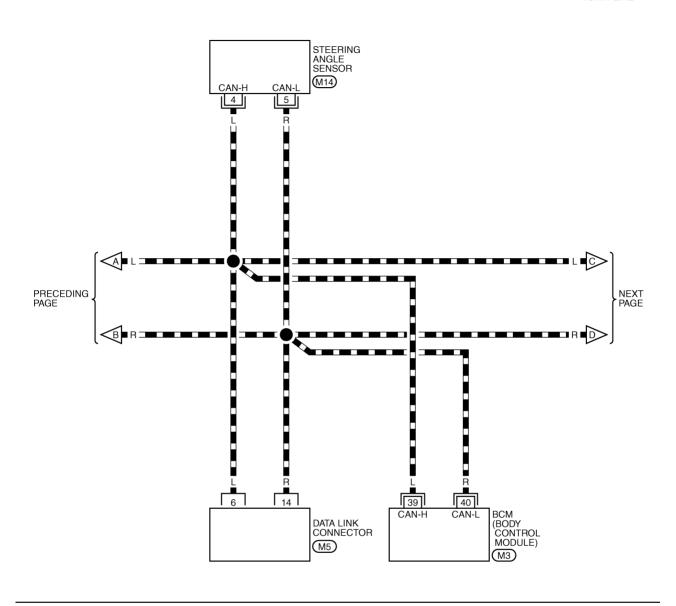
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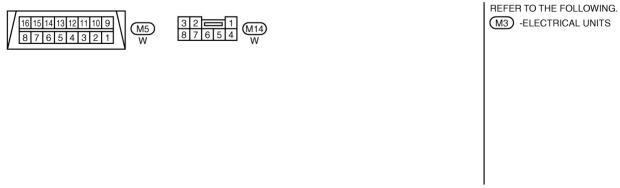
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LAN-CAN-02

: DATA LINE





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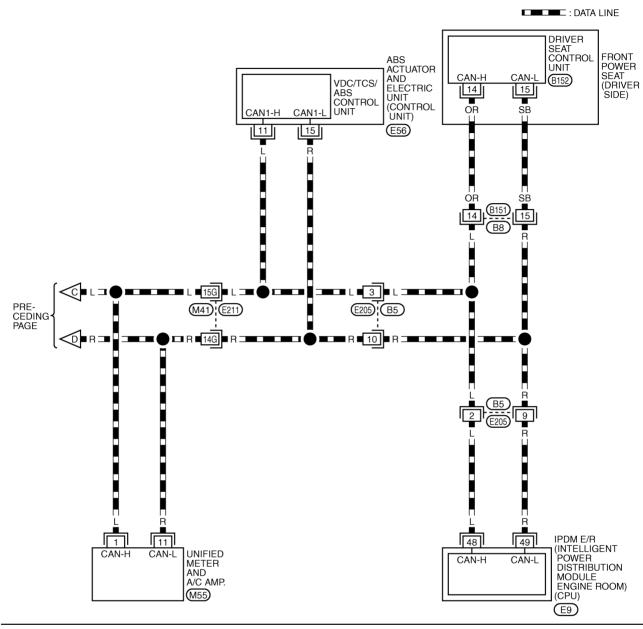
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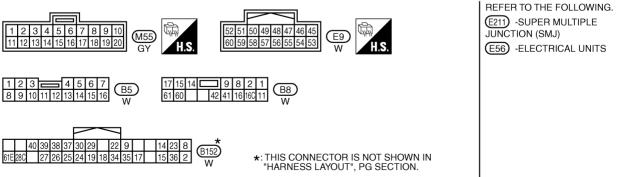
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TKWM2092E

Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

					CANE	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en.		- "				Receive	diagnosis				SELF-DIAG	RESULTS
OLLEGI OTOTEM SOIC	on	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI BIAC	THEODEIG
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A /T	_	NG	UNKWN	UNKWN	-	_	-	1	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	-	_	_	CÂN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	-	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_

Symptoms:		

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

Display unit Transl	lation Sheet: Rewrite the following	names, and put a check mark on the c	check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	_
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	_	CAN9	

Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of A/T SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS	Attach copy of METER A/C AMP SELF-DIAG RESULTS
Attach copy of	Attach copy of	Attach copy of	
ABS	AUTO DRIVE POS.	IPDM E/R	
SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS	
Attach copy of	Attach copy of	Attach copy of	Attach copy of
ENGINE	A/T	BCM	METER A/C AMP
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT
MNTR	MNTR	MNTR	MNTR
Attach copy of	Attach copy of	Attach copy of	
ABS	AUTO DRIVE POS.	IPDM E/R	
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	
MNTR	MNTR	MNTR	

Revision: 2005 July LAN-53 2005 FX

CHECK SHEET RESULTS (EXAMPLE)

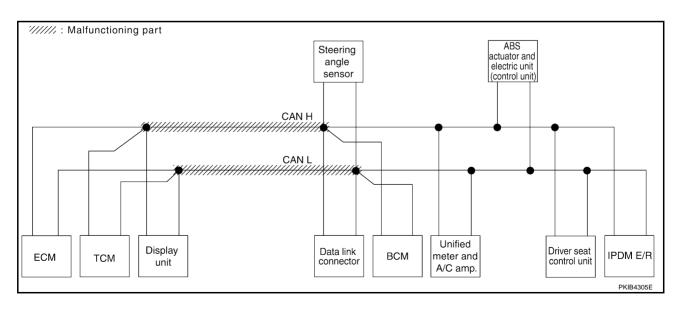
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-70</u>, "Inspection Between TCM and <u>Data Link Connector Circuit</u>".

					CAN E	OIAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en						Receive	diagnosis				SELF-DIAG	DESILITS
OLLLOT OTOTEW Scre	511	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKVN	_	UNKVN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	_	_	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNK VN	_	UNKVN	_	UNK V N	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNK N N	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	-	NG	UNKWN	UNK NN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNK VN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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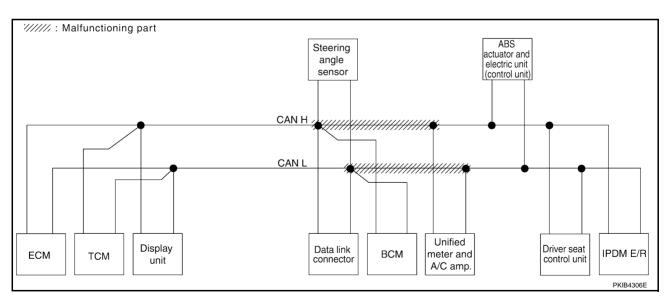
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Case 2

Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-71</u>, "Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit".

												II .	
					CAN D	IAG SUPPO		diagnosis				-	
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKVN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1		ı	ı	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	-
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKVN	_	UNK V N	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	-	1	UNKVN	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No ind Mation	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	1	UNKWN	_	CAN COMM CIFCUIT (U1000)	_
ABS	_	NG	UNKWN	UNK VN	UNKVN	_	_	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	-	ı	-	_	CAN COMM CIRCUIT (U1000)	_



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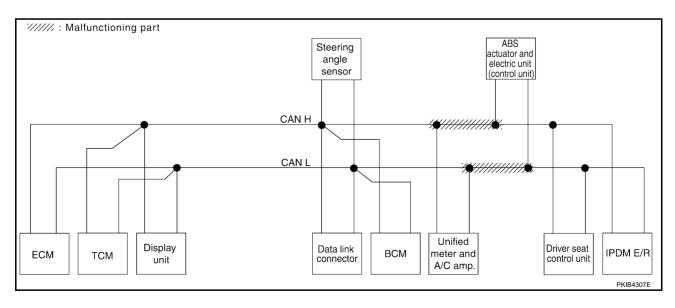
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-71, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

<u>cuit</u> .													
					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit		1	1	Receive	diagnosis		T	.	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	ı	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	-	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNK W N	_	
BCM	No indication	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	I
METER A/C AMP	No indication	I	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	İ	UNKWN	ı	CAN COMM CIRQUIT (U1000)	I
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	ı
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	-
	•												
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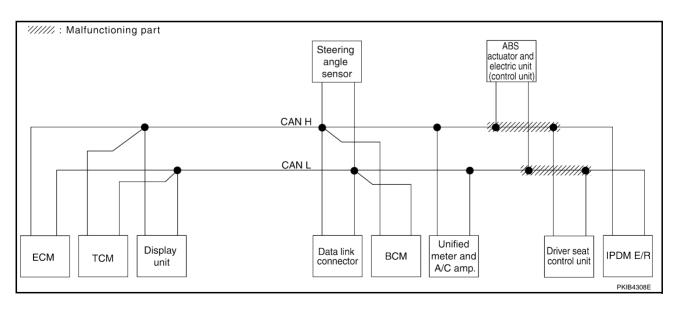
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Case 4

Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-72</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	1.20.1					Receive	diagnosis				SELF-DIAG	RESULTS
OLLEGI GIGILIN GGIG		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI DINC	TILOGETO
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIB4444E

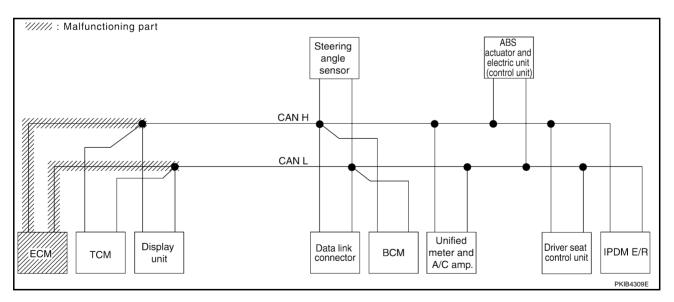


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Case 5
Check ECM circuit. Refer to <u>LAN-73</u>, "ECM Circuit Inspection" .

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit		ı	ı	Receive	diagnosis T				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKVN	-	UNKWN	_	UNKWN	_	UNKVN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
Display unit	_	NG	UNKWN	UNK WN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKVN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	ı	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKVN	_	_	UNKWN	_	_	1	_	CAN COMM CIRCUIT (U1000)	_

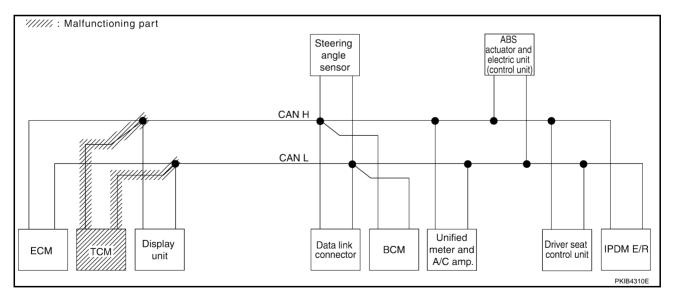


CAN SYSTEM (TYPE 1)

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Case 6
Check TCM circuit. Refer to <u>LAN-73</u>, "TCM Circuit Inspection".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	nn.						Receive	diagnosis				SELF-DIAG	DECINTO
SEELOT STSTEM SCIEN	511	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKVN		UNKWN	ı	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKVN	UNKVN	_	CÂN COMM CIRQUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	1	UNKWN	-	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNK W N	_	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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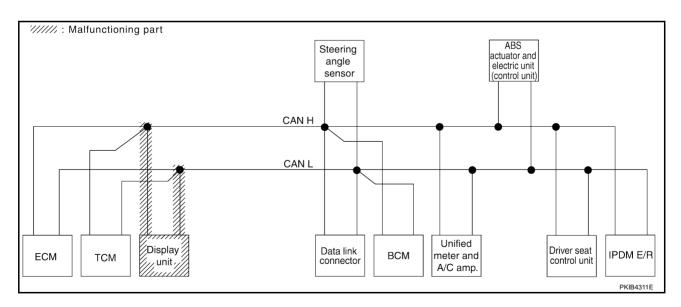
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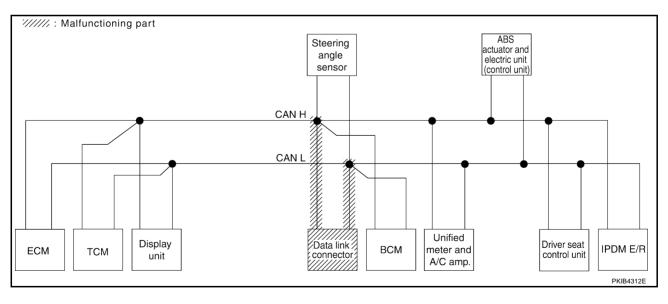
Case 7
Check display unit circuit. Refer to <u>LAN-74</u>, "<u>Display Unit Circuit Inspection</u>".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	1.22.1					Receive	diagnosis				SELF-DIAG	RESULTS
OLLLOT OTOTEW SCIE	on	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	GEET-DIAC	THEODETO
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNWN	_	_	UNKVN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	-	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CÂN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



Case 8
Check data link connector circuit. Refer to LAN-74, "Data Link Connector Circuit Inspection".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre							Receive	diagnosis				SELF-DIAG	DECLITE
SELECT STSTEM SCIE	EII	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No individuon	-	UNKWN	UNKWN	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



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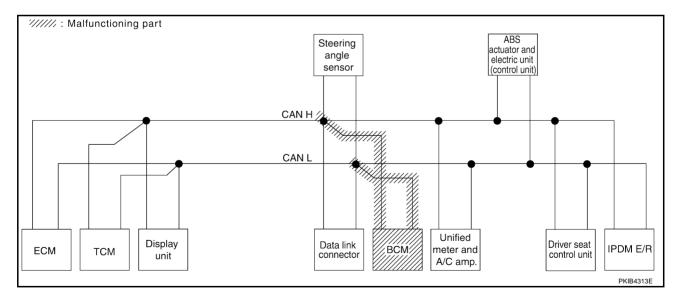
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Case 9
Check BCM circuit. Refer to <u>LAN-75</u>, "BCM Circuit Inspection" .

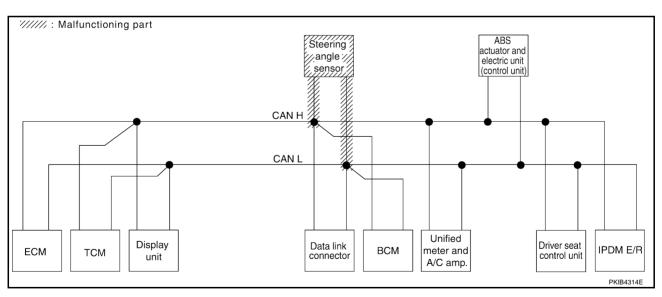
					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	en	Initial	Transmit				Receive	diagnosis	ı	ı		SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	-
BCM	N indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	-	-	CAN COMM CIRCUIT (U1000)	1
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	UNKWN	_	UNKWN	-	ı	CAN COMM CIRCUIT (U1000)	1
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
	•												
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Case 10

Check steering angle sensor circuit. Refer to LAN-75, "Steering Angle Sensor Circuit Inspection" .

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1	ı	ı	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	I
Display unit	-	NG	UNKWN	UNKWN	_	-	UNKWN	-	UNKWN	_	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	-	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	-



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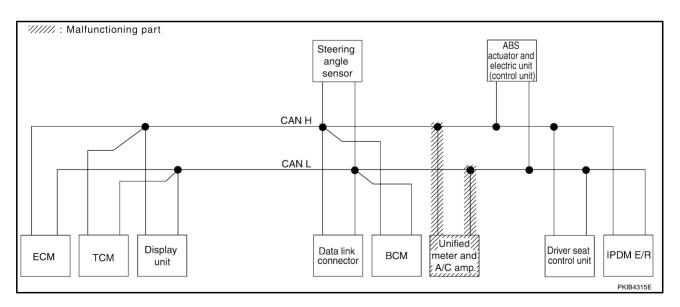
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Case 11
Check unified meter and A/C amp. circuit. Refer to LAN-76, "Unified Meter and A/C Amp. Circuit Inspection".

					CAN D	IAG SUPPO							
SELECT SYSTEM scree	n	Initial	Transmit					diagnosis I		I		SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	1	UNKWN	_	UNKWN	_	UNK V N	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	1	_	ı	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNK VN	_	UNKWN	_	_
всм	No indication	NG	UNKWN	UNKWN	I	_	ı	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	I	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	ı
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	ı	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	ı	UNKWN	_	UNKVN	-	ı	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	ı	UNKWN	UNKWN	1	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIB4451E



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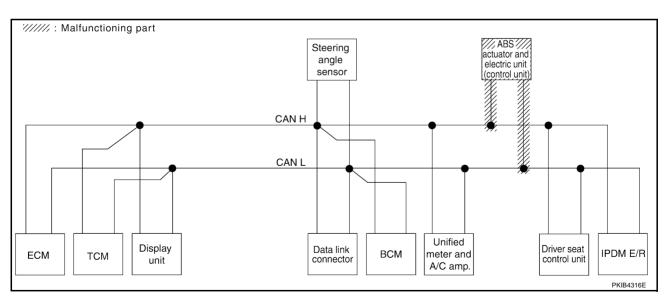
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Case 12

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-76</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

					CAN E	DIAG SUPPO							
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	diagnosis STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	*	UNK VN	UNKVN	nnkwn	_	-	UNKVN	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIB4452E



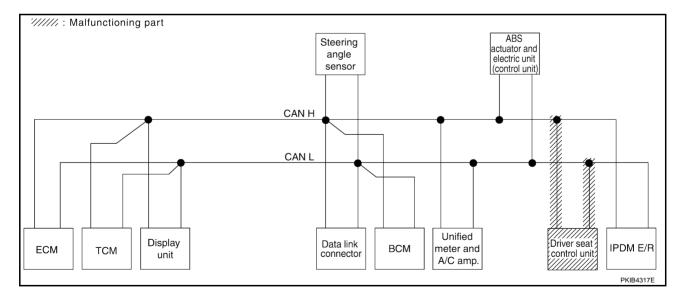
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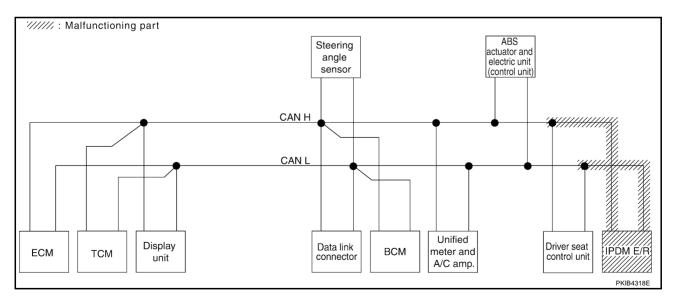
Case 13
Check driver seat control unit circuit. Refer to <u>LAN-77</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	_						Receive	diagnosis				0515 5146	DEQUITO
SELECT SYSTEM scree	n	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	HESULIS
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No ind ation	NG	UNKWN	1	UNKWN	ı	UNKWN	_	UNKWN	1	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIB4453E



Case 14
Check IPDM E/R circuit. Refer to LAN-78, "IPDM E/R Circuit Inspection".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	on						Receive	diagnosis				SELF-DIAG	DECLITO
SELECT STSTEM SCIE	GII	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	1	UNKWN	1	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	ı	1	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	-	UNKWN	_	UNKWN	_	UNK WN	_	-
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	-	_	UNKWN	_	UNK VN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	ı	1	UNKWN	ı	-	_	CAN COMM CIRCUIT (U1000)	I
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	-	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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Case 15
Check CAN communication circuit. Refer to <u>LAN-78</u>, "CAN Communication Circuit Inspection".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit			I		diagnosis I		I	I	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNK VN	_	UNKWN	_	UNKVN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNK VN	UNKVN	_	_	UNKVN	_	UNKVN	_	UNK W N	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	No indivition	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	İ	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	-	*	UNK WN	UNKWN	UNKWN	_	ı	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	ı
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 1)

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Case 16

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-84, "IPDM E/R Ignition Relay Circuit Inspection"</u>.

					CAN E	IAG SUPPO							
SELECT SYSTEM scree	en	Initial	Transmit		1	1	Receive	diagnosis		ı	ı	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNK V N	_	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	I	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	I
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	1	UNKWN	_	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	1	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	1
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKAN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 17

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-84</u>, "IPDM E/R Ignition Relay Circuit Inspection".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	an.						Receive of	diagnosis				SELF-DIAG	BEQUITO
OLLLOT OTOTLIN SCIEC)II	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	J SEET-BIAC	THEODETO
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	1	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	ı	ı	_	ı	ĺ	ı	UNKWN	l	CAN COMM CIRCUIT (U1000)	I
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN		UNKWN	-	UNKWN	_	-
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	ı
ABS	_	NG	UNKWN	-	UNKWN	_	-	İ		ı	ı	CAN COMM CIRCUIT (U1000)	I
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	UNKWN	l	UNKWN	ı	ı	CAN COMM CIRCUIT (U1000)	1
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	-	_	_	-	CAN COMM CIRCUIT (U1000)	-

Inspection Between TCM and Data Link Connector Circuit

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1. CHECK HARNESS FOR OPEN CIRCUIT

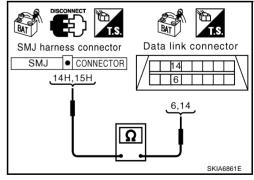
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



[CAN]

Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

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1. CHECK HARNESS FOR OPEN CIRCUIT

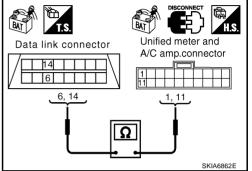
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).



OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit** AKS00CEC

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

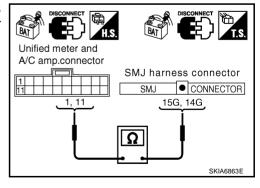
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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LAN-71 Revision: 2005 July 2005 FX

$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

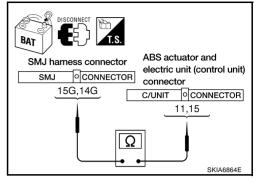
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

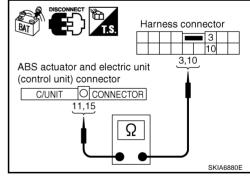
- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L) 15 (R) - 10 (R) : Continuity should exist. : Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L), 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L)

: Continuity should exist.

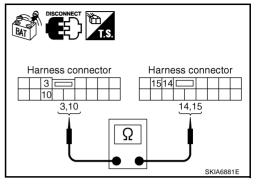
10 (R) - 15 (R)

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CES

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

: **Approx.** 108 - 132 Ω

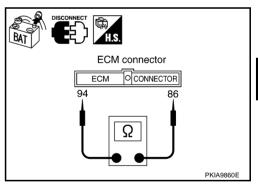
OK or NG

OK

>> Replace ECM.

NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



AKS00CFT

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

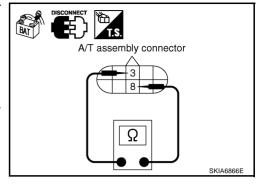
3 (L) - 8 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG

>> Repair harness between A/T assembly and display control unit.



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Display Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect display unit connector.
- Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

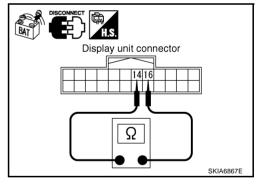
14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace display unit.

NG

>> Repair harness between display unit and harness connector M82.



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Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

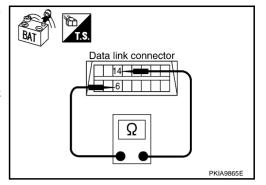
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

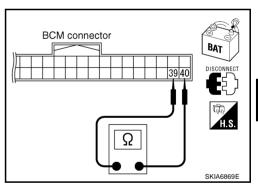
- Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

39 (L) - 40 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG >> Repair harness between BCM and data link connector.



Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

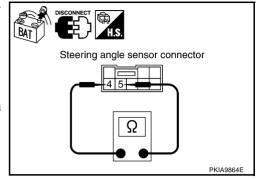
4 (L) - 5 (R) : Approx. 54 - 66
$$\Omega$$

OK or NG

OK >> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CFZ

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

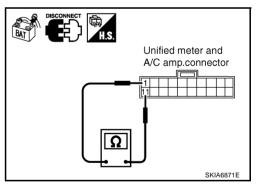
1 (L) - 11 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CG0

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect ABS actuator and electric unit (control unit) connector.
- Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

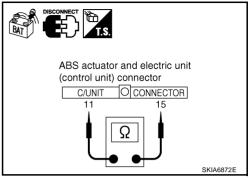
11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG >> Repair harness between ABS actuator and electric unit

(control unit) and harness connector E205.



AKS00CG1

Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

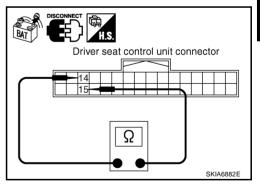
- 1. Disconnect driver seat control unit connector.
- Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

14 (OR) - 15 (SB) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace driver seat control unit. NG

>> Repair harness between driver seat control unit and harness connector B5.



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IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

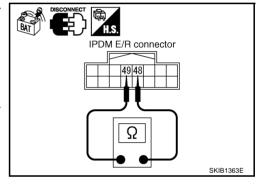
: Approx. 108 - 132 Ω

OK or NG

OK >> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and harness connector B8.



AKS00CG3

CAN Communication Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

$oldsymbol{3}$. Check harness for short circuit

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

> : Continuity should not exist. 6 (L) - Ground 14 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 4.

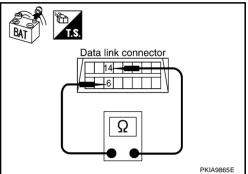
Revision: 2005 July

>> Check the following harnesses. If any harness is damaged, repair the harness.

- Harness between data link connector and ECM
- Harness between data link connector and harness connector M82
- Harness between data link connector and display unit
- Harness between data link connector and BCM
- Harness between data link connector and steering angle sensor
- Harness between data link connector and unified meter and A/C amp.

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Harness between data link connector and harness connector M41



Data link connector

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4. CHECK HARNESS FOR SHORT CIRCUIT

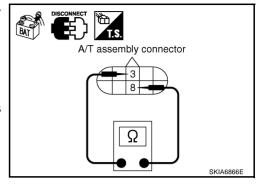
- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG

>> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

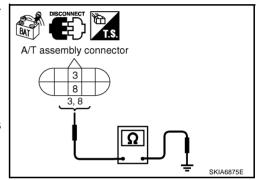
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

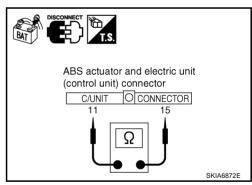
- Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 7.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

> : Continuity should not exist. 11 (L) - Ground 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

ABS actuator and electric unit (control unit) connector C/UNIT O CONNECTOR 11,15

8. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

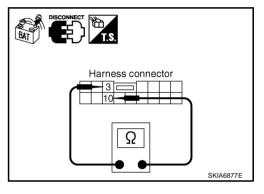
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

>> GO TO 9. OK

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

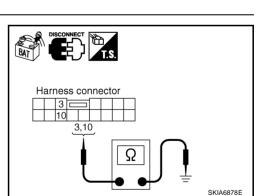
> 3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



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10. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

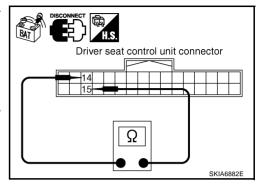
14 (OR) - 15 (SB) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG >> Repair

>> Repair harness between driver seat control unit and harness connector B151.



11. CHECK HARNESS FOR SHORT CIRCUIT

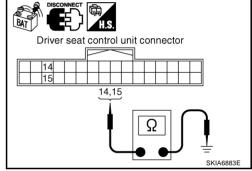
Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

14 (OR) - Ground : Continuity should not exist.15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG >> Repair harness between driver seat control unit and harness connector B151.



12. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

48 (L) - 49 (R) : Continuity should not exist.

OK or NG

NG

OK >> GO TO 13.

>> Repair harness between IPDM E/R and harness connector E205.

IPDM E/R connector

13. CHECK HARNESS FOR SHORT CIRCUIT

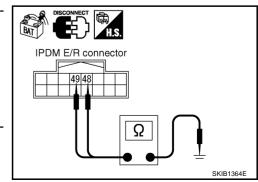
Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 14.

NG >> Repair harness between IPDM E/R and harness connector E205.



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14. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- 2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

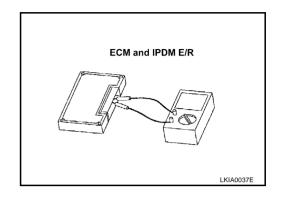
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 15.

NG >> Replace ECM and/or IPDM E/R.



15. CHECK SYMPTOM

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 16.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

16. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

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CAN SYSTEM (TYPE 1)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00CG4

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to <u>PG-28</u>, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START""</u>.

CAN SYSTEM (TYPE 2)

[CAN]

CAN SYSTEM (TYPE 2)

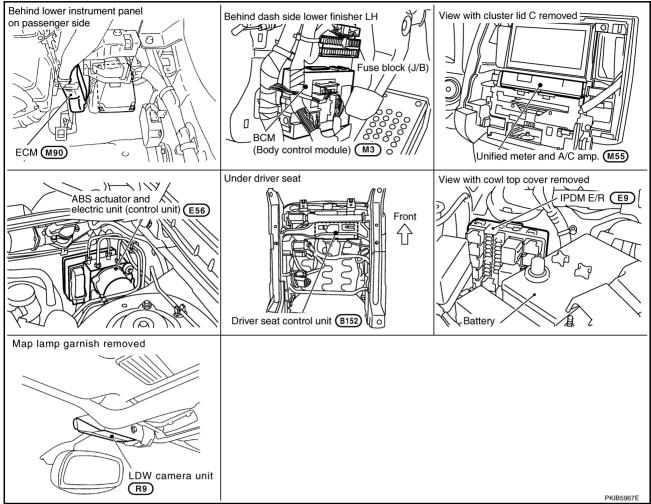
PFP:23710

Component Parts and Harness Connector Location

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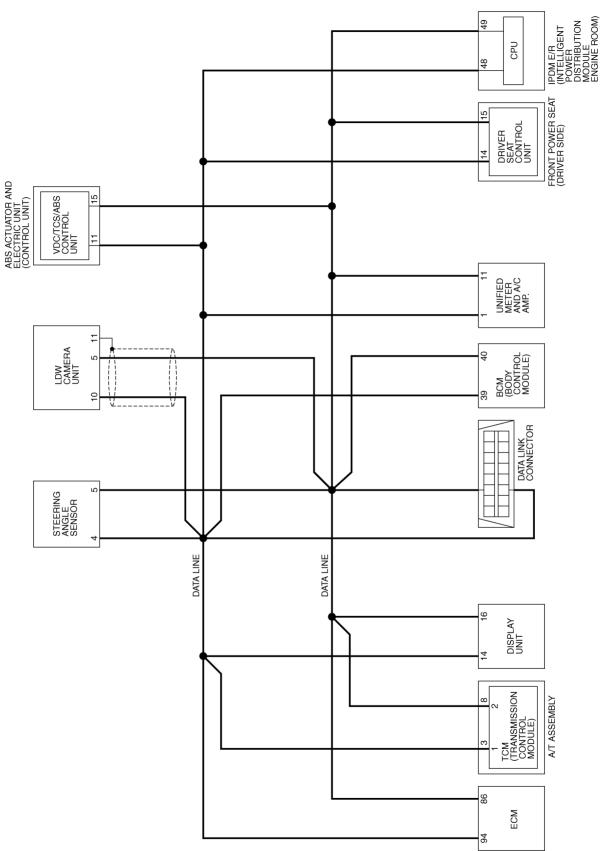


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Schematic



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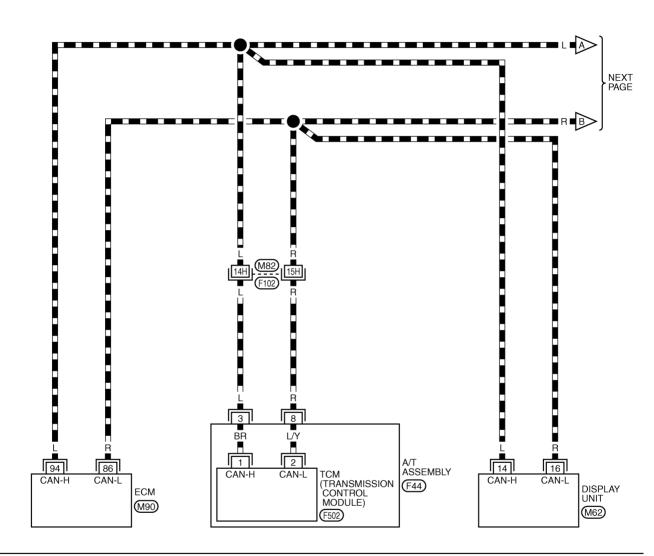
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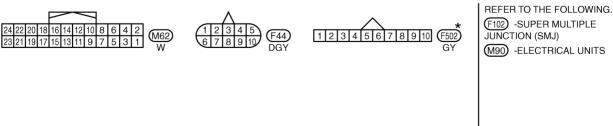
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LAN-CAN-04

: DATA LINE





*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

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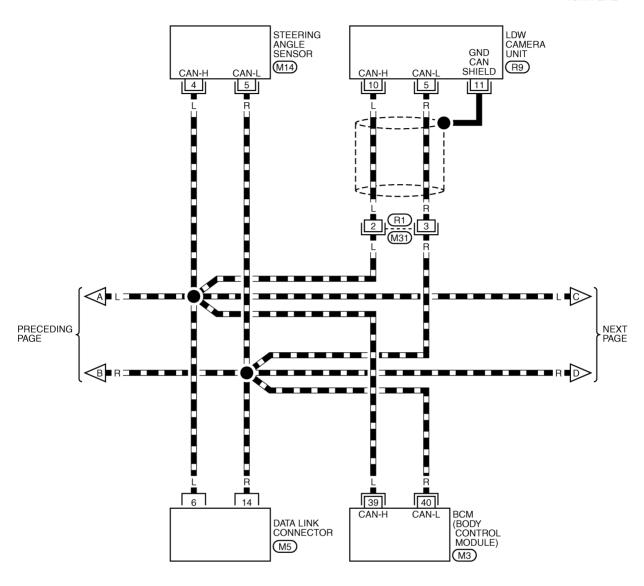
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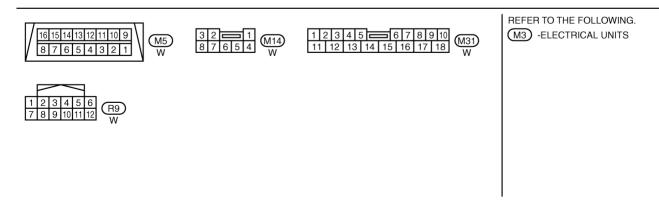
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: DATA LINE





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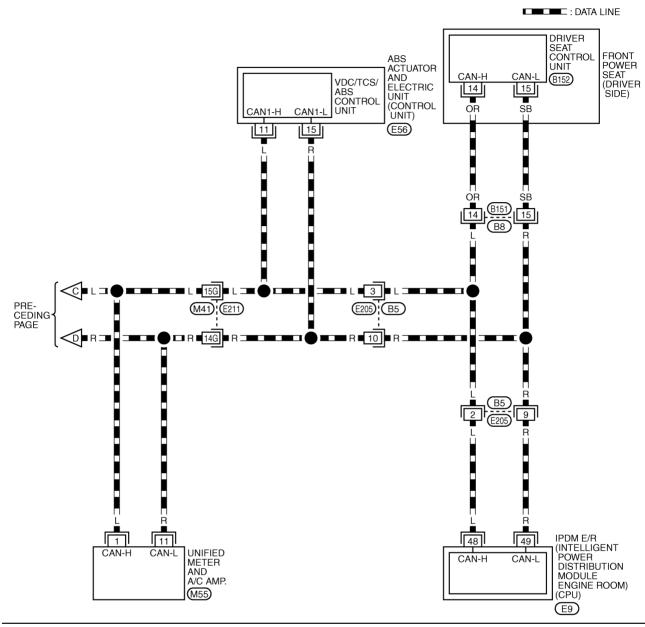
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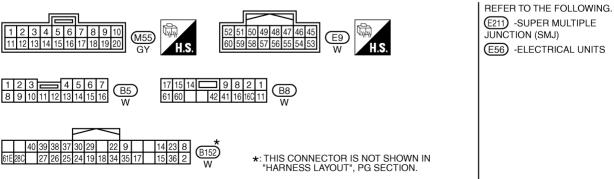
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TKWM2354E

Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

						CAN D	IAG SUPPO		diagnosis				-	
ENGINE — NG UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CIRCUIT (1000) (100	SELECT SYSTEM scree	'n			ECM	тсм	DISPLAY						- SELF-DIAG	RESULTS
ATT — NG UNKWN UNKWN — — — UNKWN UNKWN — CIRCUIT — (U1000) Display unit — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) LDW NO Indication — UNKWN UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) METER ACC AMP NO INDICATED — UNKWN UNKWN UNKWN UNKWN — — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) ABS — NG UNKWN UNKWN UNKWN — UNKWN — UNKWN — — — CIRCUIT — (U1000) AUTO DRIVE POS. NO INDICATED NO INDICA	NGINE	_	NG	UNKWN	_	UNKWN	-	UNKWN	ı	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
No No No No UNKWN UNKWN - - - UNKWN - UNKWN CIRCUIT (11000) -	т	_	NG	UNKWN	UNKWN	_	_	-	-	UNKWN	UNKWN	-	CIRCUIT	_
BCM	splay unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	_	UNKWN	-	_
LDW	СМ		NG	UNKWN	UNKWN	_	_	_	-	UNKWN	_	UNKWN	CIRCUIT (U1000)	_
METER A/C AMP	DW .		_	_	UNKWN	UNKWN	_	UNKWN	-	_	UNKWN	_	CIRCUIT (U1000)	_
ABS — NG UNKWN UNKWN — — UNKWN — — — CIRCUIT — (U1000) AUTO DRIVE POS.	ETER A/C AMP		-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	-	CIRCUIT (U1000)	_
Attach copy of Attach copy of Attach copy of	38	_	NG	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	_	_	CIRCUIT (U1000)	_
IPDM E/R Indication - UNKWN UNKWN UNKWN CIRCUIT (U1000) - CIRCUIT (U1000)	JTO DRIVE POS.		NG	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	_	_	CIRCUIT (U1000)	_
Symptoms: Attach copy of Attach copy of	DM E/R		_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CIRCUIT	_
			,	Attach (copy of SYSTEM									

CAN SYSTEM (TYPE 2)

[CAN]

Confirmation/Adjustment Display	Check sheet table Display	names, and put a check mark on the cl Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	_
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	_	CAN9	_

Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of A/T SELF-DIAG RESULTS Attach copy of ABS SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS Attach copy of AUTO DRIVE POS. SELF-DIAG RESULTS	Attach copy of LDW SELF-DIAG RESULTS Attach copy of IPDM E/R SELF-DIAG RESULTS
ABS	AUTO DRIVE POS.	IPDM E/R
Attach copy of A/T CAN DIAG SUPPORT MNTR	Attach copy of BCM CAN DIAG SUPPORT MNTR	Attach copy of LDW CAN DIAG SUPPORT MNTR
Attach copy of ABS CAN DIAG SUPPORT MNTR	Attach copy of AUTO DRIVE POS. CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR
	A/T CAN DIAG SUPPORT MNTR Attach copy of ABS CAN DIAG SUPPORT	Attach copy of ABS CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR Attach copy of ABS CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT

CHECK SHEET RESULTS (EXAMPLE)

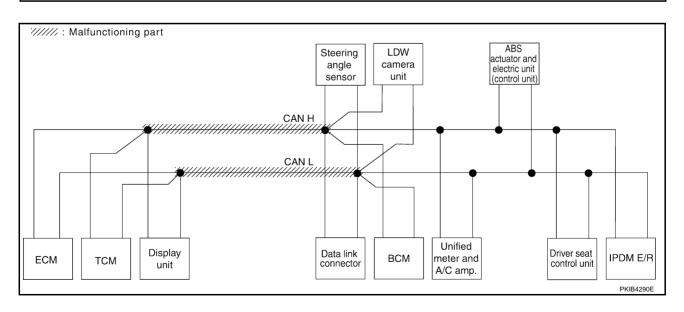
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-110</u>, "Inspection Between TCM and <u>Data Link Connector Circuit</u>".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	⊇n.	1-99-1	T 1				Receive	diagnosis				SELF-DIAG	RESULTS
CEECOT OT OT ENTITION OF	511	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKVN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	-	CAN COMM CIRQUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKVN	_	UNKWN	_	UNKVN	_	_
BCM	No indication	NG	UNKWN	UNKVN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKVN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	-	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKVN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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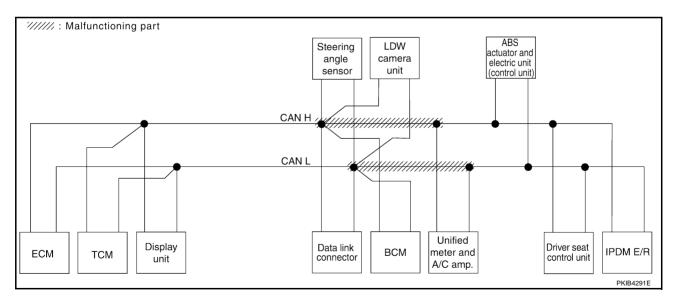
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-111, "Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scr	een	1-90-1	T				Receive	diagnosis				SELF-DIAG	RESULTS
OLLEGI GIGILINI 361	CON	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	ı	UNKVN	UNK VN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	-	CAN COMM CIRQUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	1	UNKWN	_	UNKVN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKVN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	-	UNKWN	_	_	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indivation	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No ind ation	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



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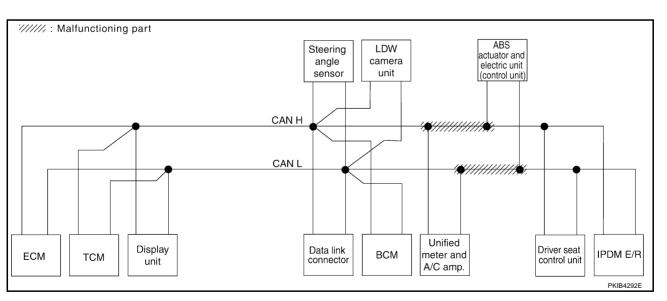
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-111, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	(million)	Transmit				Receive	diagnosis				SELF-DIAG	BESUITS
SEEEOT STOTEM SOIL	511	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	ı	_	UNKWN	UNKWN	I	CAN COMM CIPOUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	-	UNK VN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	١	UNK VN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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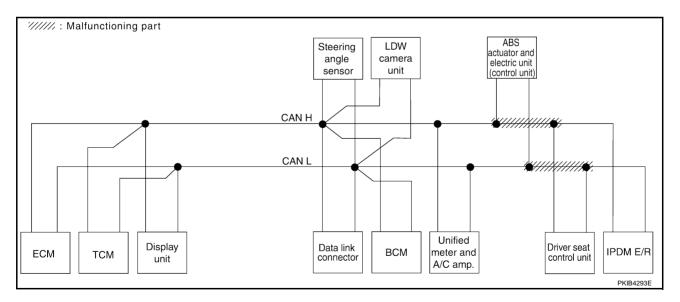
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Case 4

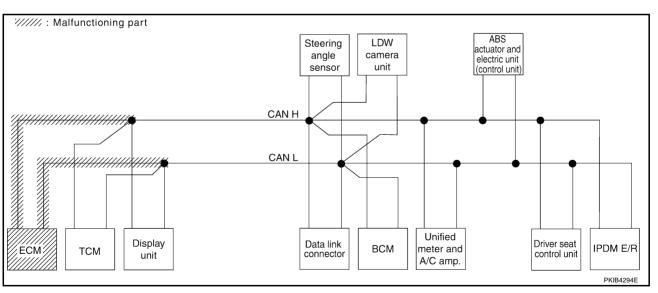
Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-112</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	T 1				Receive	diagnosis				SELF-DIAG	RESULTS
02220 7 0 7 0 7 2 111 0 0 0 1		diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKVN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No ind Mation	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No ind ation	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



Case 5
Check ECM circuit. Refer to <u>LAN-113</u>, "ECM Circuit Inspection" .

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	1-22-1	T				Receive	diagnosis				SELF-DIAG	BESUITS
SEEEST STOTEM CON		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNK V N	_	UNK N N	_	UNK V N	_	UNKWN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	I	ı	UNKWN	UNKWN	I	CÂN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNK N N	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKVN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKVN	UNKWN	-	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNK V N	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKVN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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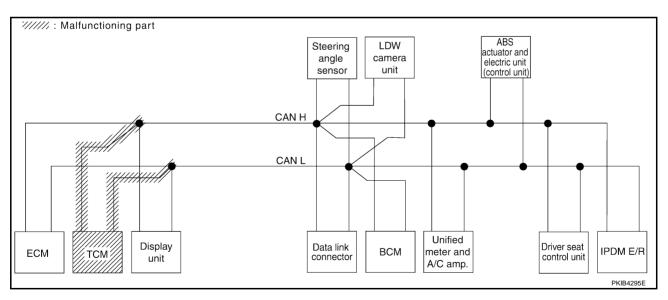
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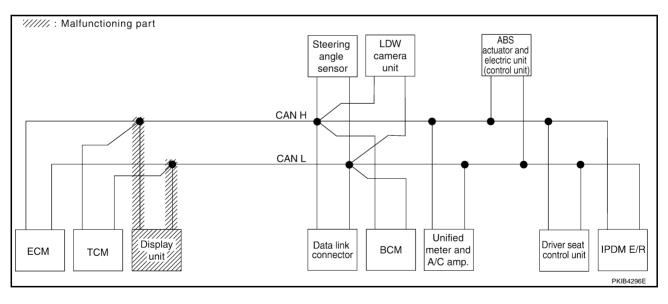
Case 6
Check TCM circuit. Refer to <u>LAN-113, "TCM Circuit Inspection"</u>.

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
0.000	•	diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK V N	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNK N N	_	_	_	_	UNKWN	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKVN	_	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNK V N	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNK V N	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



Case 7
Check display unit circuit. Refer to <u>LAN-114</u>, "<u>Display Unit Circuit Inspection</u>".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	an an						Receive	diagnosis				SELF-DIAG	RESULTS
OLLEGI GIGIENI SUICI	JII	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	TILOULIU
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	1	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	ı	1	1	UNKWN	UNKWN	1	CAN COMM CIRCUIT (U1000)	1
Display unit	_	NG	UNK N N	UNK N N	_	_	UNKWN	1	UNKWN	ı	UNKYN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	1	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	-



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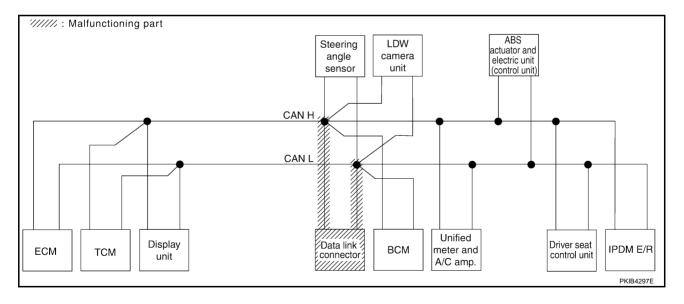
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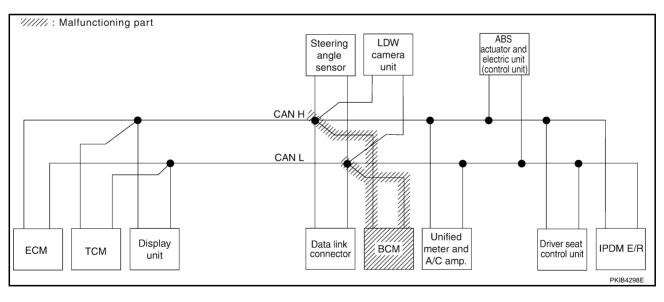
Case 8
Check data link connector circuit. Refer to <u>LAN-114</u>, "<u>Data Link Connector Circuit Inspection</u>" .

					CAN E	DIAG SUPPO	RT MNTR						
SELECT SYSTEM scree	n .						Receive	diagnosis				SELEDIA	RESULTS
SELECT STSTEM SCIEN	711	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
всм	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	1	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	ı	UNKWN	_	ı	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	ı	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	_
													PKIB4430E



Case 9
Check BCM circuit. Refer to <u>LAN-115</u>, "BCM Circuit Inspection" .

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	en	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
		diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	-	UNK W N	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	I	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	-	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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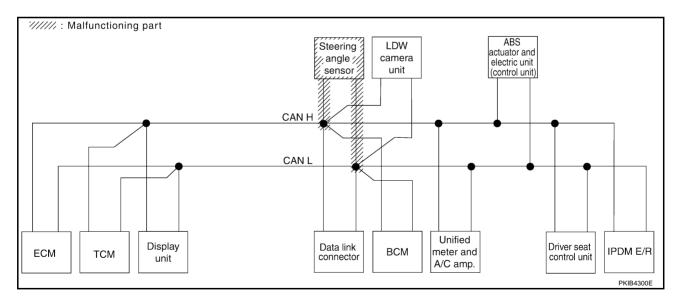
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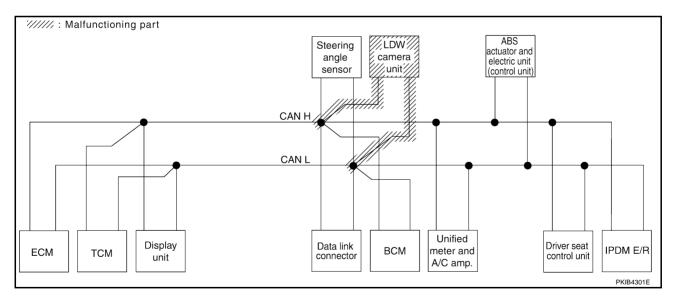
Case 10
Check steering angle sensor circuit. Refer to <u>LAN-115</u>, "Steering Angle Sensor Circuit Inspection".

					CANIC	IAG SUPPO	RT MNTR						
0515070007514					0,114.2			diagnosis				0515 514	DE011170
SELECT SYSTEM scre	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	i HESULIS
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	ı	UNKVN	l	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 11
Check LDW camera unit circuit. Refer to <u>LAN-116</u>, "<u>LDW Camera Unit Circuit Inspection</u>" .

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	on						Receive	diagnosis				SELF-DIAG	DECLUTO
SELECT STSTEM SCIE	en	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	ı	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	1	ı	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	1	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIPCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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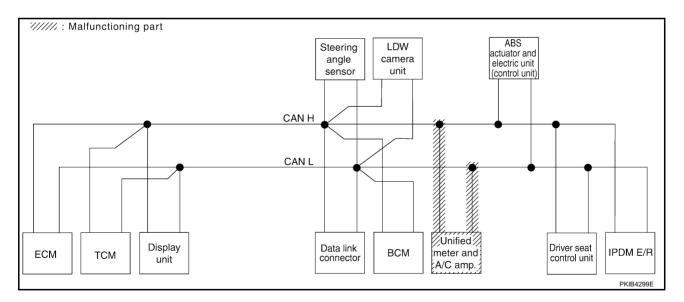
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Case 12
Check unified meter and A/C amp. circuit. Refer to <u>LAN-117</u>, "<u>Unified Meter and A/C Amp. Circuit Inspection</u>".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	la Mari	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
SEEEST STOTEM CON		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	-	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKVN	UNKWN	_	CÂN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKVN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKVN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIPCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKVN	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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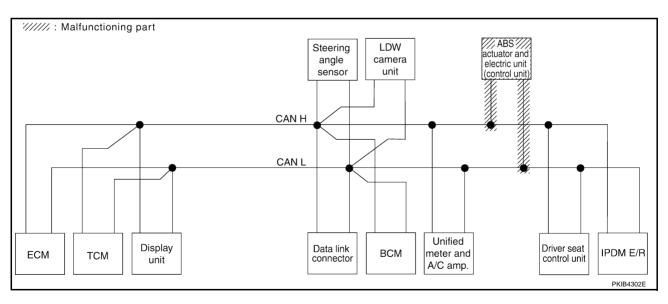
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Case 13

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-117</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en.	1-92-1	T 1				Receive	diagnosis				SELF-DIAG	RESULTS
OLLEGI GTOTEW 3000	,011	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	ı	UNKWN	UNK V N	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	UNK N N	-	CAN COMM CIRCUIT (U1000)	-
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKVN	-	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	UNKVN	ı	CAN COMM CIRCUIT (U1000)	-
ABS	_	V	UNKVN	UNKWN	UNKWN	_	_	UNKVN	-	_	-	CÀN COMM CIRCUIT (U1000)	1
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	-	CÂN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	-	_	1	CAN COMM CIRCUIT (U1000)	-



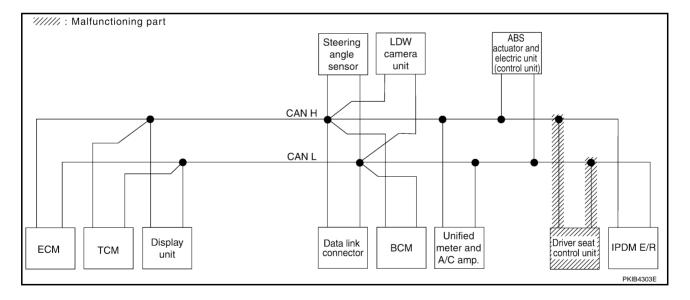
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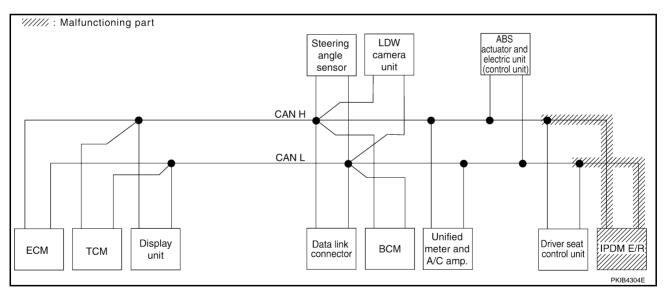
Case 14
Check driver seat control unit circuit. Refer to <u>LAN-118</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

					CANE	IAG SUPPO	RT MNTR						
SELECT SYSTEM s	creen		- "				Receive	diagnosis				SELF-DIAG	BESUITS
SEEEOT STOTEMES	oreen	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A /T	_	NG	UNKWN	UNKWN	_	_	ı	_	UNKWN	UNKWN	I	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	1	I	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	-	CÀN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 15
Check IPDM E/R circuit. Refer to <u>LAN-118</u>, "IPDM E/R Circuit Inspection".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	۵n						Receive	diagnosis				SELF-DIAG	RESULTS
GELECT CTOTEW SCIO	on .	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKVN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKVN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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Case 16
Check CAN communication circuit. Refer to <u>LAN-119</u>, "CAN Communication Circuit Inspection".

					CAN E	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	la:Mal	Tunnanit				Receive	diagnosis				SELF-DIAG	BESUITS
SEEEST STOTEM SOIL	on.	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKVN	1	UNK V N	_	UNKVN	ı	UNKVN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	ı	_	-	1	UNKVN	UNKVN	l	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKVN	_	_	UNK VN	-	UNKVN	1	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKWN	-	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	_	M	UNKVN	∩ NK WN	UNK V N	_	_	UNKVN	_	-	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	_	CAN COMM CIPCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	UNKWN	_	_	-	-	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 2)

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Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-125, "IPDM E/R Ignition Relay Circuit Inspection"</u>.

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	1-22-1	T				Receive	diagnosis				SELF-DIAG	BESUITS
CELEGY OF OTE IN CORO	on.	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK VN	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKVN	_	UNKWN	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	_	_	UNKVN	_	CAN COMM CIPQUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKVN	_	UNKWN	_	UNKWN	1	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-125, "IPDM E/R Ignition Relay Circuit Inspection".

												П	
					CANE	IAG SUPPO	RT MNTR Receive of	dia manasia				-	
SELECT SYSTEM scre	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	_	_	_	_	-	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	_	UNKWN	-	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	I	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	İ	_	UNKWN	I	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	_	UNKWN	_	1	ı	_	1	ı	CAN COMM CIPQUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKWN	1	l	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	ı	UNKWN	UNKWN	_	_	UNKWN	I	_	ı	I	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

AKS00CF2

1. CHECK HARNESS FOR OPEN CIRCUIT

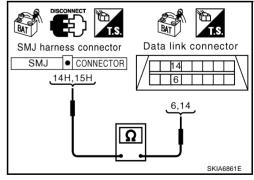
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit AKS00CF3

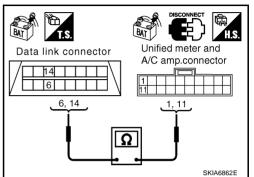
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit** AKS00CE4

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

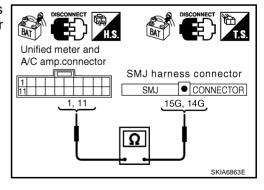
- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

1 (L) - 15G (L) : Continuity should exist. 11 (R) - 14G (R) : Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

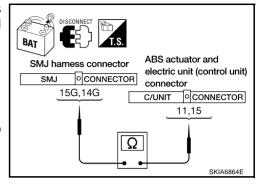
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

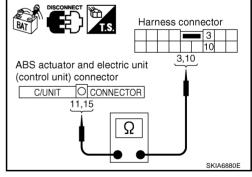
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L) 15 (R) - 10 (R) : Continuity should exist. : Continuity should exist.

OK or NG

OK >> GO TO 3. NG >> Repair harness.



$\overline{3}$. Check harness for open circuit

- 1. Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L). 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L) : Continuity should exist.

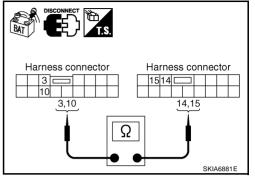
10 (R) - 15 (R)

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CF6

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

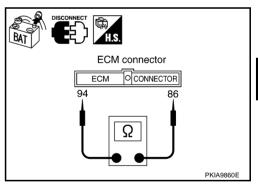
- 1. Disconnect ECM connector.
- Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : **Approx.** 108 - 132 Ω

OK or NG

OK >> Replace ECM. NG

>> Repair harness between ECM and harness connector M82.



AKS00CF7

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

Revision: 2005 July

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

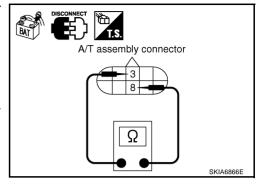
3 (L) - 8 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG

>> Repair harness between A/T assembly and display control unit.



AKS00CF8

Display Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

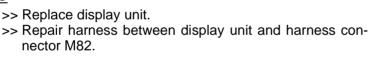
- 1. Disconnect display unit connector.
- Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

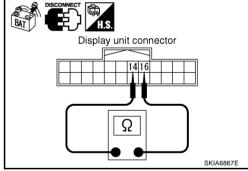
14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK

NG





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Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

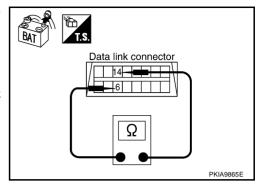
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

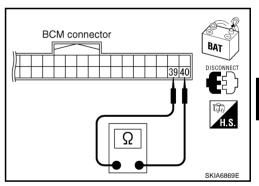
- Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

39 (L) - 40 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG >> Repair harness between BCM and data link connector.



Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

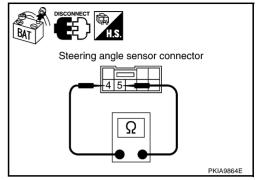
4 (L) - 5 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CFD

LDW Camera Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (unit side and harness side).
- LDW camera unit connector
- Harness connector R1
- Harness connector M31

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

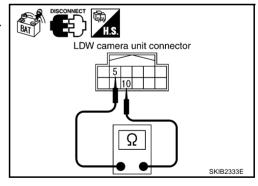
- 1. Disconnect LDW camera unit connector.
- Check resistance between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

10 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace LDW camera unit.

NG >> GO TO 3.



3. CHECK HARNESS FOR OPEN CIRCUIT

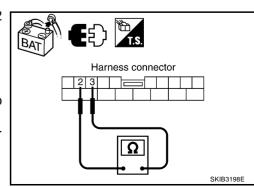
- Disconnect harness connector R1.
- Check resistance between harness connector M31 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Replace harness between LDW camera unit and harness connector R1.



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Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

1. Turn ignition switch OFF.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector.
- 2. Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

: Approx. 54 - 66 Ω

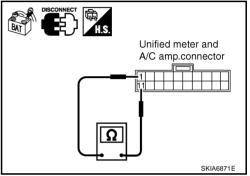
OK or NG

OK

>> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CFF

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

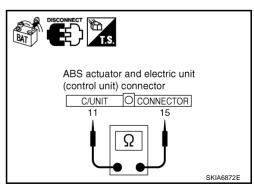
: Approx. 54 - 66Ω

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG

>> Repair harness between ABS actuator and electric unit (control unit) and harness connector E205.



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Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal. 2.
- Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect driver seat control unit connector.
- 2. Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

: Approx. 54 - 66 Ω

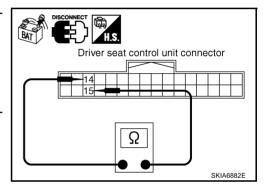
OK or NG

OK

>> Replace driver seat control unit.

NG

>> Repair harness between driver seat control unit and harness connector B5.



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IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

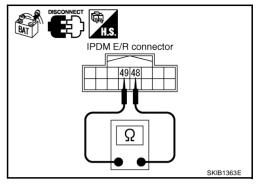
- 1. Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

: Approx. 108 - 132 Ω

OK or NG

OK >> Replace IPDM E/R.

NG >> Repair harness between IPDM E/R and harness connector B8.



CAN Communication Circuit Inspection

AKS00CFI

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and LDW camera unit
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- BCM connector
- Steering angle sensor connector
- Harness connector M31
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

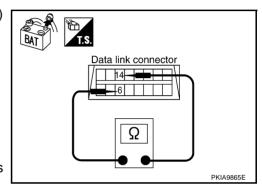
6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

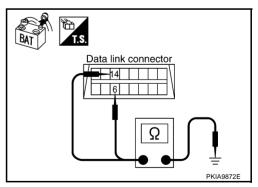
OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41





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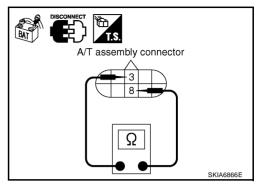
4. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect A/T assembly connector.
- 2. Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG >> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

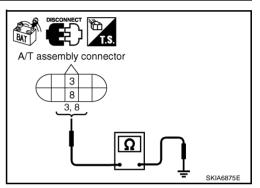
3 (L) - Ground : Continuity should not exist.8 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 6.

>> Repair harness between A/T assembly and harness connector F102.



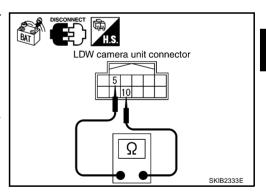
6. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect LDW camera unit connector.
- Check continuity between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

OK or NG

OK >> GO TO 7.

NG >> Replace harness between LDW camera unit and harness connector R1.



7. CHECK HARNESS FOR SHORT CIRCUIT

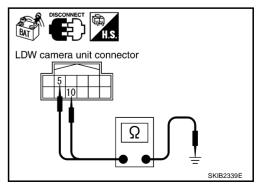
Check continuity between LDW camera unit harness connector R9 terminals 10 (L), 5 (R) and ground.

10 (L) - Ground : Continuity should not exist. 5 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG >> Replace harness between LDW and harness connector R1.



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8. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- 2. Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

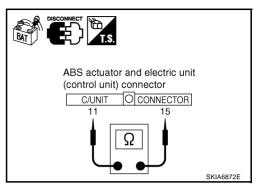
11 (L) - 15 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



ABS actuator and electric unit

11,15

O CONNECTOR

(control unit) connector

C/UNIT

9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

11 (L) - Ground : C

: Continuity should not exist.

15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

10. CHECK HARNESS FOR SHORT CIRCUIT

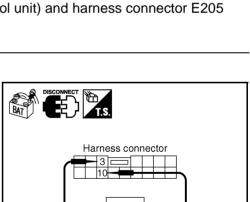
- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

OK or NG

OK >> GO TO 11.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



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11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5

Harness connector 10 3,10 SKIA6878E

12. CHECK HARNESS FOR SHORT CIRCUIT

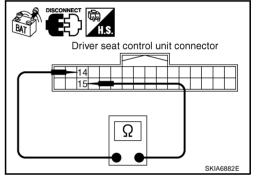
- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

OK or NG

OK >> GO TO 13.

NG

>> Repair harness between driver seat control unit and harness connector B151.



13. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

> 14 (OR) - Ground : Continuity should not exist. 15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 14.

NG

>> Repair harness between driver seat control unit and harness connector B151.

Driver seat control unit connector 14,15

14. CHECK HARNESS FOR SHORT CIRCUIT

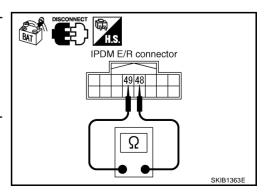
- Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

: Continuity should not exist. 48 (L) - 49 (R)

OK or NG

OK >> GO TO 15.

NG >> Repair harness between IPDM E/R and harness connector E205.



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15. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

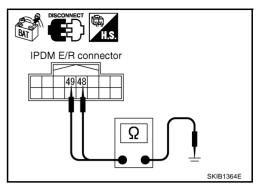
> 48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 16.

NG >> Repair harness between IPDM E/R and harness con-

nector E205.



16. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

Remove ECM and IPDM E/R from vehicle.

Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. 108 - 132 Ω

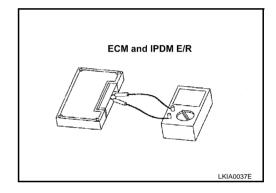
Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. 108 - 132 Ω

OK or NG

OK >> GO TO 17.

NG >> Replace ECM and/or IPDM E/R.



17. CHECK SYMPTOM

- Fill in described symptoms on the column "Symptom" in the check sheet.
- Connect all connectors, and then make sure that the symptom is reproduced. 2.

OK or NG

OK >> GO TO 18.

>> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced" NG

LAN-124 Revision: 2005 July 2005 FX

CAN SYSTEM (TYPE 2)

[CAN]

18. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it 5. with the symptom related to removed unit.)
- Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- **BCM**
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- **ECM**
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

IPDM E/R Ignition Relay Circuit Inspection

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START"".

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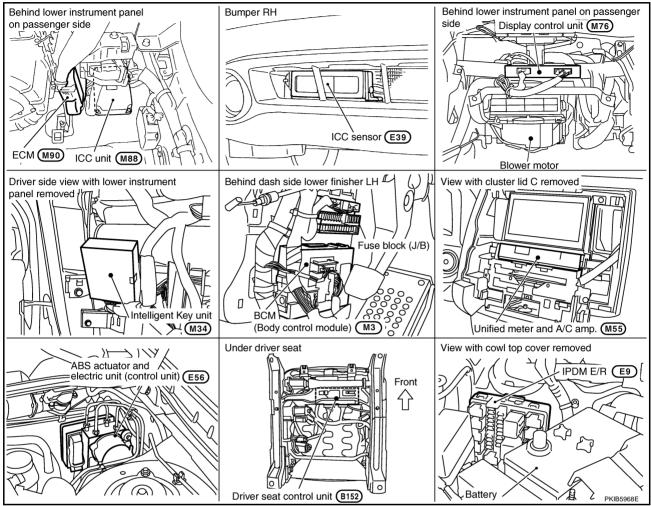
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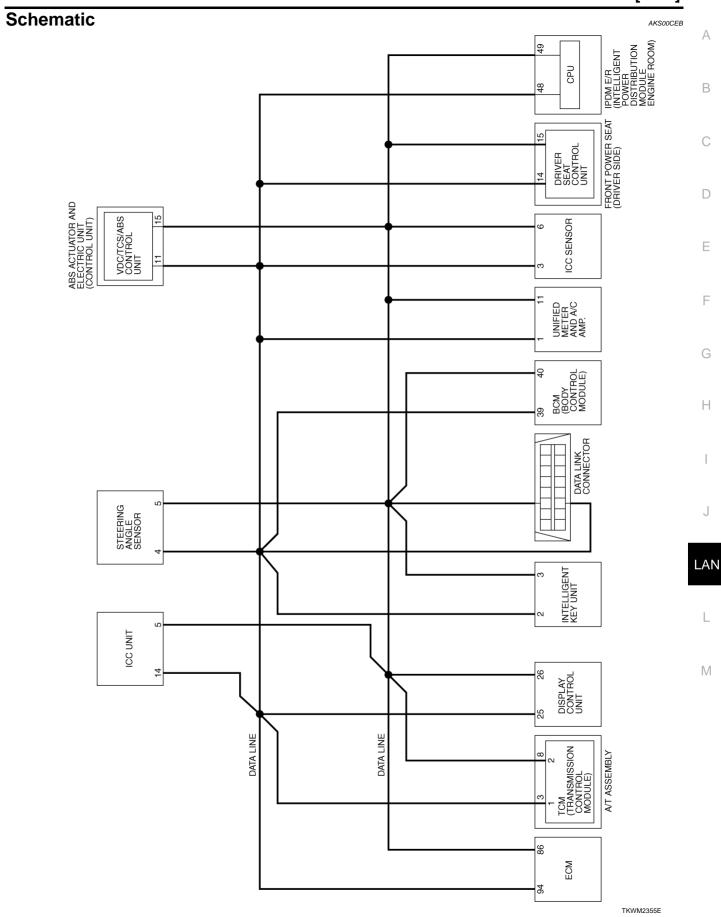
CAN SYSTEM (TYPE 3)

PFP:23710

Component Parts and Harness Connector Location

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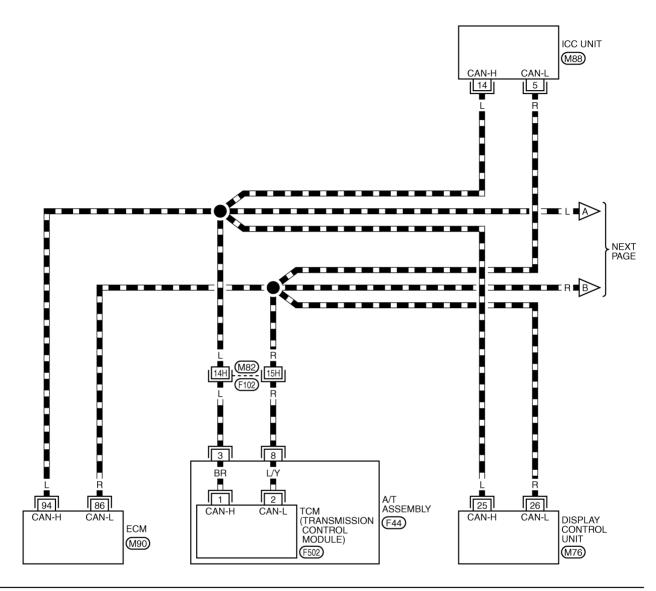


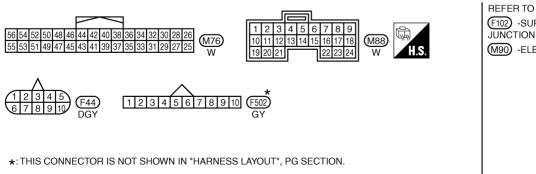
Wiring Diagram - CAN -

AKS00CEC

LAN-CAN-07

: DATA LINE





REFER TO THE FOLLOWING.

(F102) -SUPER MULTIPLE
JUNCTION (SMJ)

M90 -ELECTRICAL UNITS

TKWM2356E

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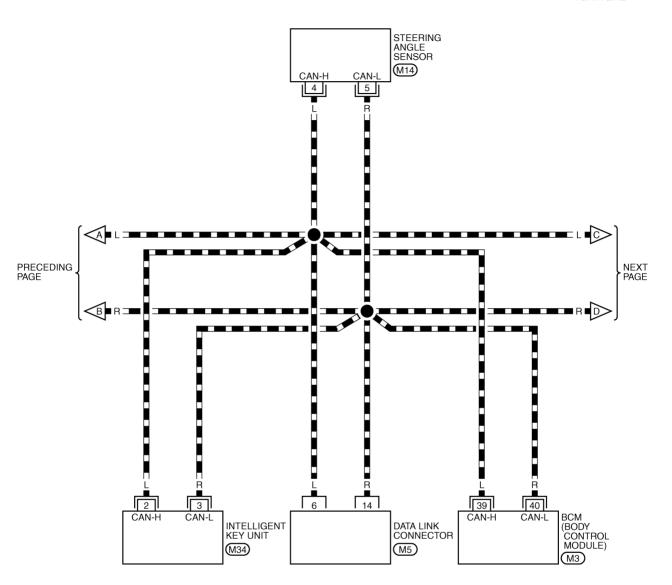
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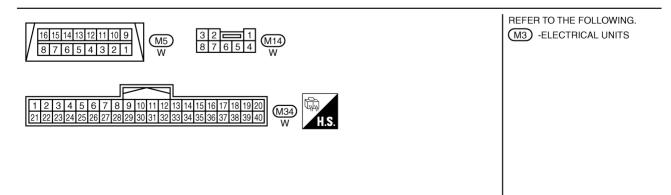
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LAN-CAN-08

: DATA LINE





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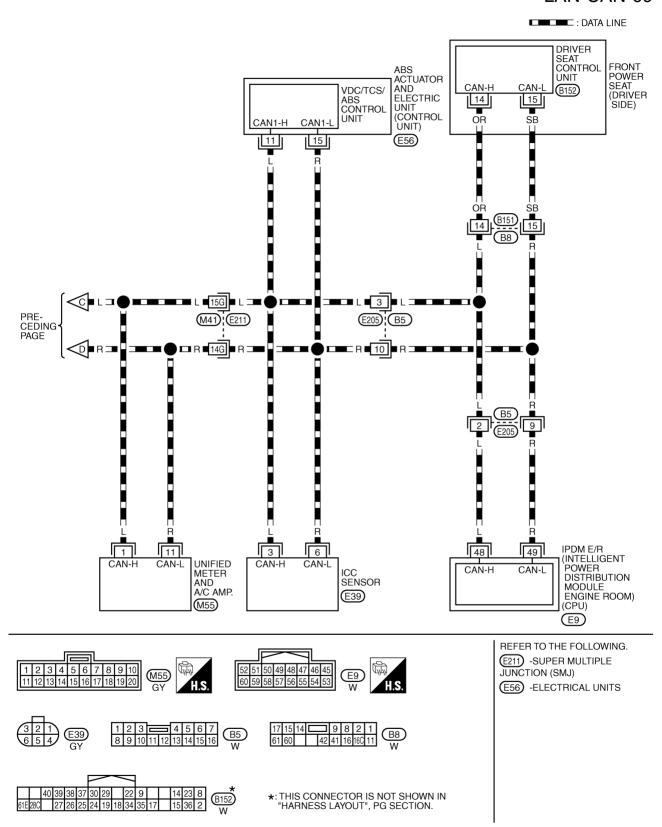
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LAN-CAN-09



TKWM2358E

CAN SYSTEM (TYPE 3)

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Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

	Initial Transmit Initial Transmit Initial Transmit Initial Transmit Initial							CAN	DIAG SU	PPORT M	INTR							
ENGINE	ENGINE	SELECT SYSTEM scree	n						ICC				METER	ICC	VDC/TCS	IPDM	SELF-DIAG	RESULTS
ATT	ATT								/e4WD		/SEC		/M&A	SENSOR	/ABS	E/R	CAN COMM	CAN COM
ATT	ATT	ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	
CC	CC	A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	-	CIRCUIT	_
No indication No indicatio	NTELLIGENT KEY	Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN		_
No indication No indicatio	NTELLIGENT KEY	cc	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CIRCUIT	-
No indication NG UNKWN	No indication NG UNKWN	NTELLIGENT KEY		_	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CIRCUIT	-
METER A/C AMP No Indication — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — — — — UNKWN — — — — CAN COMM CIRCUIT — (U1000) AUTO DRIVE POS.	METER A/C AMP No Indication — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — — — — UNKWN — — — — CAN COMM CIRCUIT — (U1000) AUTO DRIVE POS.	всм		NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT	_
ABS — NG UNKWN UNKWN UNKWN — — — — UNKWN — — — — CAN COMM CIRCUIT — (U1000) AUTO DRIVE POS. NO Indication NG UNKWN — UNKWN — UNKWN — UNKWN — — — CRAN COMM CIRCUIT — (U1000) IPDM E/R NO Indication — UNKWN UNKWN — — — — UNKWN — — — — — CAN COMM CIRCUIT — (U1000) Symptoms: Attach copy of Attach copy of	ABS — NG UNKWN UNKWN UNKWN — — — — UNKWN — — — — CAN COMM CIRCUIT — (U1000) AUTO DRIVE POS. NO Indication NG UNKWN — UNKWN — UNKWN — UNKWN — — — CAN COMM CIRCUIT — (U1000) IPDM E/R NO Indication — UNKWN UNKWN — — — — UNKWN — — — — — CAN COMM CIRCUIT — (U1000) Symptoms: Attach copy of Attach copy of	METER A/C AMP		_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT	_
AUTO DRIVE POS. No indication NG UNKWN - UNKWN	AUTO DRIVE POS. No indication NG UNKWN	ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT	_
IPDM E/R No indication - UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) - (U1000) Symptoms: Attach copy of Attach copy of	IPDM E/R No indication - UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) Symptoms: Attach copy of Attach copy of	AUTO DRIVE POS.		NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT	_
Symptoms: Attach copy of Attach copy of	Symptoms: Attach copy of Attach copy of	PDM E/R	No	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT	_
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PKIB4353E

Display control unit Tr	anslation Sheet: Rewrite the follow	ing names, and put a check mark on t	the check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	_
CAN CIRC 2	BCM/SEC	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	_
CAN CIRC 4	_	CAN CIRC 9	_

Attach copy of display control unit CAN DIAG SUPPORT MONITOR check sheet

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Attach copy of Attach copy of Attach copy of ENGINE A/T SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS Attach copy of Attach copy of Attach copy of INTELLIGENT KEY всм METER A/C AMP SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS Attach copy of Attach copy of Attach copy of ABS AUTO DRIVE POS. IPDM E/R SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS PKIB4354E

Revision: 2005 July LAN-133 2005 FX

Attach copy of Attach copy of Attach copy of ENGINE A/T ICC CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR MNTR Attach copy of Attach copy of Attach copy of INTELLIGENT KEY BCM METER A/C AMP CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR MNTR Attach copy of Attach copy of Attach copy of ABS AUTO DRIVE POS. IPDM E/R CAN DIAG SUPPORT CAN DIAG SUPPORT **CAN DIAG SUPPORT** MNTR MNTR MNTR PKIB4355E

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CHECK SHEET RESULTS (EXAMPLE)

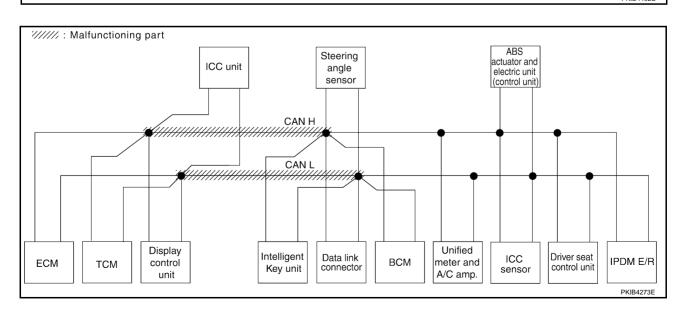
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-154</u>, "Inspection Between TCM and <u>Data Link Connector Circuit</u>".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en.	1.22.1	T					Receive	diagnosis						SELF-DIAG	RESULTS
022231 01012III 08/00	,,,	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DINO	TILOULIA
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNK W N	_	UNK W N	_	UNKWN	UNK % N	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	_	_	UNK W N	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
Display control unit	_	NG	UNKWN	UNKWN	-	_	_	_	nukwu	_	UNK W N	_	_	UNK % N	_	-
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKVN	_	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNK VN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNK WN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKVN	UNKWN	UNKVN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIPCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKVN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



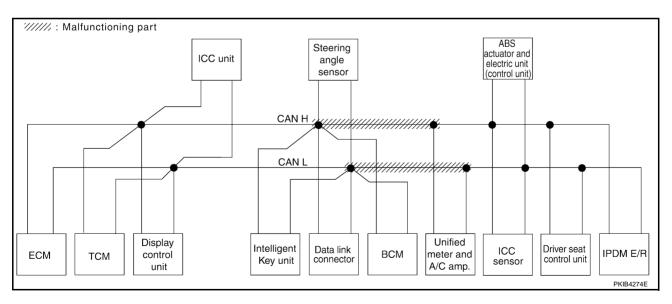
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-155</u>, "Inspection <u>Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	en							Receive	diagnosis						SELF-DIAG	RESULTS
OLLEGI GIGILINI SCIO	,011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	TILOULIU
ENGINE	_	NG	UNKWN	-	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	1	UNKWN	UNK % N	(U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKVN	1	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKVN	ı	_	UNKWN		ı
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	-	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNK V N	1	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNK V N	ı	_	UNK % N	(01000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
ABS	_	NG	UNKWN	UNKVN	UNK V N	_	_	_	_	UNKWN	1	1	_	_	CAN COMM CIRCUIT (U1000)	ı
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	_	UNKWN	_	UNKWN	1	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	UNKWN	_	ı	1	_	_	CAN COMM CIRCUIT (U1000)	-



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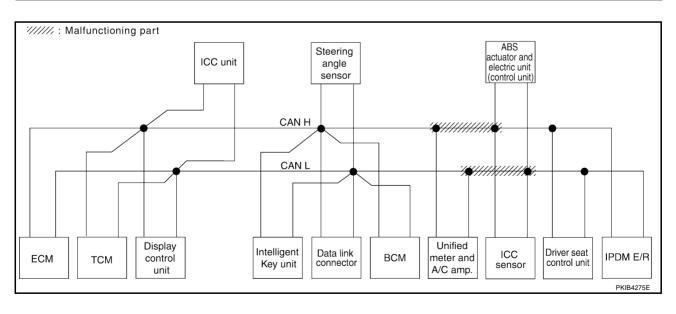
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-155, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNK V N	UNK N N	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	ı	_	_	UNKWN	-	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	n uk n	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	_	_	_		_	_	UNKWN	_	_	UNK % N	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNK % N	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKVN	_	_	_	_	UNK V N	_	_	_	_	CÂN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indi N ition	NG	UNKWN	_	UNKWN	_	_	-	UNKWN	_	UNKWN	_	_	_	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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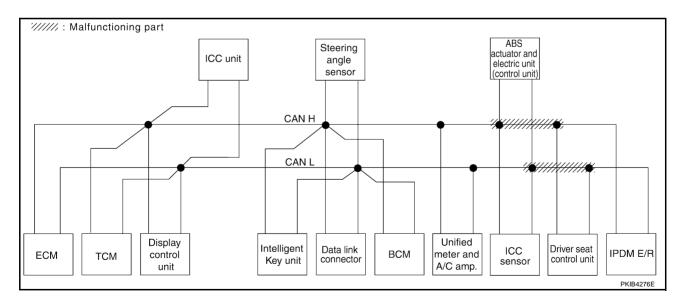
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Case 4

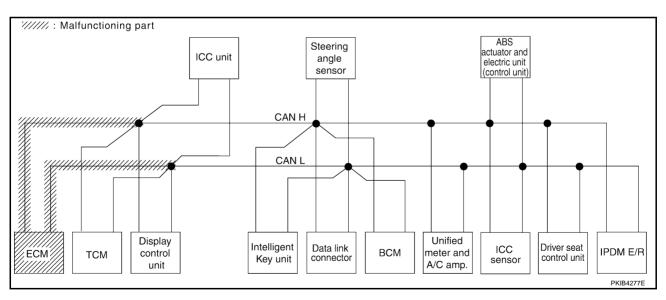
Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-156</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	en	1 - 20 - 1	T					Receive	diagnosis						SELF-DIAG	BESUITS
0	•••	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	022. 30	
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(01000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	ı	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNK V N	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNK V N	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indi N ation	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIPCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 5
Check ECM circuit. Refer to <u>LAN-157</u>, "ECM Circuit Inspection" .

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNK/VN	_	UNKVN	_	UNK V N	_	UNK VN	_	UNKWN	_	UNKWN	UNKVN	(U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	Π ИΚW И	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	n uk wu	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN		_
ICC	_	NG	UNKWN	UNK N N	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	n uk %u	_	_	_	_	UNKWN	_	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	(U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNK N N	UNKWN	_	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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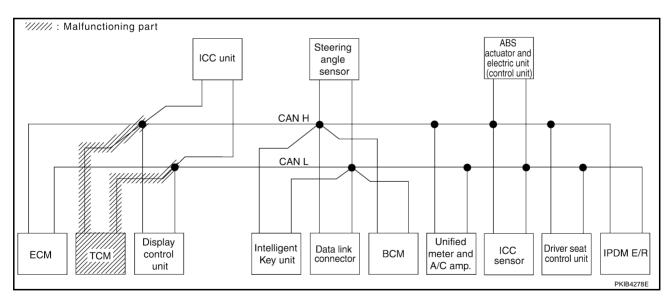
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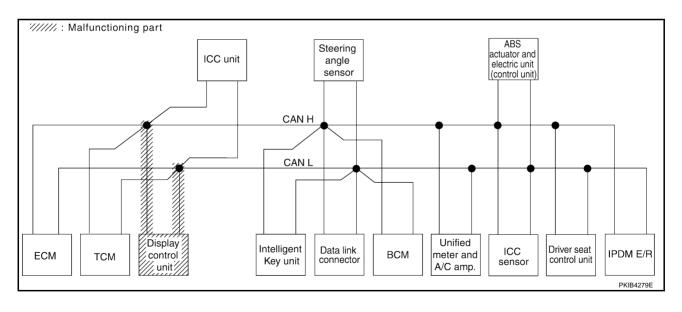
Case 6
Check TCM circuit. Refer to <u>LAN-157</u>, "TCM Circuit Inspection" .

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scre	en	1 - 22 - 1	T					Receive	diagnosis						SELF-DIAG	A RESULTS
SEEEST STOTEM COR	,,,,,,	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK/VN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	(U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNK V N	ı	_	_	UNK V N	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKVN	_	-	-	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKVIN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	-		_	CAN COMM CIRCUIT (U1000)	_



Case 7
Check display control unit circuit. Refer to <u>LAN-158</u>, "<u>Display Control Unit Circuit Inspection</u>".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	_							Receive	diagnosis						OFLE DIA	DECLUTO
SELECT SYSTEM Scree	n		Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	nukwu	UNK WN	_	_	_	_	UNK N N	_	υ νκ% ν	_	_	UNK W N	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
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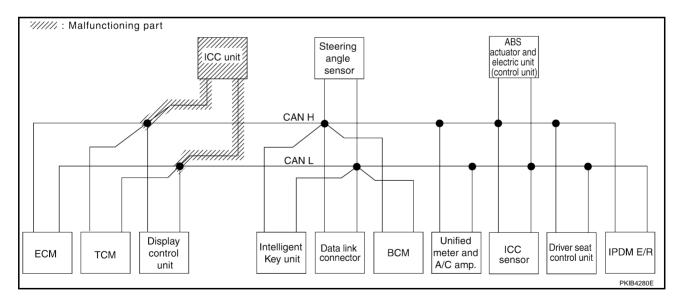
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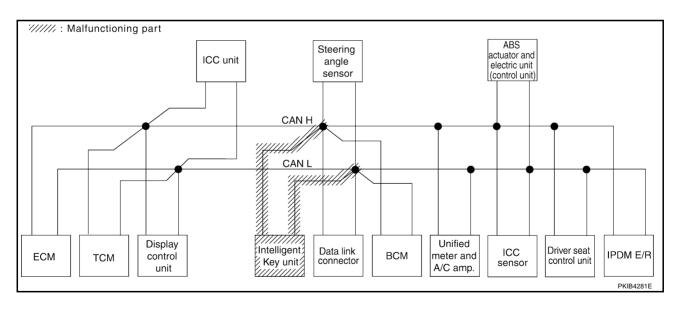
Case 8
Check ICC unit circuit. Refer to <u>LAN-158</u>, "ICC Unit Circuit Inspection" .

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	en	1.222.1	T					Receive	diagnosis						SELF-DIAG	BESUITS
OLLEST STOTEM OUT	,,,,,,	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLL: DIVIC	TTLOOLIC
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNK % N	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNK W N	UNK W N	_	_	_	nukwu	_	_	UNKVN	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 9
Check Intelligent Key unit circuit. Refer to <u>LAN-159</u>, "Intelligent Key Unit Circuit Inspection" .

				CAN DIAG SUPPORT MNTR												
SELECT SYSTEM screen		Initial diagnosis	Transmit sdiagnosis	Receive diagnosis											SELF-DIAG RESULTS	
				ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAG TILOGLI	
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indiattion	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	_	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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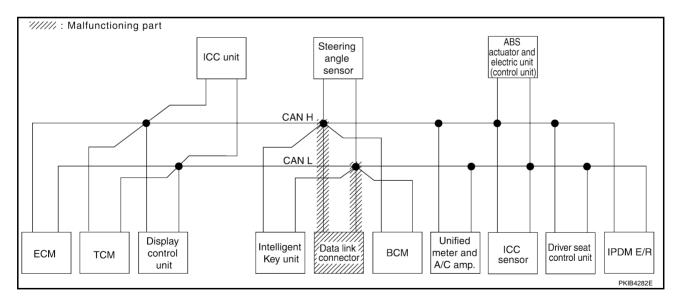
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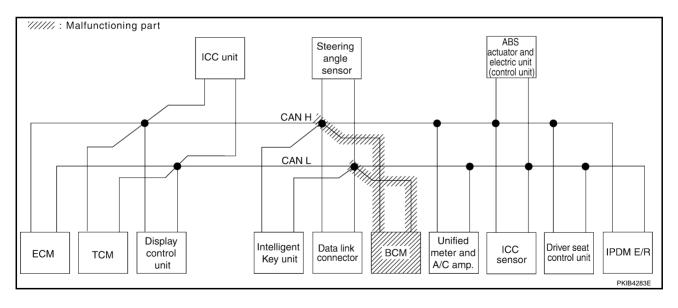
Case 10
Check data link connector circuit. Refer to <u>LAN-159</u>, "<u>Data Link Connector Circuit Inspection</u>" .

		CAN DIAG SUPPORT MNTR														
SELECT SYSTEM screen		Initial	T	Receive diagnosis											SELF-DIAG RESULTS	
			Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN		UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN		_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indi M tion	_	UNKWN	UNKWN	-	_	_	-	UNKWN	_	UNKWN	-	1	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	ı	_	_	1	-	_	UNKWN	ı	l	UNKWN	(U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	-	_	UNKWN	_	-	1	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	-	-	_	CAN COMM CIRCUIT (U1000)	_



Case 11
Check BCM circuit. Refer to <u>LAN-160</u>, "BCM Circuit Inspection".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	ı	UNK VN	_	UNKWN	-	UNKWN	UNKWN	(U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKVN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	ı	_	_	-	UNKVN	_	UNKWN	-	ı	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	1	_	_	UNKWN	1	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNK N N	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	1	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKVN	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNK % N	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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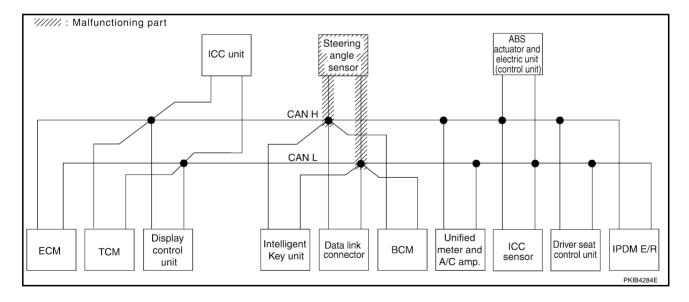
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Case 12
Check steering angle sensor circuit. Refer to <u>LAN-160</u>, "Steering Angle Sensor Circuit Inspection".

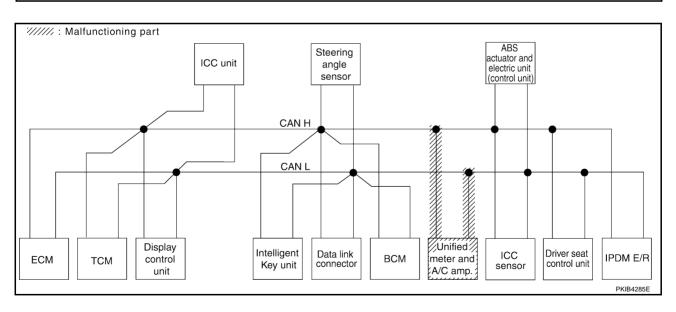
						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	UNKWN	(U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	-	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	-	_	CAN COMM CIRCUIT (U1000)	_



Case 13

Check unified meter and A/C amp. circuit. Refer to LAN-161, "Unified Meter and A/C Amp. Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	an .							Receive	diagnosis						SELF-DIAG	RESULTS
OLLEGI OTOTEM SOIC		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	TILOULIU
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	CAN COMP CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	_	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNK N N	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNK V N	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNK N N	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	-	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNK V N	_	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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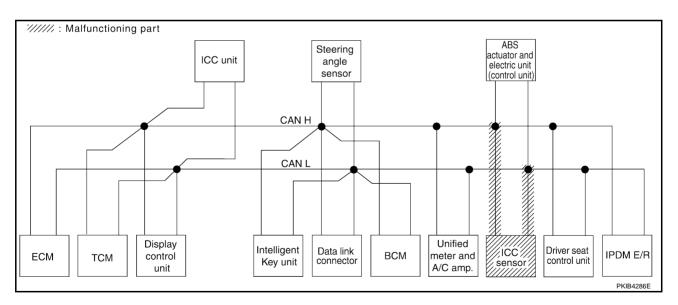
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Case 14
Check ICC sensor circuit. Refer to <u>LAN-161</u>, "ICC Sensor Circuit Inspection".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scre	en							Receive	diagnosis						SELE-DIAG	RESULTS
OLLEGI GIGILIM GOIC		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	THEODER
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	ı	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	-	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNK VN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	-	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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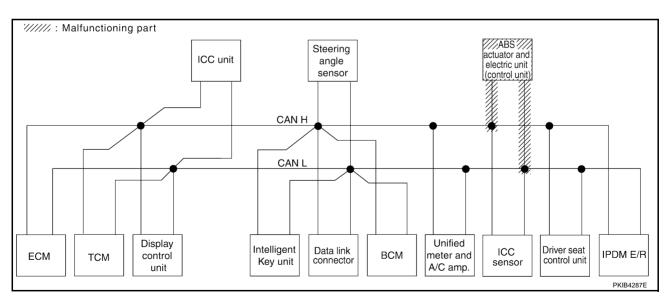
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Case 15

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-162</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	an.							Receive	diagnosis						SELF-DIAG	DEGITE
OLLEGI GIGIEN GOIGE		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	TILOULIU
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	ı	UNK % N	UNKWN	(U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1	_	UNKWN	_	_	_	UNKWN	ı	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNK % N	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	V	UNKWN	UNKVN	UNKVN	_	_	_	_	UNK V N	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN		_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_	_	UNKWN	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



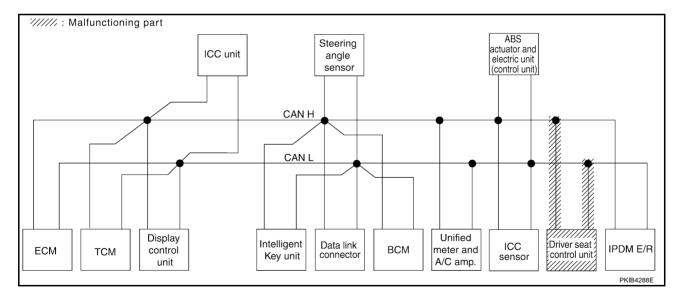
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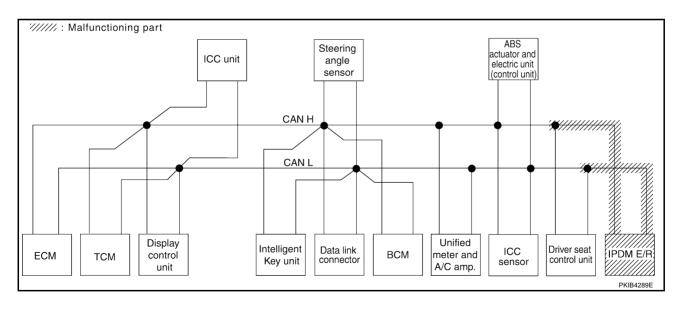
Case 16
Check driver seat control unit circuit. Refer to <u>LAN-162</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scre	en							Receive	diagnosis						SELE-DIAC	RESULTS
OLLEGI GIGILIM SOIG	CII	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI BIAC	TILOULIU
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN		_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivition	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	-	-	_	CAN COMM CIRCUIT (U1000)	_



Case 17
Check IPDM E/R circuit. Refer to <u>LAN-163</u>, "IPDM E/R Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	n	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNK W N	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	-	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNK % N	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
																PKIB4419E



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Case 18
Check CAN communication circuit. Refer to <u>LAN-164</u>, "CAN Communication Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	en	latital	Tueit					Receive	diagnosis						SELF-DIAG	BESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK NN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNK NN	UNKWN	(U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	NNKWN	_	_	UNKWN	_	_	_	UNK W N		UNK √ N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	NNKWN	_	n uk wu	_	_	UNKWN	_	_
ICC	_	NG	UNK N N	UNKWN	UNKWN	_	_	_	UNK N N	_	_	UNK V N	UNK % N	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	V	UNKVN	UNK W N	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivition	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 3)

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Case 19

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-170, "IPDM E/R Ignition Relay Circuit Inspection"</u>.

						CAN	DIAG SU	PPORT N	NTR							
SELECT SYSTEM scre	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK VN	_	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	UNKWN	(U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	ı	ı	UNKWN	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	-	-	UNKWN	l	UNKWN	l	_	UNKWN	_	1
ICC	_	NG	UNKWN	UNKWN	UNK WN	_	-	_	UNKWN	1	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_		UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	-	_		UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	-	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 20

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-170</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection"</u>.

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scre	en							Receive	diagnosis						SELE-DIAG	RESULTS
OLLEGI GIGILIM SOIG	CII	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKWN	ı	UNKWN	ı	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	1	_	_	_	_	_	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	-	_	UNKWN	_	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	1	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

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1. CHECK HARNESS FOR OPEN CIRCUIT

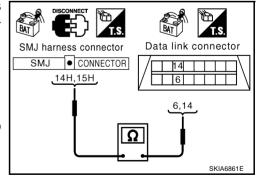
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

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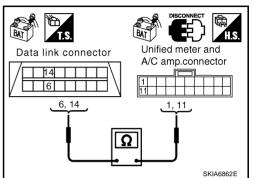
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit**

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

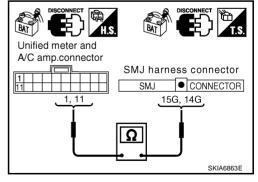
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

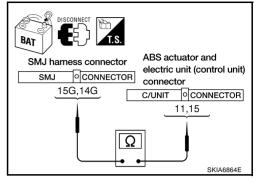
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

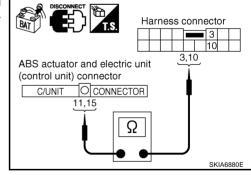
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L) 15 (R) - 10 (R) : Continuity should exist. : Continuity should exist.

OK or NG

OK >> GO TO 3. NG >> Repair harness.



$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L). 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

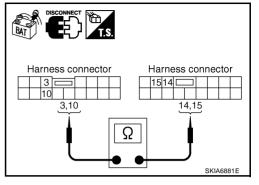
3 (L) - 14 (L) 10 (R) - 15 (R)

: Continuity should exist. : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CFI

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

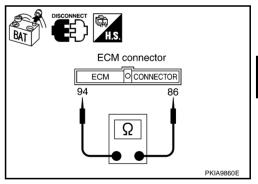
- 1. Disconnect ECM connector.
- Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. 108 - 132 Ω

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM and harness connector M82.



AKS00CEJ

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

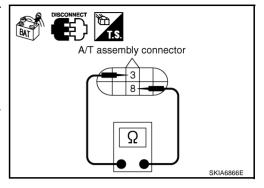
3 (L) - 8 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG

>> Repair harness between A/T assembly and display control unit.



AKS00CEK

Display Control Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect display control unit connector.
- Check resistance between display control unit harness connector M76 terminals 25 (L) and 26 (R).

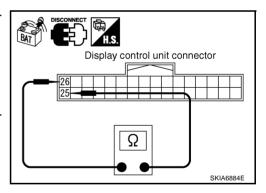
25 (L) - **26** (R) : Approx. **54** - **66**
$$\Omega$$

OK or NG

OK >> Replace display control unit.

NG

>> Repair harness between display control unit and harness connector M82.



AKS00CEM

ICC Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

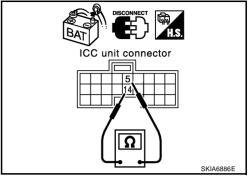
- 1. Disconnect ICC unit connector.
- Check resistance between ICC unit harness connector M88 terminals 14 (L) and 5 (R).

14 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ICC unit.

NG >> Repair harness between ICC unit and harness connector M82.



Intelligent Key Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of Intelligent Key unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

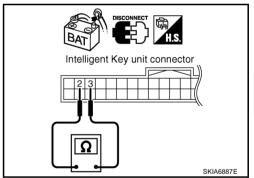
- 1. Disconnect Intelligent Key unit connector.
- Check resistance between Intelligent Key unit harness connector M34 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair harness between Intelligent Key unit and data link connector.



Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

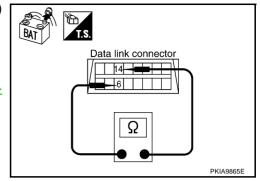
6 (L) - 14 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK

>> Diagnose again. Refer to <u>LAN-7</u>, "TROUBLE <u>DIAG-NOSES WORK FLOW"</u>.

NG >> Repair harness between data link connector and BCM.



AKS00CEP

BCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

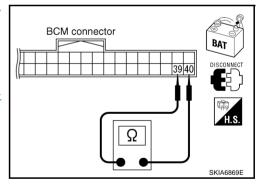
- Disconnect BCM connector.
- 2. Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

39 (L) - 40 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace BCM. Refer to <u>BCS-16</u>, "Removal and Installation of BCM".

NG >> Repair harness between BCM and data link connector.



AKS00CEQ

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

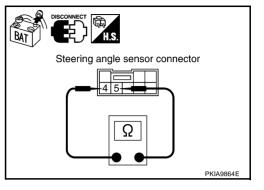
- 1. Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

4 (L) - 5 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Replace steering angle sensor.

NG >> Repair harness between steering angle sensor and data link connector.



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Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

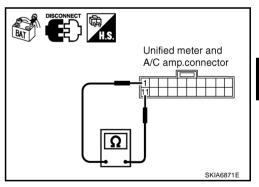
- 1. Disconnect unified meter and A/C amp. connector.
- 2. Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

1 (L) - 11 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace unified meter and A/C amp.

NG >> Repair harness between unified meter and A/C amp. and harness connector M41.



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ICC Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ICC sensor for damage, bend and loose connection (sensor side and harness side).

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OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ICC sensor connector.
- 2. Check resistance between ICC sensor harness connector E39 terminals 3 (L) and 6 (R).

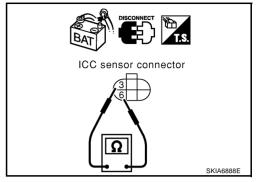
3 (L) - 6 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ICC sensor.

NG

>> Repair harness between ICC sensor and ABS actuator and electric unit (control unit).



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CET

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

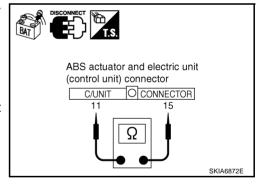
OK or NG

OK

>> Replace ABS actuator and electric unit (control unit).

NG

>> Repair harness between ABS actuator and electric unit (control unit) and ICC sensor.



AKS00CEU

Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

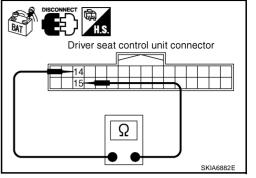
- 1. Disconnect driver seat control unit connector.
- Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

14 (OR) - 15 (SB) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Replace driver seat control unit.

NG >> Repair harness between driver seat control unit and harness connector B5.



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IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

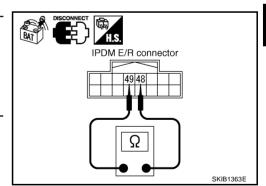
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

OK or NG

OK >> Replace IPDM E/R.

NG >> Repair harness between IPDM E/R and harness connector B8.



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CAN SYSTEM (TYPE 3)

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CAN Communication Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display control unit connector
- ICC unit connector
- Intelligent Key unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

Data link connector
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Data link connector

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4. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

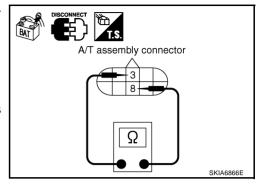
3 (L) - 8 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 5.

NG

>> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

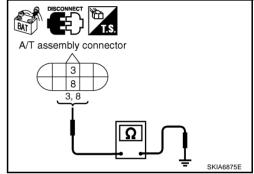
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

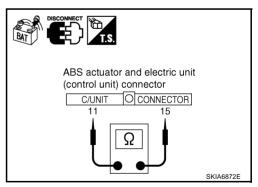
- Disconnect following connectors.
- ICC sensor connector
- ABS actuator and electric unit (control unit) connector
- Harness connector E205
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 7.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



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7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

> : Continuity should not exist. 11 (L) - Ground 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

8. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

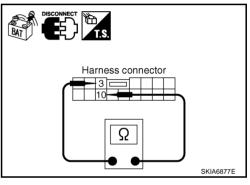
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



ABS actuator and electric unit

11,15

O CONNECTOR

(control unit) connector

C/UNIT

9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

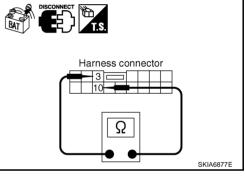
> 3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



Harness connector 3 =

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10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

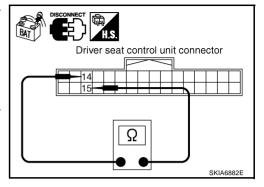
14 (OR) - 15 (SB) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG

>> Repair harness between driver seat control unit and harness connector B151.



11. CHECK HARNESS FOR SHORT CIRCUIT

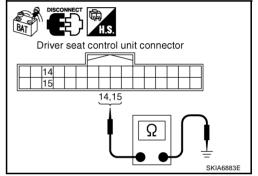
Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

> 14 (OR) - Ground : Continuity should not exist. 15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG >> Repair harness between driver seat control unit and harness connector B151.



12. CHECK HARNESS FOR SHORT CIRCUIT

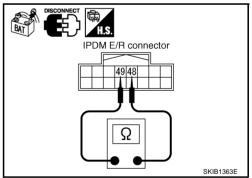
- Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

OK or NG

NG

OK

>> GO TO 13. >> Repair harness between IPDM E/R and harness connector E205.



13. CHECK HARNESS FOR SHORT CIRCUIT

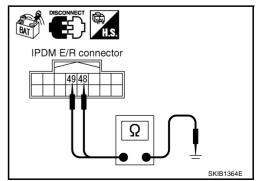
Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

> 48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 14.

NG >> Repair harness between IPDM E/R and harness connector E205.



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14. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- 2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

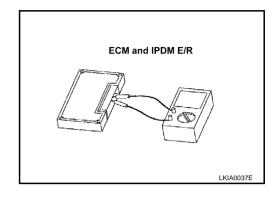
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 15.

NG >> Replace ECM and/or IPDM E/R.



15. CHECK SYMPTOM

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 16.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

16. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

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CAN SYSTEM (TYPE 3)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

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Check the following. If no malfunction is found, replace the IPDM E/R.

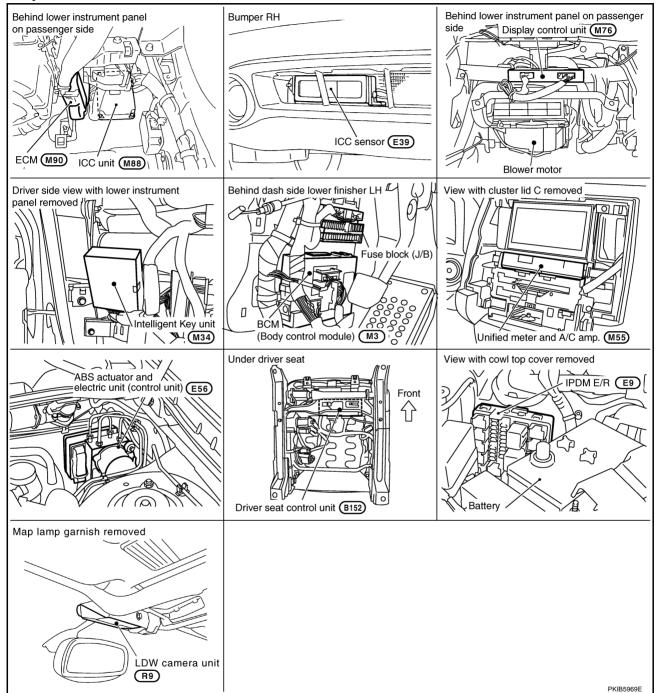
- IPDM E/R power supply circuit. Refer to <u>PG-28</u>, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START""</u>.

CAN SYSTEM (TYPE 4)

PFP:23710

Component Parts and Harness Connector Location



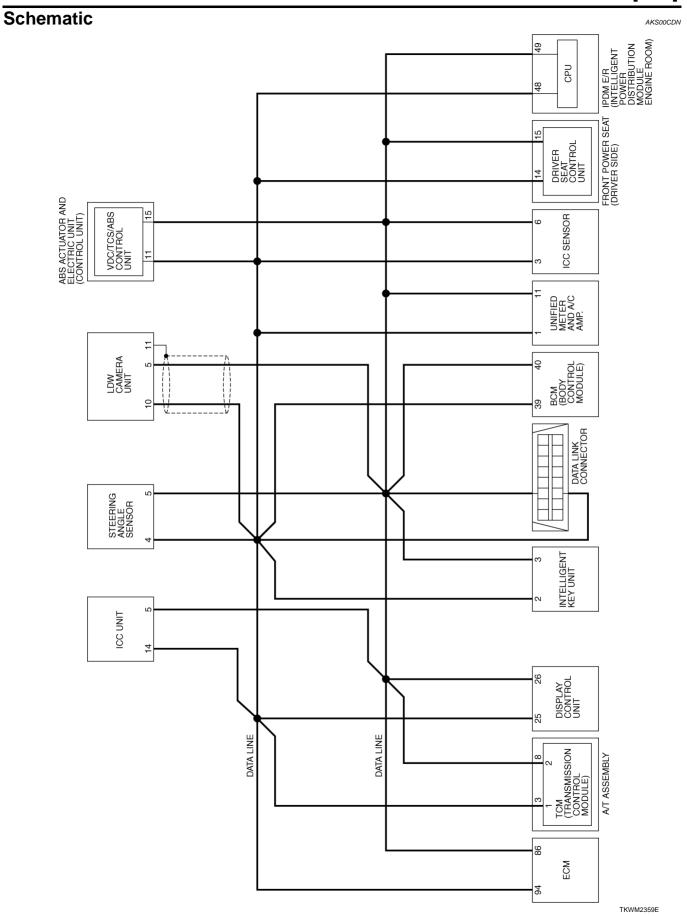


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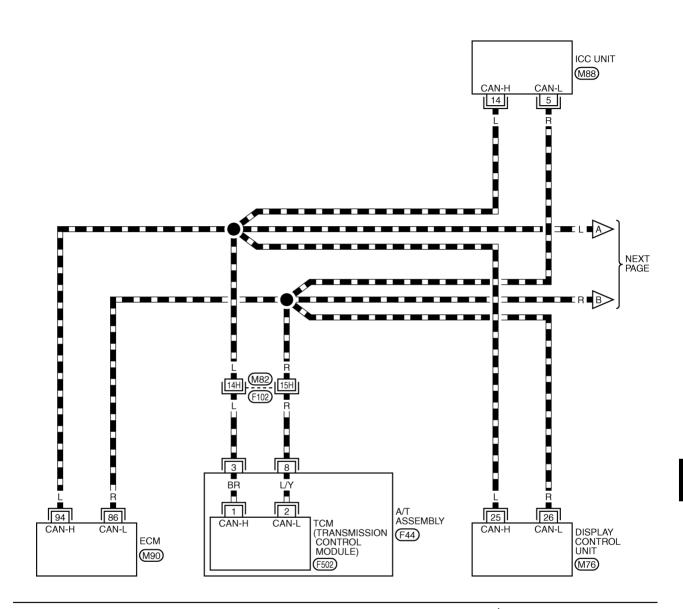
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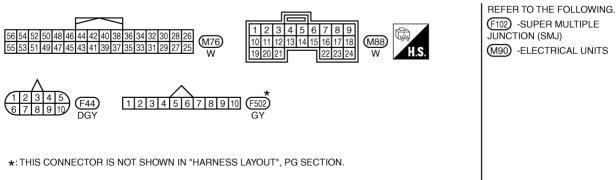
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: DATA LINE

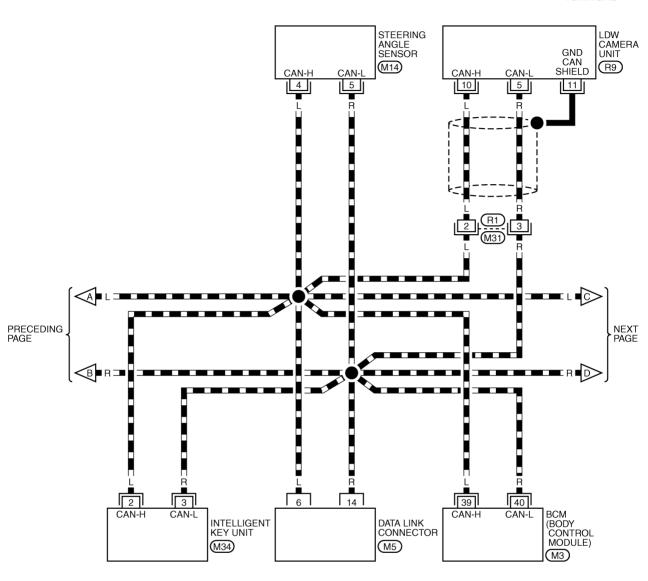


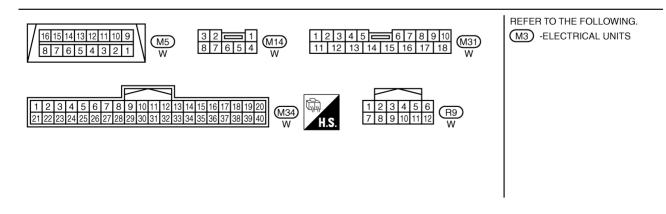


TKWM2360E

LAN-CAN-11

: DATA LINE





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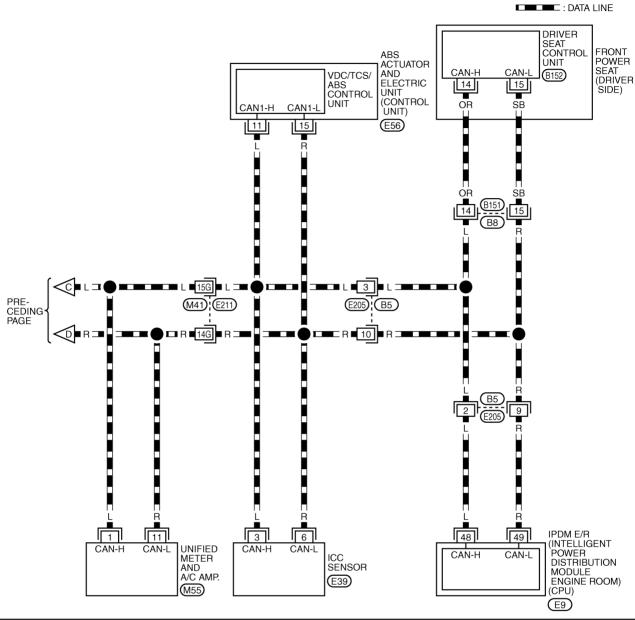
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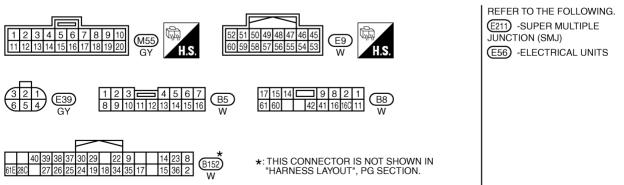
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TKWM2362E

Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree		Initial .	Transmit				ICC		diagnosis		METER	ICC	VDC/TCS	IPDM	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	/e4WD	I-KEY	BCM /SEC	STRG	/M&A	SENSOR		E/R	CAN COMM	CAN COM
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CIRCUIT (U1000) CAN COMM	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
cc	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	ı	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
NTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	-	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
_DW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CÂN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
			Atta SELE	ach cop	y of STEM				A SEI	uttach c LECT S	opy of SYSTEM	Л				

CAN SYSTEM (TYPE 4)

[CAN]

Display control unit Tra	anslation Sheet: Rewrite the follow	ing names, and put a check mark on t	he check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	_
CAN CIRC 2	BCM/SEC	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	_
CAN CIRC 4	_	CAN CIRC 9	_

Attach copy of display control unit CAN DIAG SUPPORT MONITOR check sheet

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Attach copy of	Attach copy of	Attach copy of	Attach copy of
ENGINE	A/T	ICC	INTELLIGENT KEY
SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS
Attach copy of	Attach copy of	Attach copy of	Attach copy of
BCM	LDW	METER A/C AMP	ABS
SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS
Attach copy of AUTO DRIVE POS. SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS		

Attach copy of Attach copy of Attach copy of Attach copy of ENGINE A/T ICC INTELLIGENT KEY CAN DIAG SUPPORT **CAN DIAG SUPPORT** CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR MNTR MNTR Attach copy of Attach copy of Attach copy of Attach copy of ABS ВСМ LDW METER A/C AMP CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR **MNTR** MNTR Attach copy of Attach copy of AUTO DRIVE POS. IPDM E/R CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR

Revision: 2005 July **LAN-179** 2005 FX

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CHECK SHEET RESULTS (EXAMPLE)

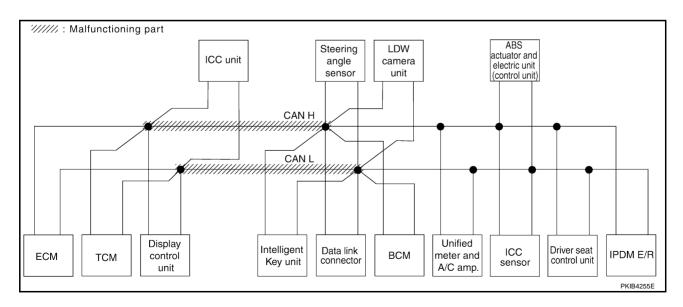
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-200, "Inspection Between TCM and Data Link Connector Circuit"</u>.

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM screen		laitial	T	Receive diagnosis									SELF-DIAG RESULTS			
		Initial diagnosis	Transmit sdiagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	-	UNK W N	_	UNK N N	_	UNKWN	UNKWN	(U1000)	CAN CO CIROU (U100
A /T	_	NG	UNKWN	UNKWN	l	_	UNKWN	ı	ı	_	UNKWN	_	UNK	ı	CAN COMM CIRCUIT (U1000)	l
Display control unit	_	NG	UNKWN	UNKWN	ı	_	_	_	UNK W N	_	UNK NN	_	_	UNK W N	_	1
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	_	UNK W N	UNKVN	1	CAN COMM CIRCUIT (U1000)	I
INTELLIGENT KEY	No indication	_	UNKWN	UNKVN	1	_	_	ı	UNKWN	_	UNKWN	_	1	1	CAN COMM CIRCUIT (U1000)	l
ВСМ	No indication	NG	UNKWN	UNKVN	ı	_	_	-	-	_	UNKWN	_	1	UNKWN	CAN COMM CIRCUIT (U1000)	İ
LDW	No indication	_	_	UNKVN	UNWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKVN	UNKVN	UNKVN	UNKWN	UNKWN	_	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	1
ABS	_	NG	UNKWN	UNKVN	UNKVN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	l
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	ı	UNKWN	_	UNKWN	_			CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indication	_	UNKWN	UNK V N	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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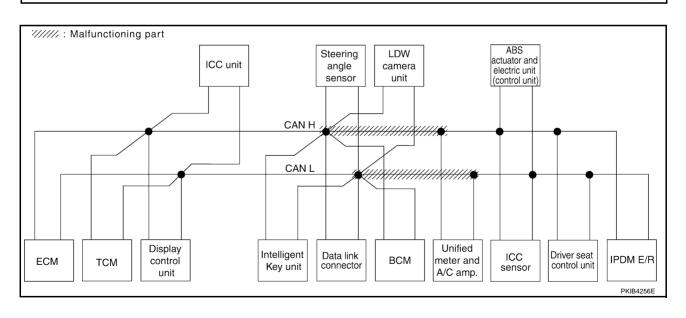
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Case 2

Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-201</u>, "Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	n	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	UNK V N	_	UNK W N	UNK N N	(U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	ı	ı	ı	UNKVN	ı	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	l	_	-	ı	UNKWN	ı	UNKVN	l	ı	UNKWN		_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	İ	_	UNK VN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	1	_	_	ı	UNKWN	ı	UNK V N	ı	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	1	_	_	ı	1	1	UNKWN	ı	1	UNKWN	(U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	ı	UNKWN	1	_	ı	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No ind ation	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	_	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKVN	_	_	ı	_	UNKVN	_	ı	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivation	NG	UNKWN	1	UNKWN	_	_	-	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	_	ı	UNKWN	_	-	-	_	_	CAN COMM CIRCUIT (U1000)	_



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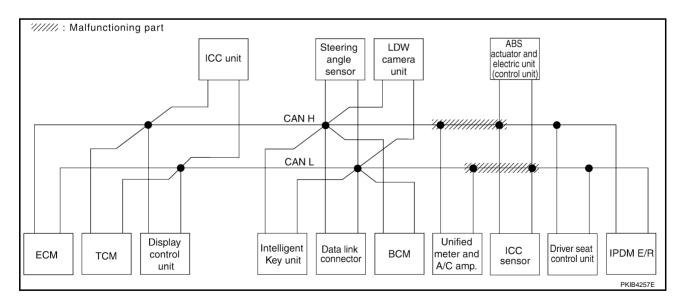
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-201, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scre	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	022. 5.7.0	
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNK W N	UNK N N	(U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNK % N	_	CAN COMM CIRCUIT (U1000)	ı
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNK WN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	n uk wu	UNKWN	_	CAN COMM CIRCUIT (U1000)	
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNK W N	_	_	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No ind vation	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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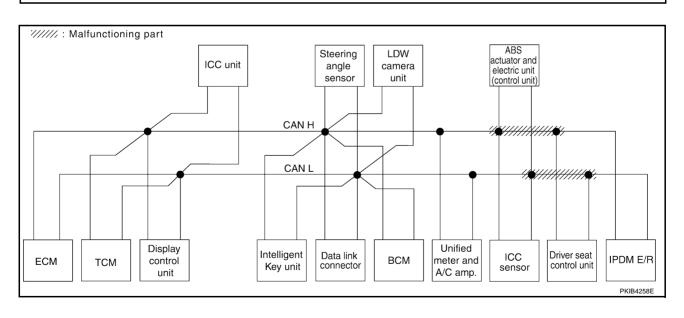
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Case 4

Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-202</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

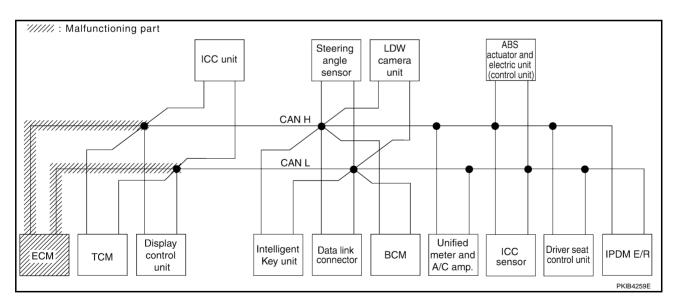
						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKWN	ı	UNKWN	1	UNKWN	UNK W N	[(01000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	ı	ı	ı	UNKWN	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	ı	_	_	ı	UNKWN	-	UNKWN	ı	_	UNKWN		_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	1	1	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	ı	_	_	ı	UNKWN	ı	UNKWN	ı	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	ı	_	-	UNKWN	1	_	UNKVN	(U1000)	_
LDW	No indication	_	ı	UNKWN	UNKWN	_	_	ı	UNKWN	-	-	1	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	ı	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	1	_	UNKWN	-	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivation	NG	UNKWN	ı	UNKWN	_	_	l	UNKWN	ı	UNKWN	ı	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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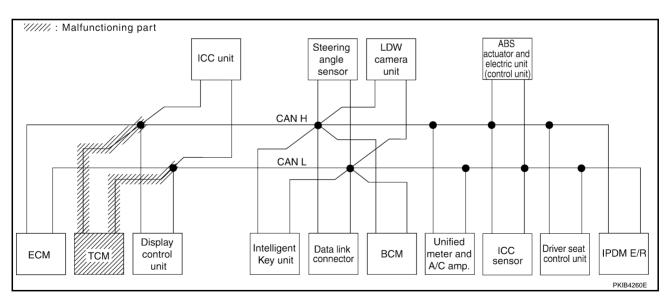
Case 5
Check ECM circuit. Refer to <u>LAN-203</u>, "ECM Circuit Inspection" .

						CAN	DIAG SU	PPORT N								
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC	Receive (ВСМ	STRG	METER		VDC/TCS	IPDM	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN		UNKWN		/e4WD UNKVN		/SEC	-	/M&A	SENSOR —		E/R UNK/VN	CAN COMM CIRCUIT (U1000)	CAN CON
A/T	_	NG	-	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	(U1000) CAN COMM CIRCUIT (U1000)	(U1001 —
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	-	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNK WN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	ı	UNKWN	UNKWN	_	_	_	UNKWN	_	ı	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	ı	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNK VN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 6
Check TCM circuit. Refer to LAN-203, "TCM Circuit Inspection".

						CAN	DIAG SU									
SELECT SYSTEM scree		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	-	UNKVN	_	UNKWN	_	UNKWN	_	/M&A UNKWN		UNKWN		CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKVN	-	_	_	UNK V N	_	UNK/VN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	_	UNKWN	-	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNK V N	_	_		UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	1	UNKWN	UNKWN	_	_	_		UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_		_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	1	UNKWN	UNK Y N	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNK Y N	UNKWN	UNKWN	UNKWN	UNKWN	_	-	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNK V N	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNK V N	_	_	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_		UNKWN	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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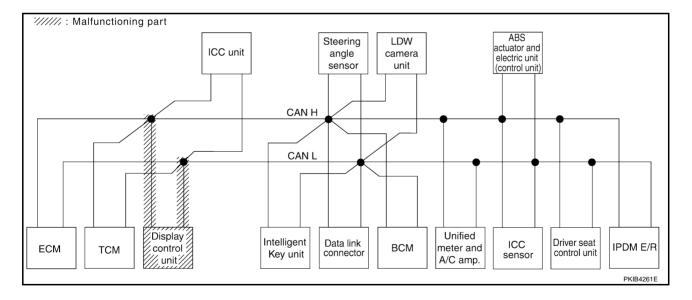
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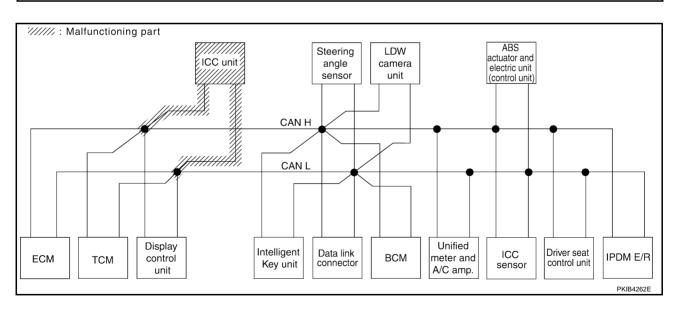
Case 7
Check display control unit circuit. Refer to <u>LAN-204</u>, "<u>Display Control Unit Circuit Inspection</u>".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
Display control unit	_	NG	n uk wu	UNK W N	_	_	_	_	nukwu	_	UNK % N	_	_	UNK N N	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	ı
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 8
Check ICC unit circuit. Refer to <u>LAN-204, "ICC Unit Circuit Inspection"</u>.

						CAN	I DIAG SU									
SELECT SYSTEM scree	en	Initial	Transmit			1		Receive	diagnosis	ı		1	1	1	SELF-DIAC	RESULTS
			diagnosis	ECM	ТСМ	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNK √ N	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNK N N	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNK % N	_	_	_	UNKWN	_	_	UNK W N	UNK W N	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	ı	UNKWN	UNKWN	_	_	-	UNKWN	_	ı	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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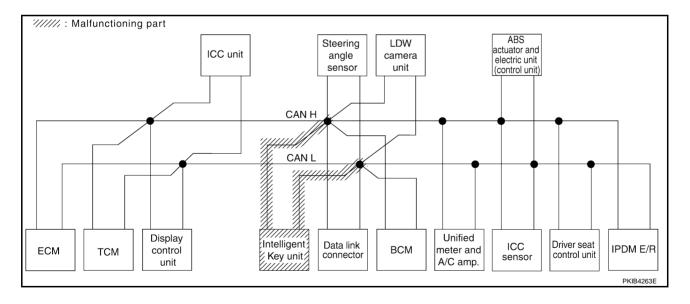
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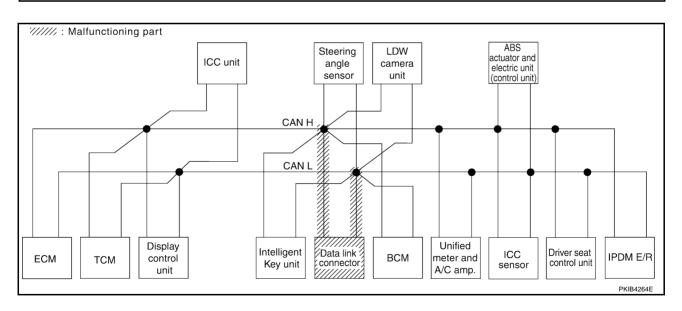
Case 9
Check Intelligent Key unit circuit. Refer to LAN-205, "Intelligent Key Unit Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	ı	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	-	١	_	ı	UNKWN	_	ı	UNKWN	CAN COMM CIRCUIT (U1000)	1
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	1	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	I
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	ı	_	_	_	CAN COMM CIRCUIT (U1000)	l
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	ı	UNKWN	1	UNKWN	_			CAN COMM CIRCUIT (U1000)	ı
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 10
Check data link connector circuit. Refer to <u>LAN-205</u>, "<u>Data Link Connector Circuit Inspection</u>" .

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	n	Initial	Transmit		_			Receive	diagnosis	_	_	_			SELF-DIAC	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indivition	NG	UNKWN	UNKWN	-	_	_	١	ı	_	UNKWN	_	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indivition	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	-	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivition	NG	UNKWN	l	UNKWN	_	_	ı	UNKWN	_	UNKWN	_	ı	ı	CAN COMM CIRCUIT (U1000)	ı
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



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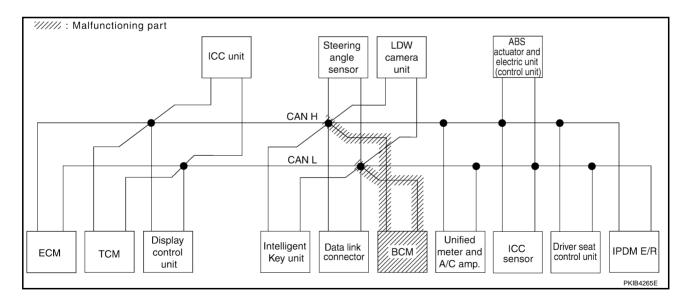
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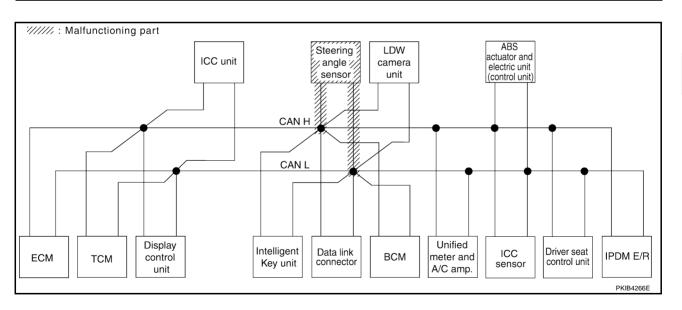
Case 11
Check BCM circuit. Refer to LAN-206, "BCM Circuit Inspection".

						CAN	DIAG SU	PPORT N								
SELECT SYSTEM scree	en	Initial	Transmit			1	1	Receive					1		SELF-DIAC	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	nukwu	-	UNKWN	_	UNKWN	UNKWN	(U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNK WN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKVN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNK % N	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indivition	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKVN	ı	ı	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	ı	1	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	ı	ı	_	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNK V N	1	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNK % N	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 12
Check steering angle sensor circuit. Refer to <u>LAN-206</u>, "Steering Angle Sensor Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis	1					SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	-	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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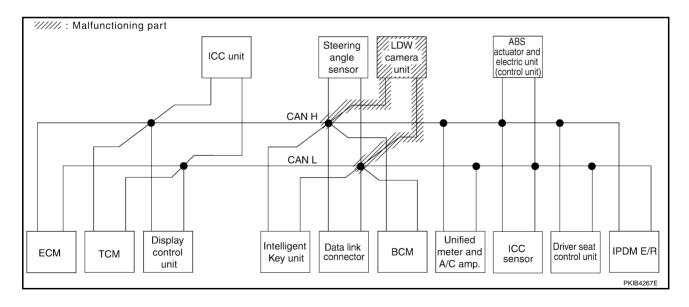
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Case 13
Check LDW camera unit circuit. Refer to LAN-207, "LDW Camera Unit Circuit Inspection".

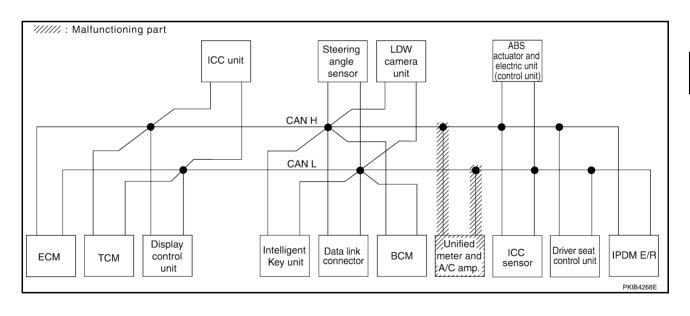
						CAN	DIAG SU	PPORT N								
SELECT SYSTEM scree	n	Initial	Transmit		Ι	1		Receive	diagnosis	ı			1		SELF-DIAC	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	-	UNKWN	_	ı	_	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	_	UNKWN	_	UNKWN	-	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 14

Check unified meter and A/C amp. circuit. Refer to LAN-208, "Unified Meter and A/C Amp. Circuit Inspection".

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG UNKWN UN	ı	UNKWN	_	UNKWN	ı	UNKWN	-	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)	
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	ı	_	1	UNKVN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	ı	_	_	ı	UNKWN	ı	UNKVN	ı	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	1	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	ı	UNKWN	UNKWN	1	_	_	ı	UNKWN	I	UNKVN	-	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	ı	_	_	ı	ı	1	UNKWN	ı	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	ı	I	UNKWN	UNKWN	_	_	l	UNKWN	ı	ı	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	1	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	1	-	UNKWN	ı	ı	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	ı	UNKWN	1	UNK V N	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	-	UNKWN	-	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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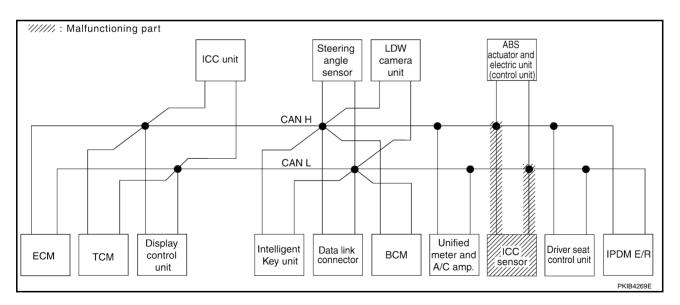
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Case 15
Check ICC sensor circuit. Refer to <u>LAN-208</u>, "ICC Sensor Circuit Inspection".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	n	Initial	Transmit					Receive	diagnosis						SELF-DIAC	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG		ı	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	1	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	ı	UNKWN	UNKWN	_	_	_	UNKWN	_	-	-	UNKWN		CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN		_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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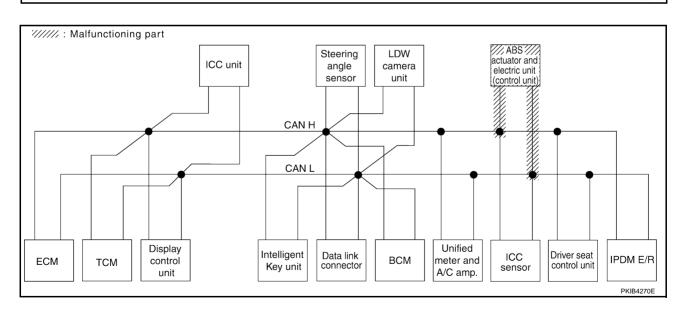
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Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-209</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKWN	_	UNKWN	1	UNK W N	UNKWN	J (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	ı	_	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	I	_	_	ı	UNKWN	ı	UNKWN	ı	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	ı	1	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	1	_	_	ı	UNKWN	-	UNKWN	ı	_		CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_	ı	ı	_	UNKWN	ı	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	ı	UNKWN	UNKWN	_	_	l	UNKWN	ı	ı	ı	UNIWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	1	ı	UNWN	_	CAN COMM CIPQUIT (U1000)	_
ABS	_	V	UNKWN	UNK VN	UNK	_	_	1	ı	UNKVN	ı	ı	-		CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	1	UNKWN	_	UNKWN	1	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	-	UNKWN	_	_	ı	_	_	CAN COMM CIRCUIT (U1000)	_



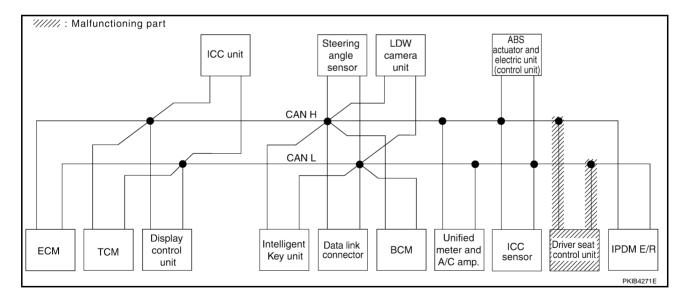
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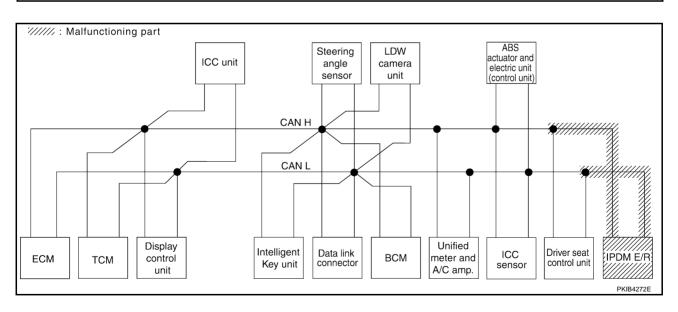
Case 17
Check driver seat control unit circuit. Refer to <u>LAN-209</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_	_	_	ı	UNKWN	ı	ı	UNKWN	CAN COMM CIRCUIT (U1000)	1
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indi v ation	NG	UNKWN	1	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 18
Check IPDM E/R circuit. Refer to LAN-210, "IPDM E/R Circuit Inspection".

						CAN	DIAG SU	PPORT N								
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	ICC	Receive (всм	STRG	METER	ICC	VDC/TCS		SELF-DIAG	RESULTS
ENGINE	_	NG	NG UNKWN	_	UNKWN		/e4WD UNKWN	-	/SEC UNKWN	-	/M&A UNKWN	SENSOR —		E/R UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	— (O1601)
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	ı	ı	_	UNKWN	_	_	UNK V N	J (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	-	-	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIPQUIT (U1000)	_



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Case 19
Check CAN communication circuit. Refer to <u>LAN-211</u>, "CAN Communication Circuit Inspection".

						CAN	DIAG SU									
SELECT SYSTEM scree	en	Initial	Transmit		1	1		Receive	diagnosis	ı					SELF-DIAG	RESULTS
		diagnosis	Desis diagnosis UNKVN UNKWN UI	ECM	тсм	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN I	-	UNKWN	_	UNKWN	-	UNKWN	_	nnkwn	ı	UNKVN	UNKWN	(U1 0 00)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	nukwu	_	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNK % N	UNK W N	_	_	_	_	UNK % N	_	UNK % N	_	_	UNKWN		_
ICC	_	NG	UNK % N	UNKWN	UNKWN	_	_	_	UNKWN	_	_	UNK V N	UNK % N	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
LDW	indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIPQUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	V	UNKWN	UNK WN	UNKWN	_	_	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 4)

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Case 20

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-218</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection"</u>.

						CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM scree	en	Initial	Transmit					Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	(U1 0 00)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	_	-	UNKWN	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ICC	_	NG	UNKWN	UNKWN	UNK V N	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKVN	_	_	_	UNKWN	_	_	_	UNKVN	_	CAN COMM CIPOUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKVN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 21

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-218, "IPDM E/R Ignition Relay Circuit Inspection" .

						CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM scree	an.	1.70.1	T					Receive of	diagnosis						SELF-DIAG	RESULTS
022201 01012 M 03100		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI BINC	TILOGETO
ENGINE	_	NG UNKWN NG UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)	
A/T	_	NG	UNKWN	ı	I	_	_	_	_	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
Display control unit	_	NG	UNKWN	UNKWN	l	_	-	_	UNKWN	_	UNKWN	_	_	UNKWN	_	I
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	-	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	l	_	-	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	ı
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	ı	UNKWN	_	_	_	_	-	_	_	_	_	CAN COMM CIRCUIT (U1000)	ı
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

AKS00CDQ

1. CHECK HARNESS FOR OPEN CIRCUIT

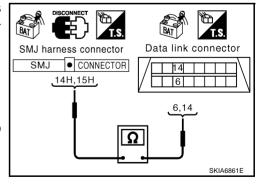
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW" .

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit AKS00CDR

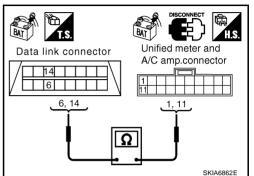
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit**

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

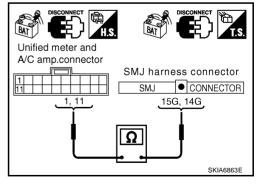
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

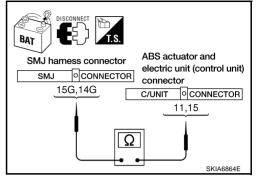
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

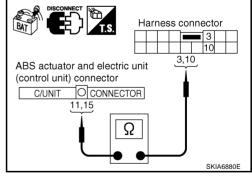
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L) 15 (R) - 10 (R) : Continuity should exist. : Continuity should exist.

OK or NG

OK >> GO TO 3. NG >> Repair harness.



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$\overline{3}$. Check harness for open circuit

- 1. Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L). 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

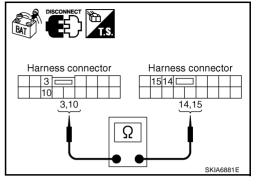
3 (L) - 14 (L) 10 (R) - 15 (R) : Continuity should exist.

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CDU

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

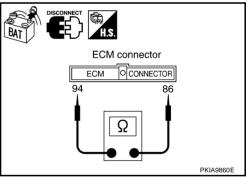
- 1. Disconnect ECM connector.
- Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : **Approx.** 108 - 132 Ω

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM and harness connector M82.



AKS00CDV

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

Revision: 2005 July

NG >> Repair terminal or connector.

> **LAN-203** 2005 FX

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2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

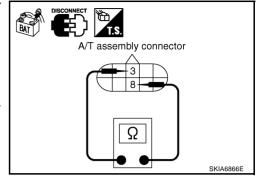
3 (L) - 8 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG

>> Repair harness between A/T assembly and display control unit.



AKS00CDW

Display Control Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect display control unit connector.
- Check resistance between display control unit harness connector M76 terminals 25 (L) and 26 (R).

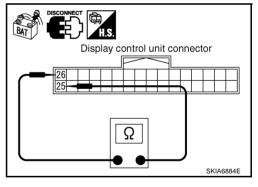
25 (L) - **26** (R) : Approx. **54** - **66**
$$\Omega$$

OK or NG

OK >> Replace display control unit.

NG

>> Repair harness between display control unit and harness connector M82.



AKS00CDX

ICC Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

AKS00CDY

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2. CHECK HARNESS FOR OPEN CIRCUIT

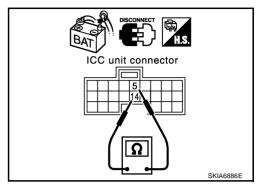
- 1. Disconnect ICC unit connector.
- 2. Check resistance between ICC unit harness connector M88 terminals 14 (L) and 5 (R).

14 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ICC unit.

NG >> Repair harness between ICC unit and harness connector M82.



Intelligent Key Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of Intelligent Key unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

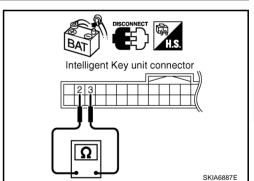
- 1. Disconnect Intelligent Key unit connector.
- 2. Check resistance between Intelligent Key unit harness connector M34 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair harness between Intelligent Key unit and data link connector.



Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

e, bend and loose connection (unit side

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2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

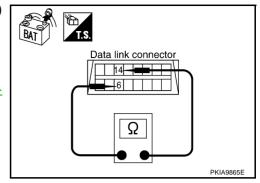
6 (L) - 14 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK

>> Diagnose again. Refer to <u>LAN-7</u>, "TROUBLE <u>DIAGNOSES WORK FLOW"</u>.

NG >> Repair harness between data link connector and BCM.



AKS00CE0

BCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

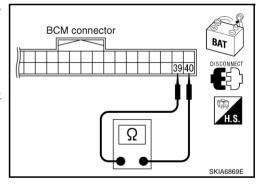
- Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

39 (L) - 40 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG >> Repair harness between BCM and data link connector.



Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

AKS00CF1

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect steering angle sensor connector.
- 2. Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

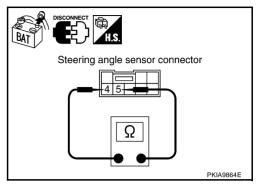
4 (L) - 5 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CF2

LDW Camera Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (unit side and harness side).
- LDW camera unit connector
- Harness connector R1
- Harness connector M31

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

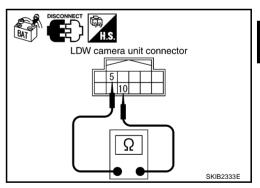
- 1. Disconnect LDW camera unit connector.
- Check resistance between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

10 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace LDW camera unit.

NG >> GO TO 3.



3. CHECK HARNESS FOR OPEN CIRCUIT

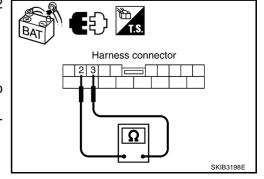
- Disconnect harness connector R1.
- Check resistance between harness connector M31 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Replace harness between LDW camera unit and harness connector R1.



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[CAN]

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

AKS00CE3

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- 2. Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

: Approx. 54 - 66 Ω

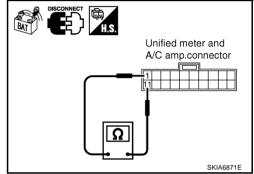
OK or NG

OK

>> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



AKS00CE4

ICC Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ICC sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ICC sensor connector.
- 2. Check resistance between ICC sensor harness connector E39 terminals 3 (L) and 6 (R).

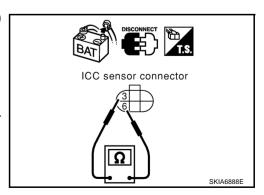
: Approx. 54 - 66 Ω

OK or NG

OK >> Replace ICC sensor.

NG

>> Repair harness between ICC sensor and ABS actuator and electric unit (control unit).



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

1. CHECK CONNECTOR

AKS00CE5

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

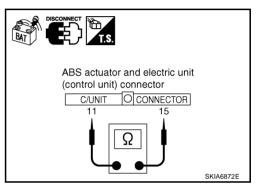
11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

NG

OK >> Replace ABS actuator and electric unit (control unit).

>> Repair harness between ABS actuator and electric unit (control unit) and ICC sensor.



Driver Seat Control Unit Circuit Inspection

AKS00CE6

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

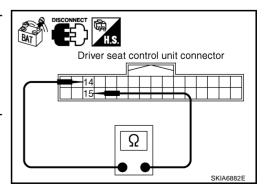
- Disconnect driver seat control unit connector.
- Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

14 (OR) - 15 (SB) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace driver seat control unit.

NG >> Repair harness between driver seat control unit and harness connector B5.



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CAN SYSTEM (TYPE 4)

[CAN]

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

AKS00CE7

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

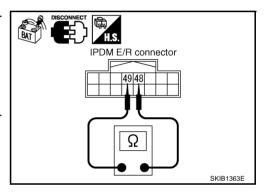
: **Approx. 108 - 132** Ω

OK or NG

OK >> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and harness connector B8.



CAN SYSTEM (TYPE 4)

[CAN]

CAN Communication Circuit Inspection 1. CHECK CONNECTOR

AKS00CE8

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and LDW camera unit
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display control unit connector
- ICC unit connector
- Intelligent Key unit connector
- BCM connector
- Steering angle sensor connector
- Harness connector M31
- Unified meter and A/C amp. connector
- Harness connector M41
- Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

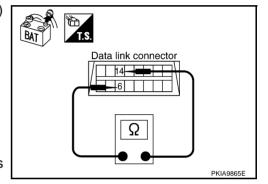
6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



$\overline{3}$. Check harness for short circuit

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

> 6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

4. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

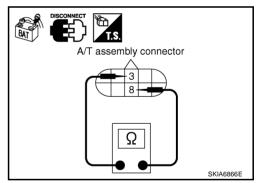
3 (L) - 8 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 5.

NG

>> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

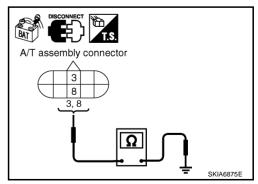
> 3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 6.

> >> Repair harness between A/T assembly and harness connector F102.



Data link connector 14 Ω

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6. CHECK HARNESS FOR SHORT CIRCUIT

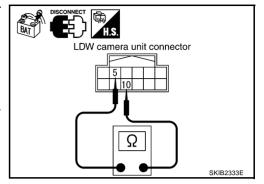
- 1. Disconnect LDW camera unit connector.
- Check continuity between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

OK or NG

OK >> GO TO 7.

NG >> Replace

>> Replace harness between LDW camera unit and harness connector R1.



7. CHECK HARNESS FOR SHORT CIRCUIT

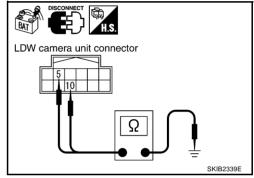
Check continuity between LDW camera unit harness connector R9 terminals 10 (L), 5 (R) and ground.

10 (L) - Ground : Continuity should not exist. 5 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG >> Replace harness between LDW and harness connector R1.



8. CHECK HARNESS FOR SHORT CIRCUIT

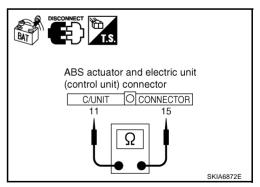
- Disconnect following connectors.
- ICC sensor connector
- ABS actuator and electric unit (control unit) connector
- Harness connector E205
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 9.

NG >> Check th

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



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9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

11 (L) - Ground : Continuity should not exist. 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

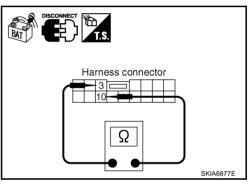
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



ABS actuator and electric unit

11,15

O CONNECTOR

(control unit) connector

C/UNIT

11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

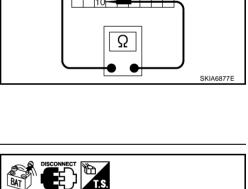
3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



Harness connector

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12. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect driver seat control unit connector.
- 2. Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

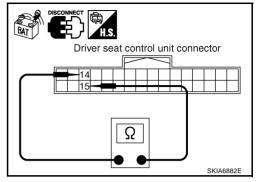
14 (OR) - 15 (SB) : Continuity should not exist.

OK or NG

OK >> GO TO 13.

NG >> Repair ha

>> Repair harness between driver seat control unit and harness connector B151.



13. CHECK HARNESS FOR SHORT CIRCUIT

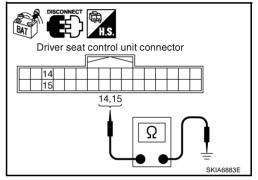
Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

14 (OR) - Ground : Continuity should not exist. 15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 14.

NG >> Repair harness between driver seat control unit and harness connector B151.



14. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

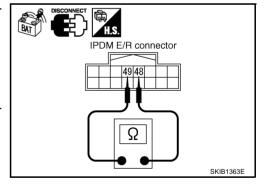
48 (L) - 49 (R) : Continuity should not exist.

OK or NG

NG

OK >> GO TO 15.

>> Repair harness between IPDM E/R and harness connector E205.



15. CHECK HARNESS FOR SHORT CIRCUIT

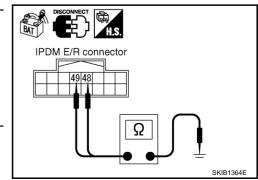
Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 16.

NG >> Repair harness between IPDM E/R and harness connector E205.



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16. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- 2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

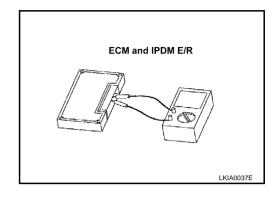
3. Check resistance between IPDM E/R terminals 48 and 49.

18 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 17.

NG >> Replace ECM and/or IPDM E/R.



17. CHECK SYMPTOM

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 18.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

18. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

Turn ignition switch OFF.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

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CAN SYSTEM (TYPE 4)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00CE9

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START""</u>.

CAN SYSTEM (TYPE 5)

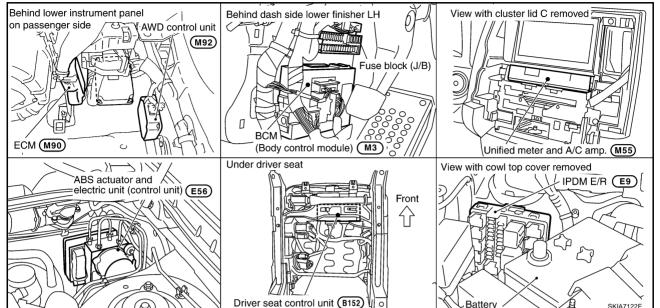
[CAN]

CAN SYSTEM (TYPE 5)

PFP:23710

Component Parts and Harness Connector Location

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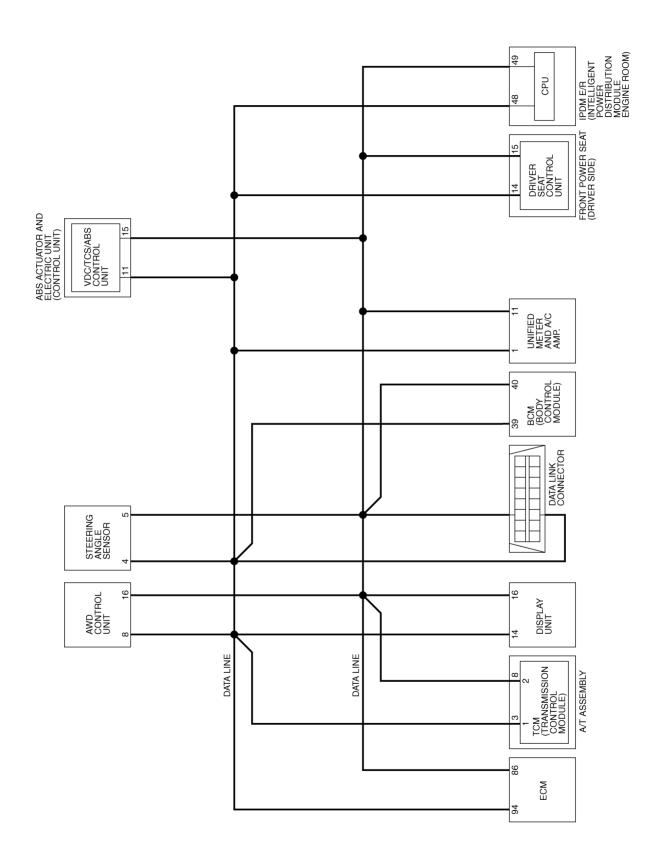
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Schematic



TKWM2363E

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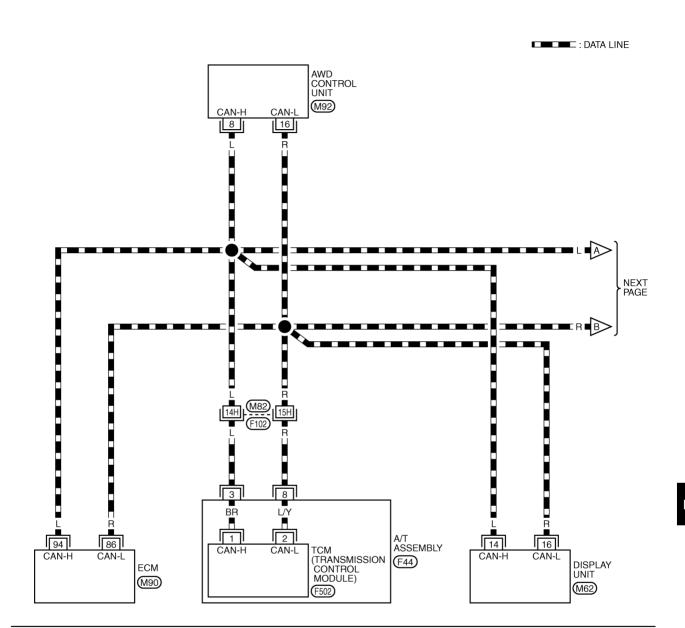
D

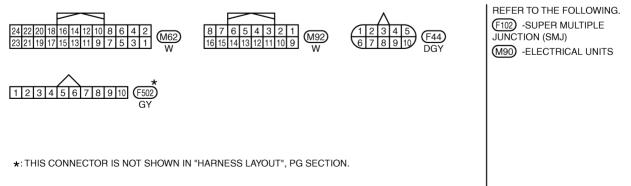
Е

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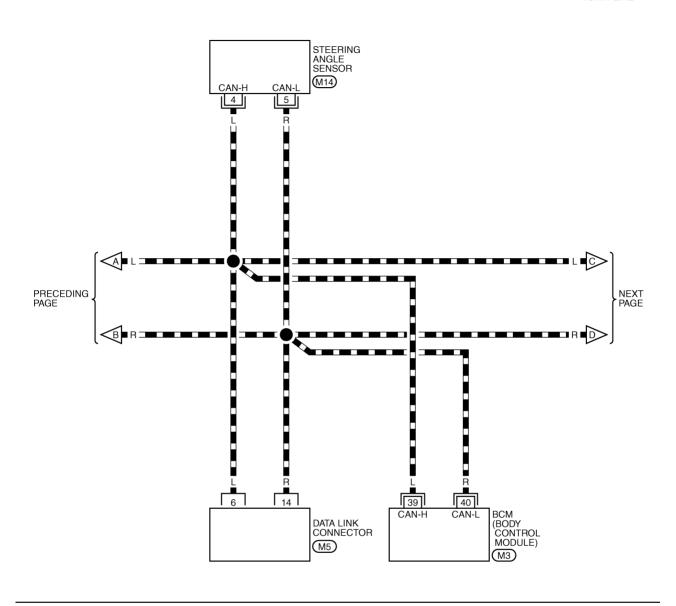


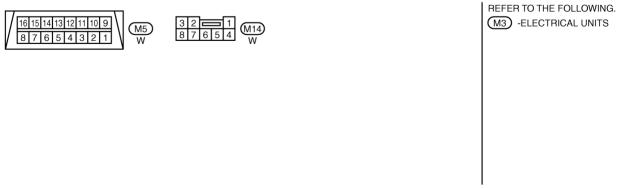
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: DATA LINE





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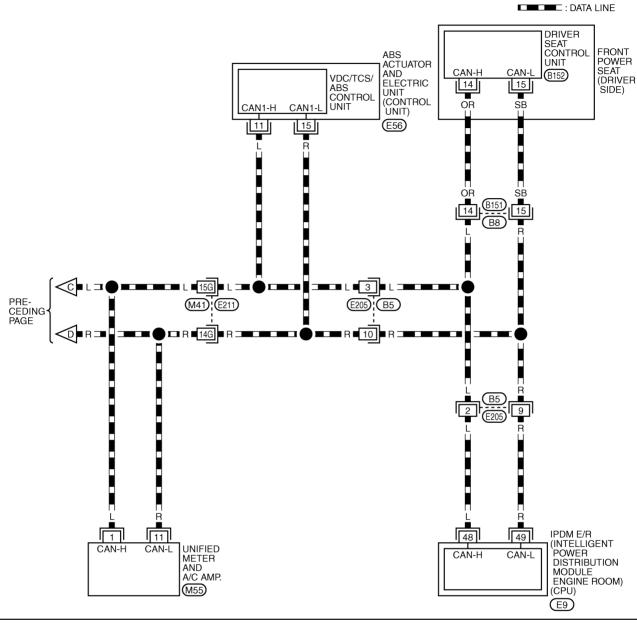
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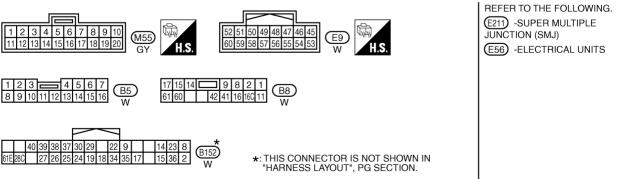
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Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

						CAN DIA	G SUPPOF	RT MNTR						
CELECT CVCTEM cores							Re	ceive diagn	osis				CELE DIAC	DECLUTO
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULIS
ENGINE	1	NG	UNKWN	_	UNKWN	-	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_		_	UNKWN	-	UNKWN	_	UNKWN	-	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000) CAN COMM	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	_	UNKWN	CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000) CAN COMM	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000) CAN COMM	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	-	UNKWN	_	_	CIRCUIT (U1000) CAN COMM	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CIRCUIT (U1000)	_
			Attach SELECT	n copy of FSYSTE	· ·M			Att SELE	ach copy ECT SYS	of TEM				

CAN SYSTEM (TYPE 5)

[CAN]

Display unit Transla	ation Sheet: Rewrite the following	names, and put a check mark on the c	heck sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	_
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	_	CAN9	_
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Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of A/T SELF-DIAG RESULTS	Attach copy of ALL MODE AWD/4WD SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS
Attach copy of	Attach copy of	Attach copy of	Attach copy of
METER A/C AMP	ABS	AUTO DRIVE POS.	IPDM E/R
SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS	SELF-DIAG RESULTS
Attach copy of	Attach copy of	Attach copy of	Attach copy of
ENGINE	A/T	ALL MODE AWD/4WD	BCM
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT
MNTR	MNTR	MNTR	MNTR
Attach copy of	Attach copy of	Attach copy of	Attach copy of
METER A/C AMP	ABS	AUTO DRIVE POS.	IPDM E/R
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT
MNTR	MNTR	MNTR	MNTR

[CAN]

CHECK SHEET RESULTS (EXAMPLE)

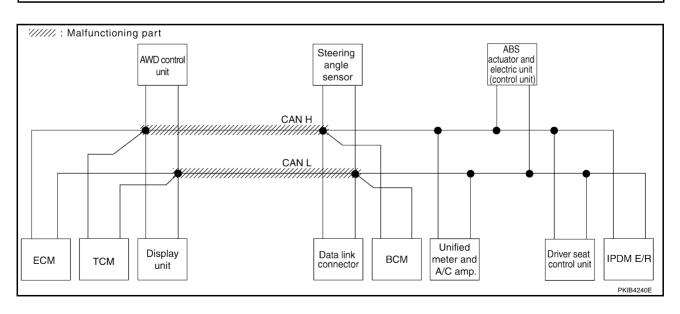
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-244, "Inspection Between TCM and Data Link Connector Circuit"</u>.

						CAN DIA	G SUPPOF	RT MNTR						-
SELECT SYSTEM scre	on						Re	ceive diagno	osis				SELF-DIAG	2 DEQUITE
OLLLOT GTOTEW 3010	,011	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	-	UNKVN	-	UNKVN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	-	_	UNKWN	_	_	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	-	-	UNKVN	_	UNKVN	_	UNKVN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	-	-	_	_	_	_	_	_	_
всм	No indication	NG	UNKWN	UNKWN	-	_	-	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKVN	UNKVN	UNKVN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKVN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKVN	-	-	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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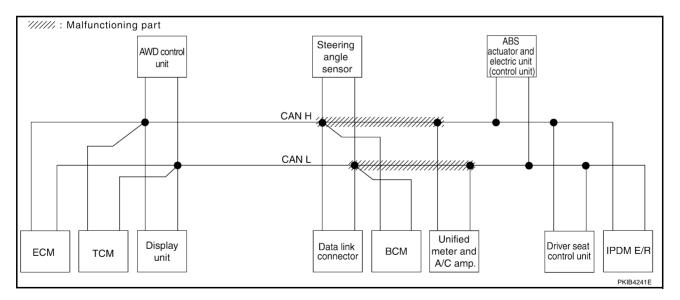
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-245</u>, "Inspection <u>Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	Initial	T				Re	ceive diagno	osis				SELF-DIAG	RESULTS
022201 0101211 001	00	diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	322. 3.7.0	
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNK V N	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	ı	ı	UNKVN	UNKVN	I	CÂN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	1	UNKWN	-	UNK V N	_	UNKVN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	-	ı	_	-	_	-	_	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	1	_	UNKWN	-	UNKVN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKVN	UNKWN	_	UNKVN	-	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	-	_	UNKWN	-	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indiation	_	UNKWN	UNKWN	_	-	-	UNKWN	_	_	_	-	CÂN COMM CIRCUIT (U1000)	_



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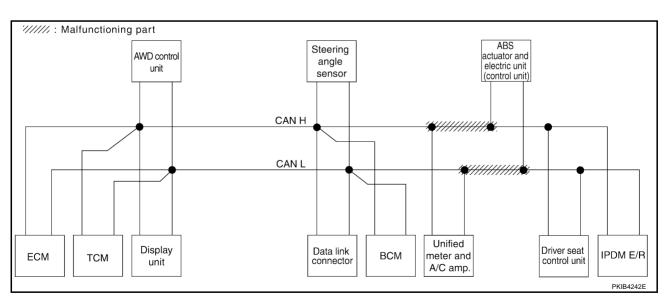
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-245, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagn	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	-
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	-	UNKWN	_	ı
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	UNKVN	(01000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	UNKWN	_	UNKVN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indi N tion	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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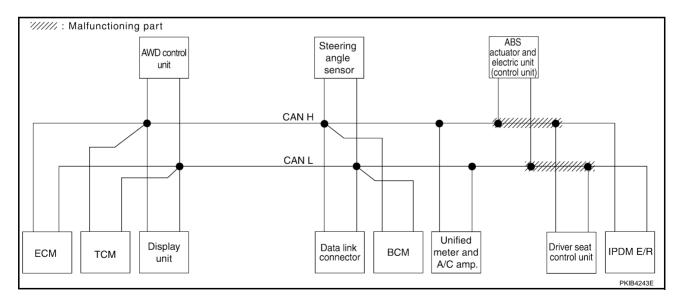
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Case 4

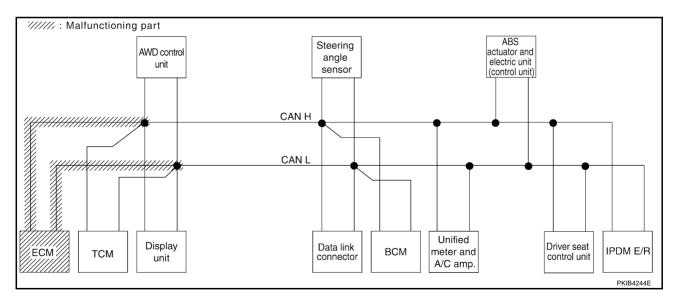
Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-</u>246, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	ı	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	1	UNKWN	1	ı	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	l
Display unit	_	NG	UNKWN	UNKWN	_	_	ı	UNKWN	-	UNKWN	_	UNKWN	_	-
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	-	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	ı	-	_	UNKWN	-	UNKVN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	-	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indi N tion	_	UNKWN	UNKWN	_	_	1	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



Case 5
Check ECM circuit. Refer to <u>LAN-247</u>, "ECM Circuit Inspection" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	Initial	Transmit				Re	ceive diagn	osis				SELF-DIAG	RESULTS
022201 01012111001		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK/N	-	-	UNKVN	_	UNKVN	UNKWN	UNKWN	II (U 1 0 00)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	UNKWN	-	_	UNKWN	UNKWN	_	CÂN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKVN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	-	_	-	ĺ	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKVN	-	_	-	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKVN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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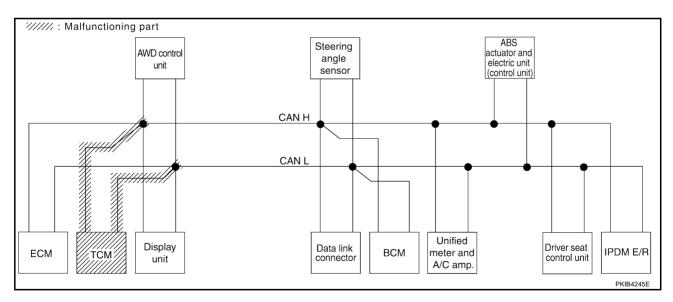
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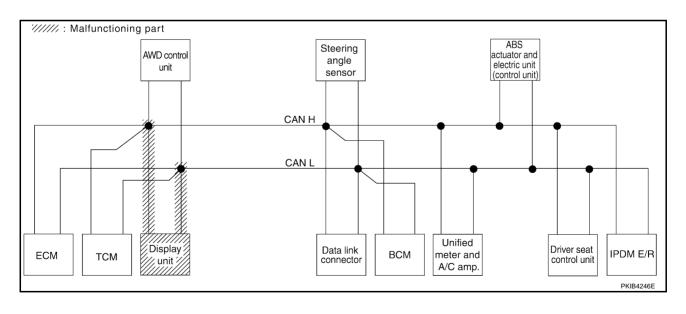
Case 6
Check TCM circuit. Refer to <u>LAN-247, "TCM Circuit Inspection"</u>.

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	een	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNK VN	_	_	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKVN	_	_	UNK/VN	_	ı	UNK/N	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	-	UNKWN	-	-	_	-	CAN COMM CIRCUIT (U1000)	_



Case 7
Check display unit circuit. Refer to <u>LAN-248</u>, "<u>Display Unit Circuit Inspection</u>".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
022201 01012111 0010		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	022, 5,710	
ENGINE	_	NG	UNKWN	1	UNKWN	_	ı	UNKWN	ı	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	ı	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNK WN	UNKVN	_	_	_	UNKVN	_	UNKVN	_	UNKVN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	ı	-	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	1	-	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	ı	UNKWN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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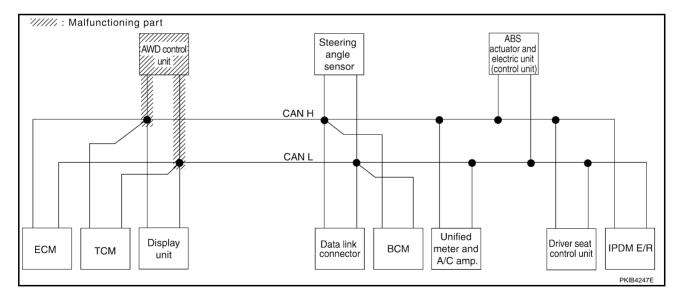
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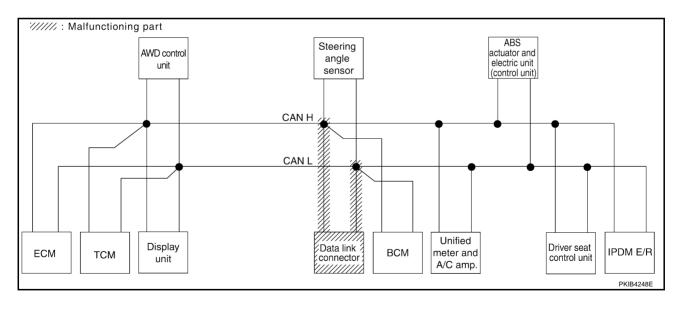
Case 8
Check AWD control unit circuit. Refer to <u>LAN-248</u>, "AWD Control Unit Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en .	1 22 1					Re	ceive diagn	osis				SELF-DIAG	RESULTS
SEEEST STOTEM OFF	,011	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI DINC	711200210
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNK V N	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNK VN	_	-	_	-	-	-	_	-	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNK V N	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNK N N	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
														PKIB5935E



Case 9
Check data link connector circuit. Refer to <u>LAN-249</u>, "<u>Data Link Connector Circuit Inspection</u>" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAC	3 RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	-	-	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indi v ition	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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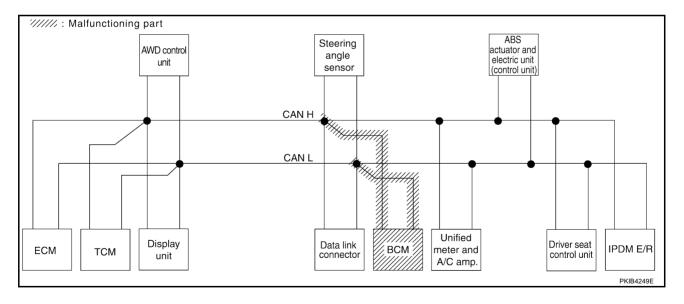
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Case 10
Check BCM circuit. Refer to <u>LAN-249</u>, "BCM Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM so	reen	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	BESULTS
022201 01012		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	-	_	UNKVN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A /T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	-	UNKVN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indi N tion	NG	UNKWN	UNKWN	_	_	-	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	ı	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	-	UNKVN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKVN	_		_	_	CAN COMM CIRCUIT (U1000)	_



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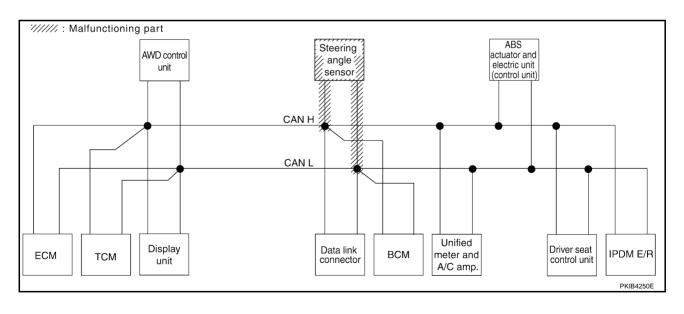
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Case 11
Check steering angle sensor circuit. Refer to <u>LAN-250</u>, "Steering Angle Sensor Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELE-DIAC	RESULTS
022201 01012111 0010		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	022. 57.0	
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	ı	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	ı	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_	1	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKVN	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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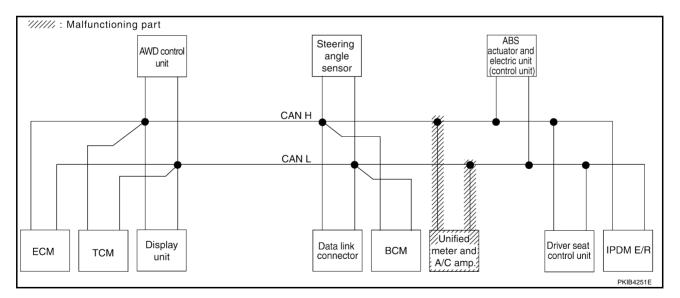
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Case 12
Check unified meter and A/C amp. circuit. Refer to LAN-250, "Unified Meter and A/C Amp. Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	een	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN		UNKWN	_	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	ı	UNKVN	UNKWN	I	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKVN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKVN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKVN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	N indivation	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKVN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	-	CAN COMM CIRCUIT (U1000)	_



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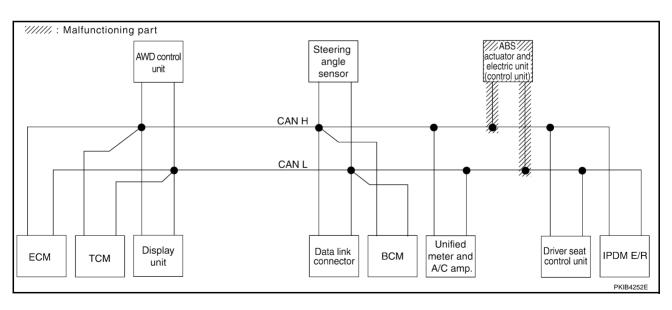
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Case 13

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-251</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

						CAN DIA	G SUPPOF							
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	-	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	_	-	UNKWN	UNKVN	ı	CÂN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	ı	_	ı	UNKWN	-	UNKWN	_	UNKWN	_	1
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	1	_	-	UNKWN	UNKVN	ı	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	1	_	1	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	W	UNKVN	UNKWN	UNKVN	_	UNKWN	_	UNKWN	-	_	ı	CÂN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	ı	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_

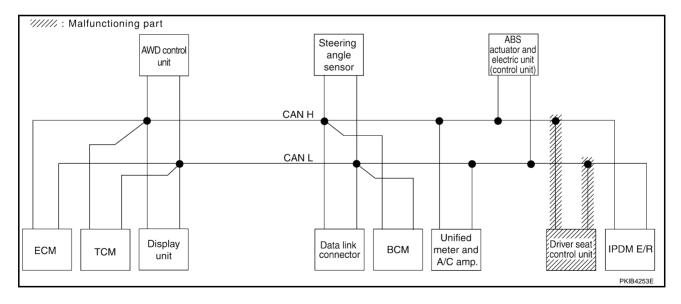


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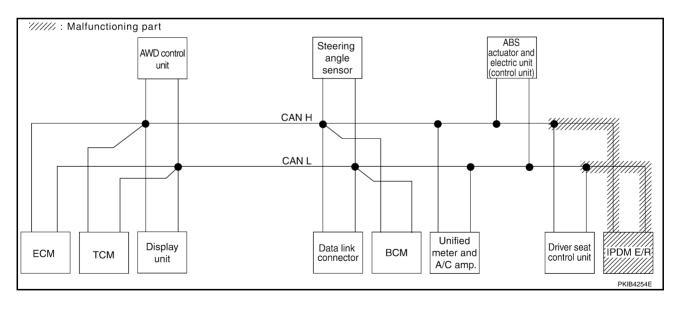
Case 14
Check driver seat control unit circuit. Refer to <u>LAN-251</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM S	creen	1-14-1	T				Re	ceive diagno	osis				SELF-DIAG	RESULTS
occes of ordinary	010011	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLL: DINC	TILOULIN
ENGINE	_	NG	UNKWN	1	UNKWN	_	ı	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	-	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	indication	NG	UNKWN	-	UNKWN	_	-	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	-	_	-	UNKWN	-	-	_	-	CAN COMM CIRCUIT (U1000)	_



Case 15
Check IPDM E/R circuit. Refer to LAN-252, "IPDM E/R Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	Initial	Transmit				Re	ceive diagno	osis		_		SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN		UNKWN	_	_	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	-	_	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_



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Case 16
Check CAN communication circuit. Refer to <u>LAN-253</u>, "CAN Communication Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	een	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNK V N	_	UNKYN	_	_	UNKWN	_	UNK VN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	ı	UNKVN	ı	ı	UNK V N	UNKVN	1	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKVN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNK V N	-	-	_	_	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No ind ation	NG	UNKWN	UNKWN	-	_	-	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	W	UNKVN	UNKVN	UNKVN	_	UNKVN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No ind ation	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 5)

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Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to LAN-259, "IPDM E/R Ignition Relay Circuit Inspection" .

						CAN DIA	NG SUPPOF	RT MNTR						
SELECT SYSTEM scre	en .	1 20 1					Re	ceive diagn	osis				SELE-DIAC	RESULTS
32220 T 0 T 0 T 2 M 00 M		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKYN	_	_	UNKWN	_	UNKWN	UNK VN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIPCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	ı	UNKWN	I	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNK N N	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
														PKIB5944E

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Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-259</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection"</u>.

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	1 22 1					Re	ceive diagno	osis				SELE-DIAG	RESULTS
OLLEGI GIGIENI GOIC		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	1	UNKWN		UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	_	_	_	-	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	1	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	1	ı	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	ı	ı	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	_	UNKWN	_	ı	ı	-	_	-	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	ı	UNKWN	-	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	-	UNKWN	_	-	_	-	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

AKS00CD5

1. CHECK HARNESS FOR OPEN CIRCUIT

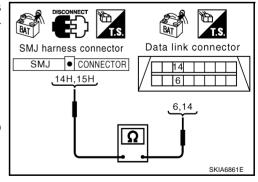
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW" .

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit AKSONCDE

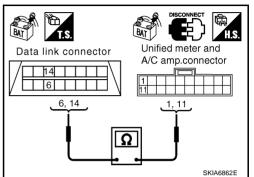
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit**

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

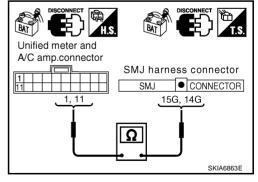
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

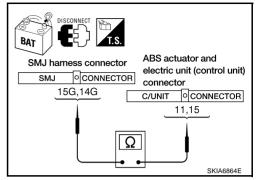
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

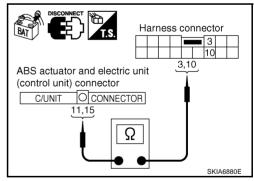
- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L) 15 (R) - 10 (R) : Continuity should exist.: Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. CHECK HARNESS FOR OPEN CIRCUIT

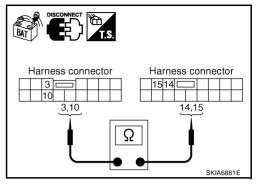
- 1. Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L). 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L) : Continuity should exist. 10 (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CD9

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

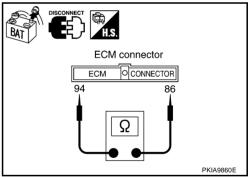
- 1. Disconnect ECM connector.
- Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : **Approx.** 108 - 132 Ω

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM and harness connector M82.



AKS00CDA

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

LAN-247 Revision: 2005 July 2005 FX

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2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

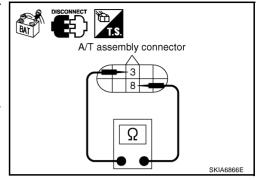
3 (L) - 8 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG

>> Repair harness between A/T assembly and display control unit.



AKS00CDB

Display Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect display unit connector.
- Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

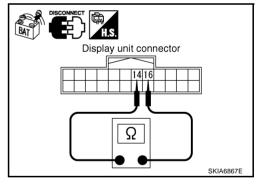
14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace display unit.

NG

>> Repair harness between display unit and harness connector M82.



AKS00CDC

AWD Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of AWD control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

В

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

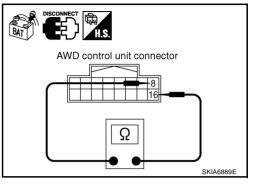
- Disconnect AWD control unit connector.
- Check resistance between AWD control unit harness connector M92 terminals 8 (L) and 16 (R).

8 (L) - 16 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace AWD control unit.

NG >> Repair harness between AWD control unit and harness connector M82.



AKS00CDD

Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

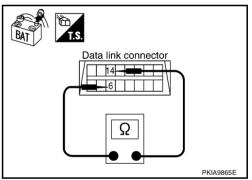
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

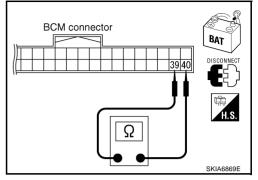
: Approx. 54 - 66 Ω

OK or NG

OK

>> Replace BCM. Refer to <u>BCS-16, "Removal and Installation of BCM"</u>.

NG >> Repair harness between BCM and data link connector.



AKS00CDF

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect steering angle sensor connector.
- 2. Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

: Approx. 54 - 66 Ω

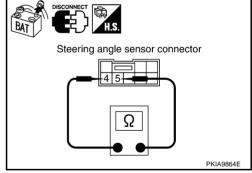
OK or NG

OK

>> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CDG

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

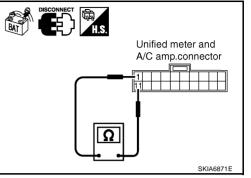
1 (L) - **11 (R)** : Approx. **54** - **66**
$$\Omega$$

OK or NG

OK >> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CDH

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

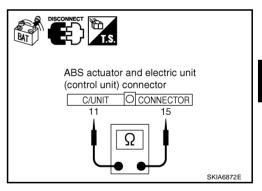
OK or NG

OK

>> Replace ABS actuator and electric unit (control unit).

NG

>> Repair harness between ABS actuator and electric unit (control unit) and harness connector E205.



AKS00CDI

Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

LAN-251 Revision: 2005 July 2005 FX В

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect driver seat control unit connector.
- 2. Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

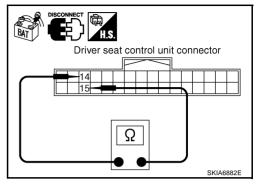
14 (OR) - 15 (SB) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace driver seat control unit.

NG

>> Repair harness between driver seat control unit and harness connector B5.



AKS00CDJ

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

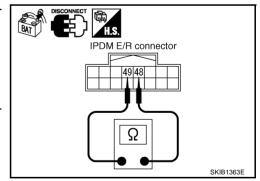
- 1. Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

48 (L) - 49 (R) : Approx.
$$108 - 132\Omega$$

OK or NG

OK >> Replace IPDM E/R.

NG >> Repair harness between IPDM E/R and harness connector B8.



CAN SYSTEM (TYPE 5)

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CAN Communication Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- AWD control unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- AWD control unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

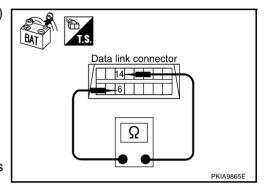
6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



Data link connector

14

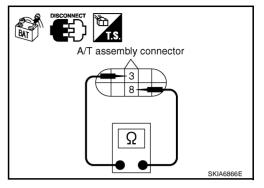
4. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG >> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

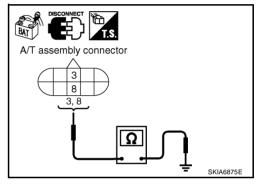
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. : Continuity should not exist. 8 (R) - Ground

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

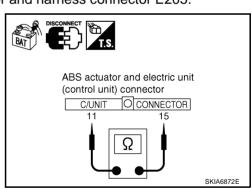
- Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 7.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



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7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

11 (L) - Ground : Continuity should not exist. 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

8. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

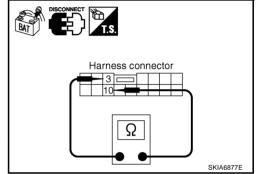
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



ABS actuator and electric unit

11,15

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(control unit) connector

C/UNIT

9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

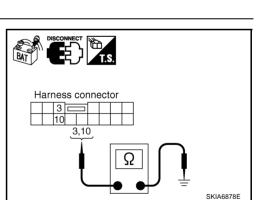
3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG >> Check

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



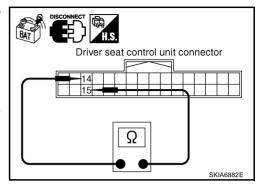
10. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

OK or NG

OK >> GO TO 11.

NG >> Repair harness between driver seat control unit and harness connector B151.



11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

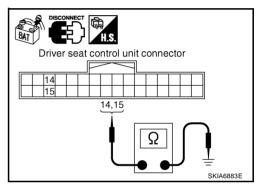
14 (OR) - Ground : Continuity should not exist.15 (SB) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 12.

>> Repair harness between driver seat control unit and harness connector B151.



12. CHECK HARNESS FOR SHORT CIRCUIT

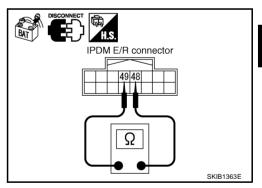
- 1. Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

OK or NG

NG

OK >> GO TO 13.

>> Repair harness between IPDM E/R and harness connector E205.



13. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

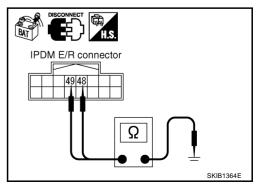
48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 14.

>> Repair harness between IPDM E/R and harness connector E205.



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14. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- 2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

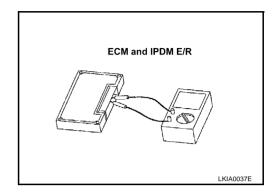
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 15.

NG >> Replace ECM and/or IPDM E/R.



15. СНЕСК ЗҮМРТОМ

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 16.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

16. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- AWD control unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

CAN SYSTEM (TYPE 5)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00CDL

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to <u>PG-28</u>, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12</u>, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START".

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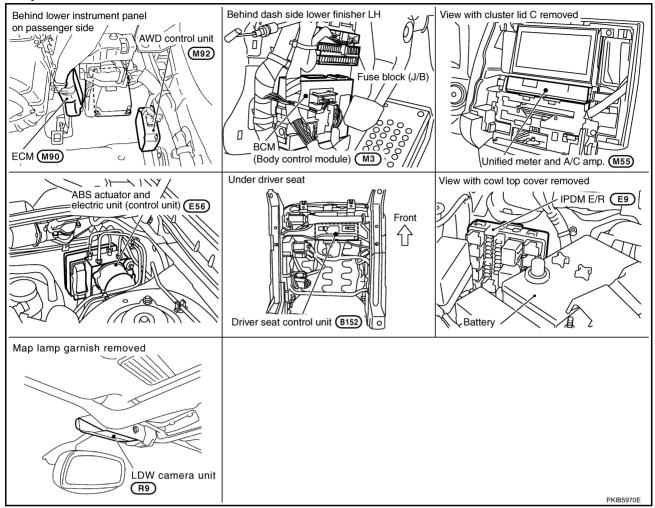
ı

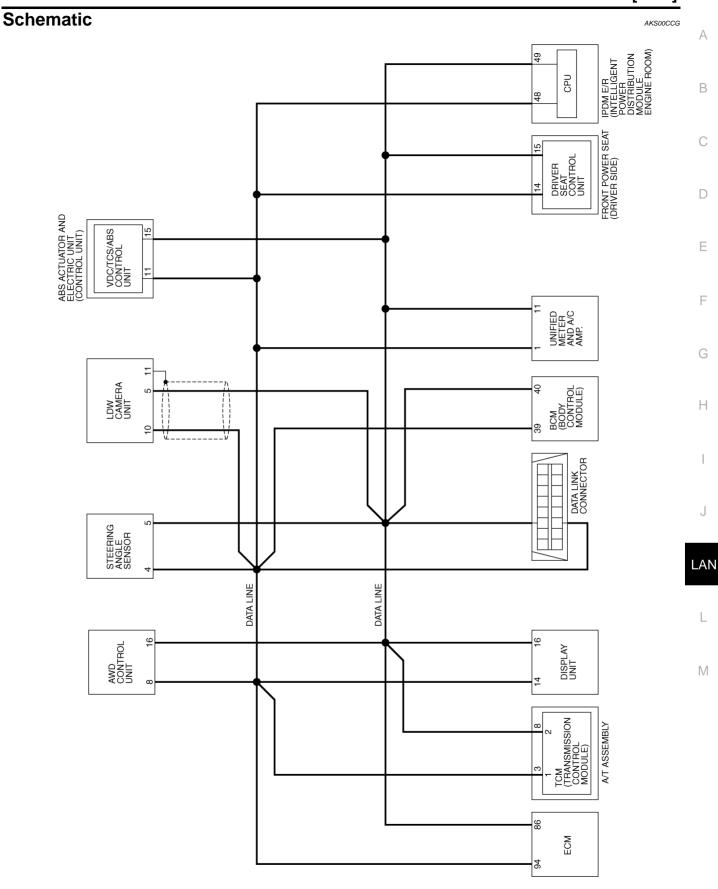
CAN SYSTEM (TYPE 6)

PFP:23710

Component Parts and Harness Connector Location

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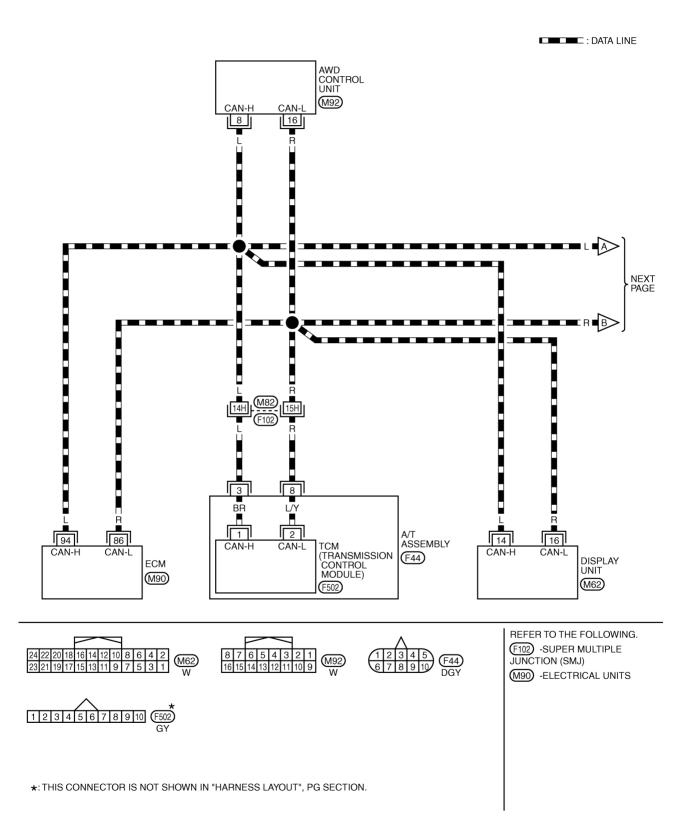


TKWM2367E

Wiring Diagram - CAN -

AKS00CCH

LAN-CAN-16



TKWM2368E

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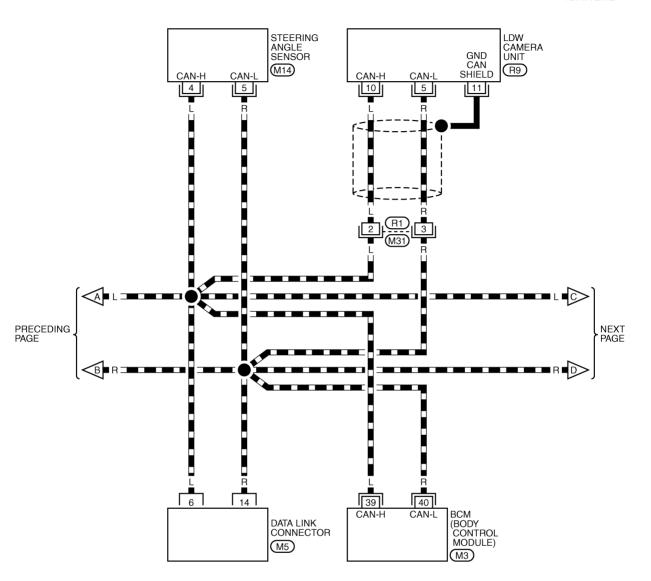
Е

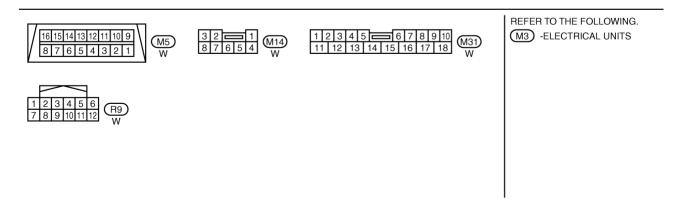
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LAN-CAN-17

: DATA LINE

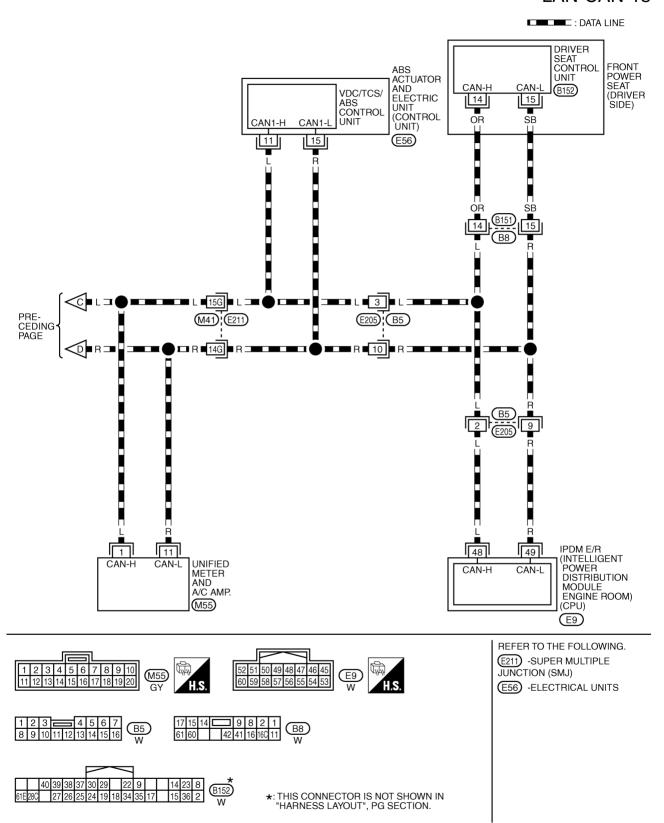




TKWM2369E

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LAN-CAN-18



TKWM2370E

CAN SYSTEM (TYPE 6)

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Check Sheet AKS00CCI

NOTE:

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						CAN DIA	G SUPPOR	RT MNTR						
CELECT CYCTEM oo	****							ceive diagn	osis				SELF-DIAG	DECLUTE
SELECT SYSTEM sc	reen	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	-	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	-	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000) CAN COMM	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	-	_	UNKWN	_	UNKWN	CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	-	_	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	ı	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	ı	ı	ı	CAN COMM CIRCUIT (U1000)	_
Symptoms:			Attach SELECT	n copy of F SYSTE					ach copy ECT SYS					

M

PKIB4344E

Display unit Trans	ation Sheet: Rewrite the following	names, and put a check mark on the o	check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	-
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	_	CAN9	_

Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of ENGINE Attach copy of Attach copy of ALL MODE AWD/4WD A/T SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS Attach copy of Attach copy of Attach copy of всм METER A/C AMP LDW SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS Attach copy of Attach copy of Attach copy of AUTO DRIVE POS. IPDM E/R ABS SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS PKIB4345E

Revision: 2005 July **LAN-267** 2005 FX

Attach copy of Attach copy of Attach copy of ENGINE A/T ALL MODE AWD/4WD **CAN DIAG SUPPORT CAN DIAG SUPPORT** CAN DIAG SUPPORT MNTR MNTR MNTR Attach copy of Attach copy of Attach copy of **BCM** LDW METER A/C AMP CAN DIAG SUPPORT CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR MNTR Attach copy of Attach copy of Attach copy of IPDM E/R AUTO DRIVE POS. ABS **CAN DIAG SUPPORT** CAN DIAG SUPPORT CAN DIAG SUPPORT MNTR MNTR MNTR PKIB4346E

CHECK SHEET RESULTS (EXAMPLE)

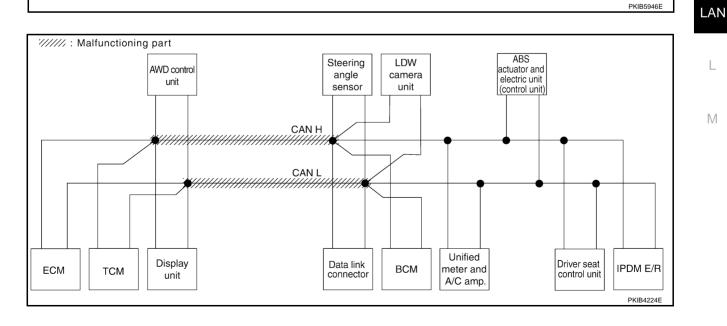
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to LAN-287, "Inspection Between TCM and Data Link Connector Circuit".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	BESULT!
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	ı	UNKVN	_	UNKVN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COI CIROUI (U1001
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	_	UNKVN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	l
Display unit	_	NG	UNKWN	UNKWN	ı	_	ı	UNK V N	_	UNKVN	-	UNKVN	_	l
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	ı	_	_	_	_	_	_	-
BCM	No indication	NG	UNKWN	UNKVN	_	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKVN	UNKWN	_	-	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKVN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	-	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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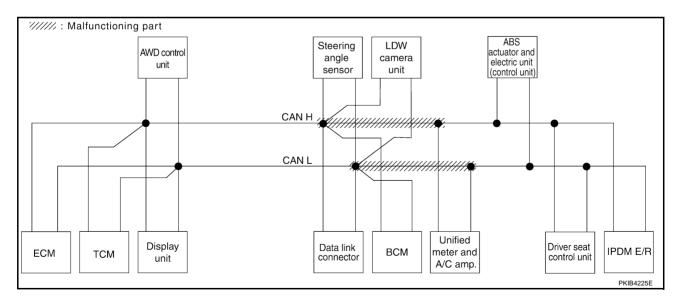
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-288</u>, "Inspection <u>Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

						CAN DIA	G SUPPOR	RT MNTR						
SELECT SYSTEM scre	een	Initial	Transmit				Re	ceive diagn	osis				SELF-DIAG	BESULTS
GEEEGT	,0	diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG OMWN			UNKWN	1	_	UNKWN	_	UNKVN	UNKWN	UNK V N	(01000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	ı	UNKWN	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	1	I	-	UNKWN	_	UNKVN	ı	UNKVN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	ı	ı	_	_	_	-	_	_	_	_
BCM	No indication	NG	UNKWN	UNKWN	ı	_	_	_	_	UNKVN	_	UNK V N	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	1	UNKWN	UNKWN	1	_	UNKWN	_	1	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKVN	_	UNKVN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indi v ition	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	ı	-	_	UNKWN	_	1	_	_	CAN COMM CIRCUIT (U1000)	



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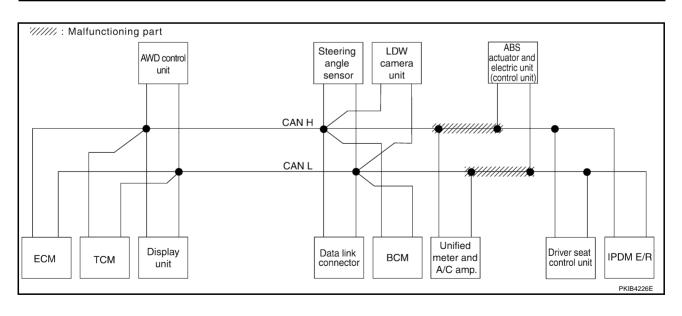
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-288, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een.	1 22 1					Re	ceive diagno	osis				SELF-DIAG	RESULTS
OLLLOT OT OT LIM OUT	0011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG OF		_	UNKWN	-	_	UNKWN	-	UNKWN	UNK W N	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	ı	UNKWN	I	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKWN	_	UNK\\N	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	-	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKVN	-	UNKWN	-	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	-	UNKWN	-	UNKWN	_	_	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No. indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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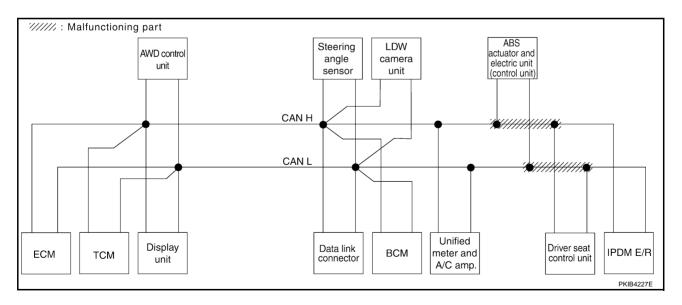
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Case 4

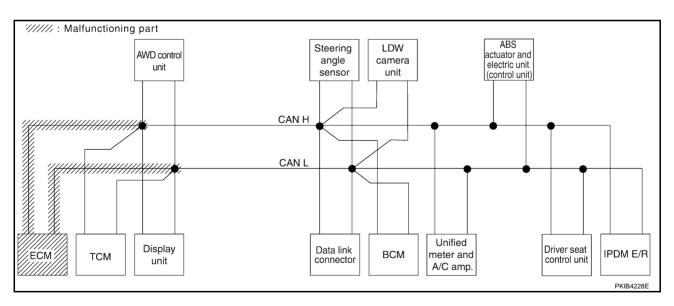
Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-289</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en		+				Re	ceive diagno	osis				SELF-DIAG	RESULTS
012101 0101 2 m oon	,0	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	022, 5,,,,	
ENGINE	NG UNKWNNG UNKWN			-	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN		CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNK W N	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	-	-	-	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	_	-	_	UNKWN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	ı	UNKWN	UNKWN	_	_	UNKWN	-	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indi v ition	NG	UNKWN	_	UNKWN	_	_	UNKWN	-	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indiation	-	UNKWN	UNKWN	-	_	-	UNKWN	-	_	-	-	CAN COMM CIRCUIT (U1000)	_



Case 5
Check ECM circuit. Refer to <u>LAN-290</u>, "ECM Circuit Inspection" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNK NN	1	UNKVN	I	ı	UNKVN	_	UNK WN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	ı	1	UNKWN	ı	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	-	_	-	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	ı	1	1	1	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNK WN	-	-	-	=	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKWN	ı	-	UNKWN	-	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	ı	UNKWN	1	UNKWN	_	ı	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	ı	ı	UNKWN	_	UNKWN	ı	1	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	1	1	-	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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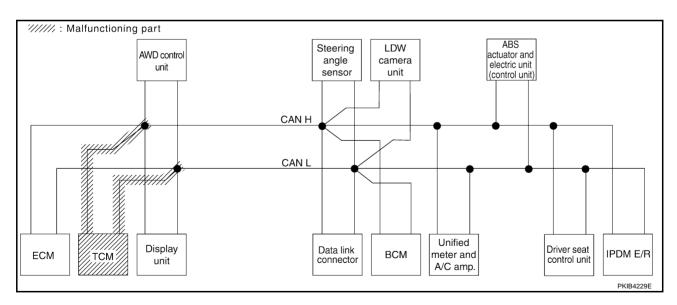
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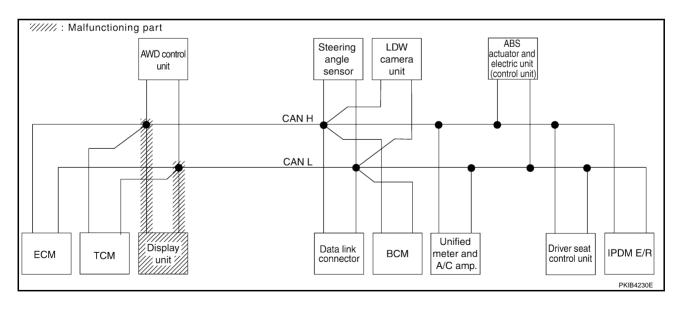
Case 6
Check TCM circuit. Refer to <u>LAN-290, "TCM Circuit Inspection"</u>.

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	1141-1	T				Re	ceive diagno	osis				SELF-DIAG	RESULTS
01220 T 0 T 0 T 2 III 001	00	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	022, 5,,,0	
ENGINE	NG UNKWNNG UNKWN			ı	UNKVN	_	_	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	UNKVN	_	_	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	1
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	-	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CÂN COMM CIRCUIT (U1000)	-
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	=	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	UNKWN	_	CAN COMM CIRCUIT (U1000)	1
ABS	_	NG	UNKWN	UNKWN	UNKVN	_	UNKWN	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U1000)	1
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKVN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	1



Case 7
Check display unit circuit. Refer to <u>LAN-291</u>, "<u>Display Unit Circuit Inspection</u>".

						CANIDIA	0.0110000	OT MANITO					I	
						CAN DIA	G SUPPOR		:-				-	
SELECT SYSTEM scree	en	Initial	Transmit			I		ceive diagn	osis T	I			SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	- NG UNKWN			-	UNKWN	_	-	UNKWN	_	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	-	_	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNK V N	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	ı	UNKWN	_	_	_	ı	CAN COMM CIRCUIT (U1000)	_
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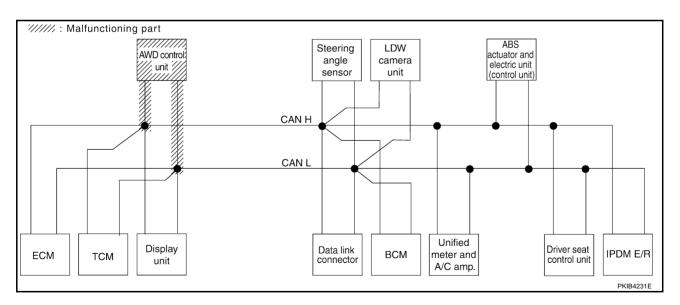
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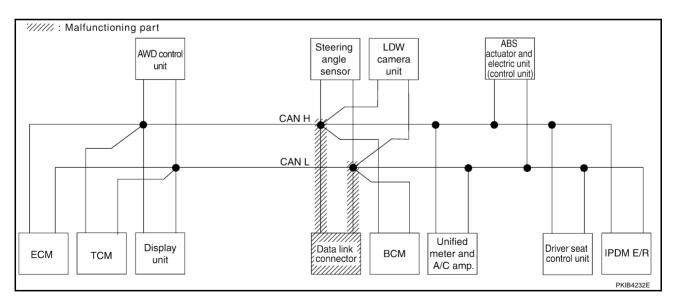
Case 8
Check AWD control unit circuit. Refer to <u>LAN-291</u>, "AWD Control Unit Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en.						Re	ceive diagno	osis				SELF-DIAG	RESULTS
OLLEGI GTOTEM GON	5011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI BING	711200210
ENGINE	- NG UNKWN			-	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKVN	_	_	_	_	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	-	UNKWN	UNKWN	_	_	UNKWN	_	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKWN	-	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	-	-	CAN COMM CIRCUIT (U1000)	_



Case 9
Check data link connector circuit. Refer to <u>LAN-292</u>, "<u>Data Link Connector Circuit Inspection</u>" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagn	osis				SELE-DIAC	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	- NG UNKWN			ı	UNKWN	_	ı	UNKWN	_	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	1	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indi v ition	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	ı	UNKWN	ı	UNKWN	-	ı	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indi ac tion	NG	UNKWN	1	UNKWN	_	ı	UNKWN	_	UNKWN	ı	I	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indi v ition	_	UNKWN	UNKWN	_	_	ı	UNKWN	_	_	_	ı	CAN COMM CIRCUIT (U1000)	_
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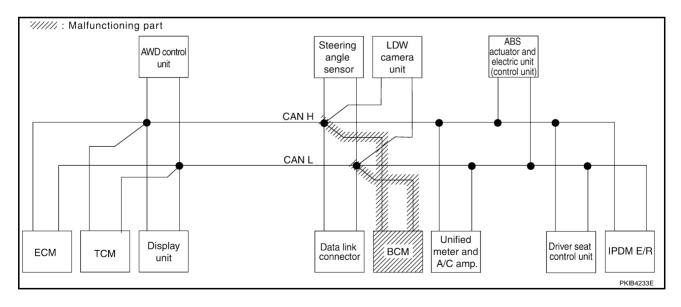
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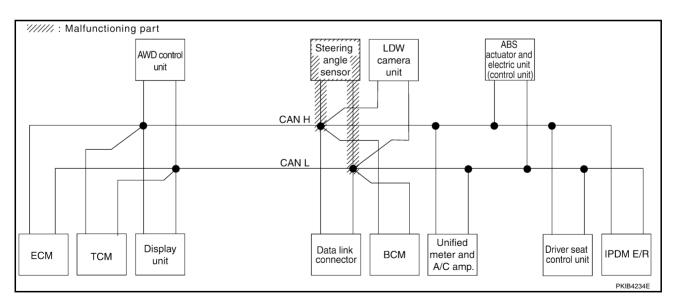
Case 10 Check BCM circuit. Refer to <u>LAN-292</u>, "BCM Circuit Inspection" .

						CAN DIA	G SUPPOR	RT MNTR						
SELECT SYSTEM scre	on						Re	ceive diagn	osis				SELE-DIAC	3 RESULTS
SEEEST STOTEM SOIC	011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI BING	111200210
ENGINE	_	NG	UNKWN	I	UNKWN	_	ı	UNKWN	_	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNK W N	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	-	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	-	_	UNKWN	-	=	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_		UNKVN	_	-	_		CAN COMM CIRCUIT (U1000)	_
<u> </u>														PKIB5955E



Case 11
Check steering angle sensor circuit. Refer to <u>LAN-293</u>, "Steering Angle Sensor Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	1141-1	T				Re	ceive diagno	osis				SELF-DIAG	RESULTS
3223 · 3 · 3 · 2 · 2 · 1 · 1 · 3 · 2 · 3 · 3 · 3 · 3 · 3 · 3 · 3 · 3		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN		_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	-	_	=	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	-	_	UNKWN	-	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-		UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	UNKWN	_	-	_	-	CAN COMM CIRCUIT (U1000)	_



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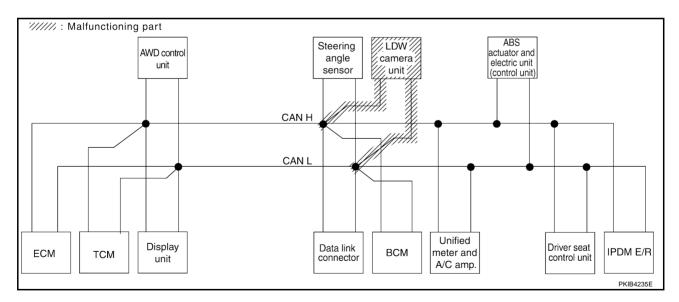
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Case 12
Check LDW camera unit circuit. Refer to <u>LAN-293</u>, "<u>LDW Camera Unit Circuit Inspection</u>" .

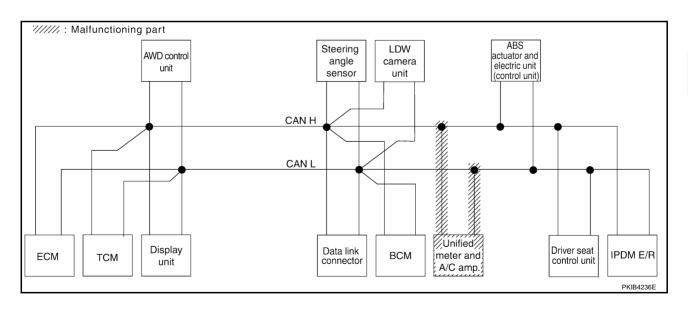
						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	ion						Re	ceive diagno	osis				SELE DIAG	RESULTS
SELECT STOTEW SCIE	:CII	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	A NEGOLI G
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	-	UNKWN	_	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	UNKWN	-	1	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	-	_	UNKWN	_	UNKWN	-	ı	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	ı	_	_	CAN COMM CIRCUIT (U1000)	_



Case 13

Check unified meter and A/C amp. circuit. Refer to LAN-294, "Unified Meter and A/C Amp. Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	en.	1 22 1					Re	ceive diagn	osis				SELF-DIAG	RESULTS
CLLEGI GIGILINI GOI	5011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI DINO	TILOGLIG
ENGINE	_	NG	UNKWN	-	UNKWN	_	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	-	-	-	UNKVN	UNKWN	-	CAN COMM CIPQUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	_	-	UNKVN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No ind ation	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	1	-	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	-	UNKVN	1	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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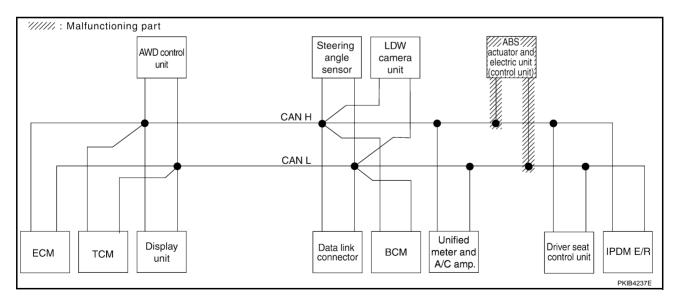
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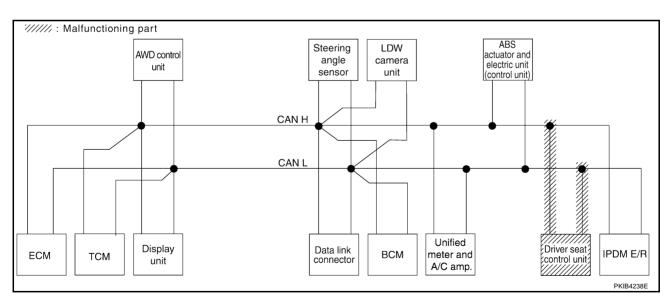
Case 14
Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-295</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	1 22 1					Re	ceive diagno	osis				SELF-DIAG	RESULTS
OLLEGI GIGILIN CONC	011	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI DINC	111200210
ENGINE	_	NG	UNKWN	ı	UNKWN	_	_	UNKWN	-	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1	-	UNKWN	_	_	UNKWN	UNKVN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	-	-	-	UNKWN	UNKVN	-	CAN COMM CIRQUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	1	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	_	UNKVN	-	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	V	UNKVN	UNKWN	UNKVN	_	UNKVN	-	UNKWN	_	ı	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	-	UNKWN	-	UNKWN	ı	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_	UNKWN	_	-	1	-	CAN COMM CIRCUIT (U1000)	_



Case 15
Check driver seat control unit circuit. Refer to <u>LAN-295</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en						Re	ceive diagno	osis				SELF-DIAG	RESULTS
022201 01012ml 00.00		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	-	_	-	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	-	_	UNKWN	-	=	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-		UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indiaction	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	-	_	UNKWN	-	=	_	_	CAN COMM CIRCUIT (U1000)	_



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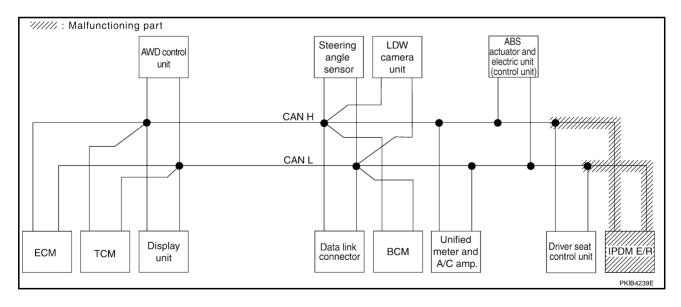
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Case 16
Check IPDM E/R circuit. Refer to LAN-296, "IPDM E/R Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	on						Re	ceive diagn	osis				SELE DIAG	RESULTS
SEEEOT OTOTEW SCIE	on	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	THEODERO
ENGINE	_	NG	UNKWN	_	UNKWN	_	-	UNKWN	_	UNKWN	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
Α/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNK W N	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	-	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	_	-	UNKWN	-	UNKVN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	-	_	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	ı	UNKWN	-	_		_	CAN COMM CIRCUIT (U1000)	_
														PKIB5961E



CAN SYSTEM (TYPE 6)

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Case 17
Check CAN communication circuit. Refer to <u>LAN-297</u>, "CAN Communication Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM so	reen	Initial	Transmit				Re	ceive diagno	osis			_	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNK VN	-	UNKVN	1	-	UNKWN	1	UNKVN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKVN	ı	1	UNKVN	1	1	UNKVN	UNKVN	ı	CAN COMM CIRCUIT (U1000)	l
Display unit	_	NG	UNKVN	UNKVN	_	1	ı	UNKVN	1	UNKVN	_	UNK VN	_	1
ALL MODE AWD/4WD	_	NG	UNKVN	-	_	ı	1	1	1	1	_	_	CAN COMM CIRCUIT (U1000)	1
BCM	No indication	NG	UNKWN	UNKWN	_	1	1	1	1	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	1	UNKWN	UNKWN	ı	ı	UNKWN	ı	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	I	UNKWN	ı	CAN COMM CIRCUIT (U1000)	l
ABS	_	W	UNK VN	UNKVN	UNK V N	ı	UNKWN	ı	UNK VN	-	-	_	CAN COMM CIRCUIT (U1000)	ı
AUTO DRIVE POS.	No indi N ation	NG	UNKWN	1	UNKWN	ı	ı	UNKWN	ı	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	indication	_	UNKWN	UNKWN	_	_	-	UNKWN		-	_	_	CAN COMM CIRCUIT (U1000)	-

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Case 18

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to LAN-303, "IPDM E/R Ignition Relay Circuit Inspection" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	en.	1 22 1					Re	ceive diagno	osis				SELF-DIAG	RESULTS
OLLEGI GIGILINI 3011	5611	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKVN	_	_	UNKWN	1	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	1	ı	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	ı	ı	UNKWN	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	1	1	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	-	UNKWN	UNKVN	_	_	UNKWN	ı	_	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	-	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKVN	_	_	UNKWN	1	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_

Case 19

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-303, "IPDM E/R Ignition Relay Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	on						Re	ceive diagno	osis				SELE DIA	RESULTS
OLLLOT OTOTEM 3010	,011	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	THEODEIG
ENGINE	_	NG	UNKWN	ı	UNKWN	-	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	ı	_	_	_	_	ı	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	ı	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	-		UNKWN	_	UNKWN	CÂN COMM CIRCUIT (U1000)	_
LDW	No indication	_	ı	UNKWN	UNKWN	-	_	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
ABS	-	NG	UNKWN	-	UNKWN	-	_	-	_	_	_	-	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	-	_	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	-	_	_	_	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

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1. CHECK HARNESS FOR OPEN CIRCUIT

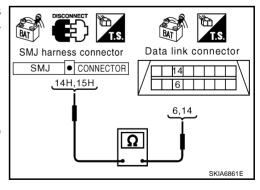
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

1. CHECK HARNESS FOR OPEN CIRCUIT

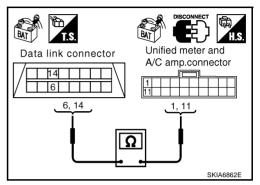
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp. harness connector M55 terminals 1 (L), 11 (R).

6 (L) - 1 (L) : Continuity should exist. 14 (R) - 11 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

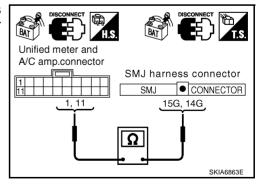
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp. harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

1 (L) - 15G (L) : Continuity should exist. 11 (R) - 14G (R) : Continuity should exist.

OK or NG

OK >> GO TO 3. NG >> Repair harness.



3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

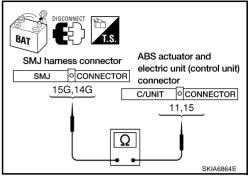
15G (L) - 11 (L) 14G (R) - 15 (R) : Continuity should exist.

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L)

: Continuity should exist.

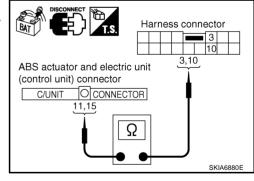
15 (R) - 10 (R)

: Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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3. CHECK HARNESS FOR OPEN CIRCUIT

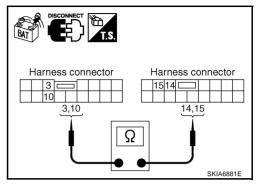
- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L), 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L) : Continuity should exist. 10 (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

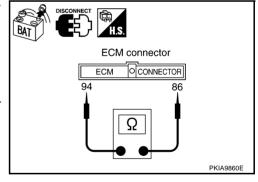
- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. $108 - 132\Omega$

OK or NG

OK >> Replace ECM.
NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



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TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

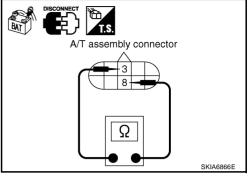
- Disconnect A/T assembly connector.
- 2. Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - 8 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG >> Repair harness between A/T assembly and display control unit.



Display Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

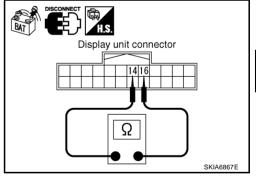
- 1. Disconnect display unit connector.
- Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace display unit.

NG >> Repair harness between display unit and harness connector M82.



AWD Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of AWD control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect AWD control unit connector. 1.
- Check resistance between AWD control unit harness connector M92 terminals 8 (L) and 16 (R).

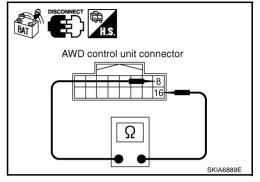
8 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace AWD control unit.

NG

>> Repair harness between AWD control unit and harness connector M82.



AKS00CCR

Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

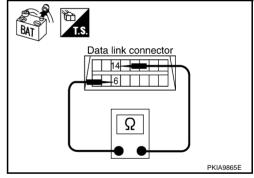
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. 54 - 66
$$\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



AKS00CCS

BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

В

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

: Approx. 54 - 66 Ω

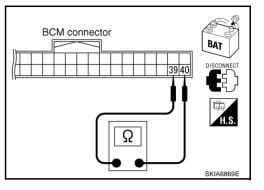
OK or NG

OK

>> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG

>> Repair harness between BCM and data link connector.



AKS00CCT

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

1. Turn ignition switch OFF.

- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

: Approx. 54 - 66 Ω

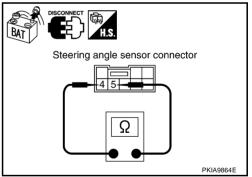
OK or NG

OK

>> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CCU

LDW Camera Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (unit side and harness 3. side).
- LDW camera unit connector
- Harness connector R1
- Harness connector M31

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

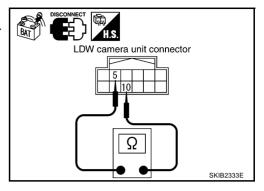
- 1. Disconnect LDW camera unit connector.
- Check resistance between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

10 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace LDW camera unit.

NG >> GO TO 3.



3. CHECK HARNESS FOR OPEN CIRCUIT

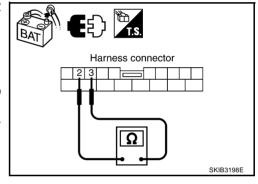
- 1. Disconnect harness connector R1.
- Check resistance between harness connector M31 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Replace harness between LDW camera unit and harness connector R1.



AKS00CCV

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- 2. Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

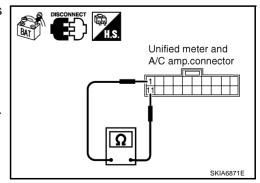
1 (L) - 11 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

NG

OK >> Replace unified meter and A/C amp.

>> Repair harness between unified meter and A/C amp. and harness connector M41.



[CAN]

ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

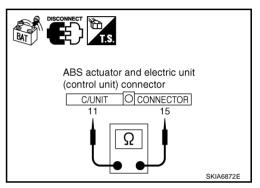
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG >> Repair harness between ABS actuator and electric unit (control unit) and harness connector E205.



Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

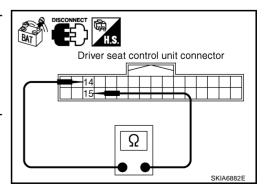
- Disconnect driver seat control unit connector.
- Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

14 (OR) - 15 (SB) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace driver seat control unit.
NG >> Repair harness between driver s

>> Repair harness between driver seat control unit and harness connector B5.



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CAN SYSTEM (TYPE 6)

[CAN]

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

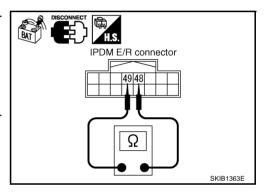
: **Approx. 108 - 132** Ω

OK or NG

OK >> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and harness connector B8.



CAN SYSTEM (TYPE 6)

[CAN]

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CAN Communication Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- AWD control unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and LDW camera unit
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- AWD control unit connector
- BCM connector
- Steering angle sensor connector
- Harness connector M31
- Unified meter and A/C amp. connector
- Harness connector M41
- Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

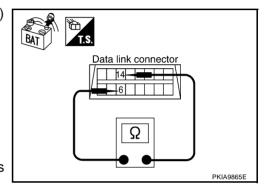
6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



Data link connector

14 | |

[CAN]

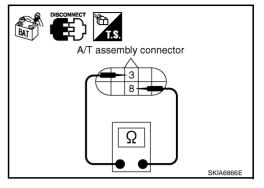
4. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect A/T assembly connector.
- 2. Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG >> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

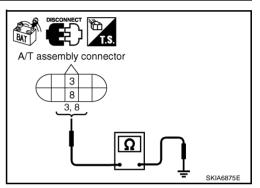
3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 6.

>> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

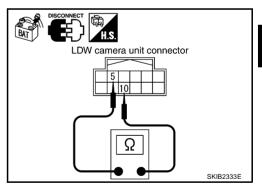
- Disconnect LDW camera unit connector.
- Check continuity between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

OK or NG

NG

OK >> GO TO 7.

>> Replace harness between LDW camera unit and harness connector R1.



7. CHECK HARNESS FOR SHORT CIRCUIT

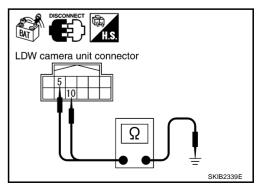
Check continuity between LDW camera unit harness connector R9 terminals 10 (L), 5 (R) and ground.

10 (L) - Ground : Continuity should not exist. 5 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG >> Replace harness between LDW and harness connector R1.



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8. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- 2. Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

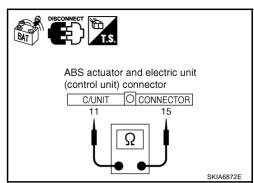
11 (L) - 15 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



ABS actuator and electric unit

11,15

O CONNECTOR

(control unit) connector

C/UNIT

9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

11 (L) - Ground

: Continuity should not exist.

15 (R) - Ground

: Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

10. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

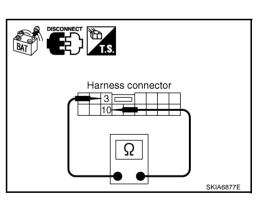
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

3 (L) - Ground : Continuity should not exist.10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5

Harness connector 3 3 3,10 SKIA6878E

12. CHECK HARNESS FOR SHORT CIRCUIT

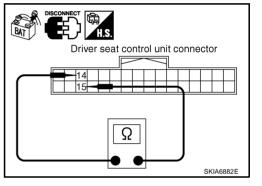
- 1. Disconnect driver seat control unit connector.
- 2. Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

OK or NG

OK >> GO TO 13.

NG >> Repair

>> Repair harness between driver seat control unit and harness connector B151.



13. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

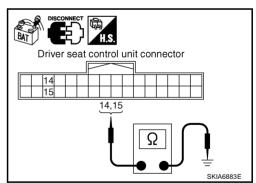
14 (OR) - Ground : Continuity should not exist. 15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 14.

NG >> Repair har

>> Repair harness between driver seat control unit and harness connector B151.



14. CHECK HARNESS FOR SHORT CIRCUIT

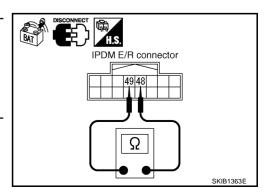
- Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

48 (L) - 49 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 15.

NG >> Repair harness between IPDM E/R and harness connector E205.



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15. CHECK HARNESS FOR SHORT CIRCUIT

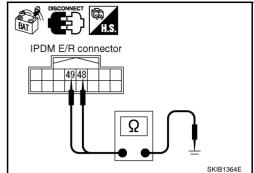
Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 16.

NG >> Repair harness between IPDM E/R and harness connector E205.



16. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

1. Remove ECM and IPDM E/R from vehicle.

2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

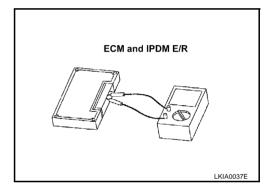
Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 17.

NG >> Replace ECM and/or IPDM E/R.



17. CHECK SYMPTOM

1. Fill in described symptoms on the column "Symptom" in the check sheet.

2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 18.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

CAN SYSTEM (TYPE 6)

[CAN]

18. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it 5. with the symptom related to removed unit.)
- Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- AWD control unit
- **BCM**
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- **ECM**
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit. Not reproduced>>Replace removed unit.

IPDM E/R Ignition Relay Circuit Inspection

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START"".

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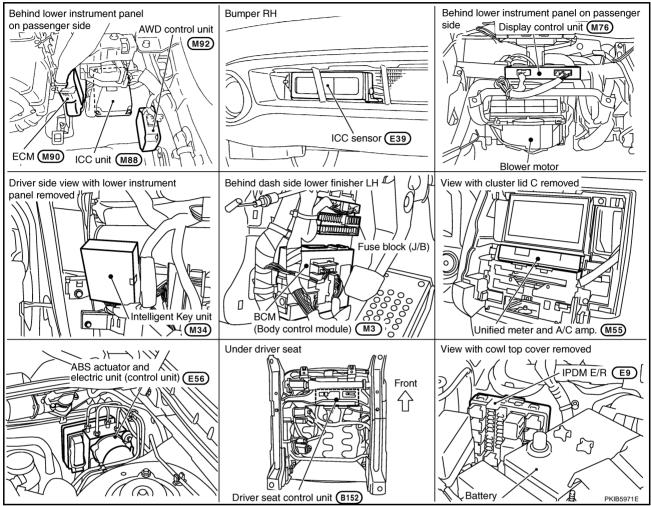
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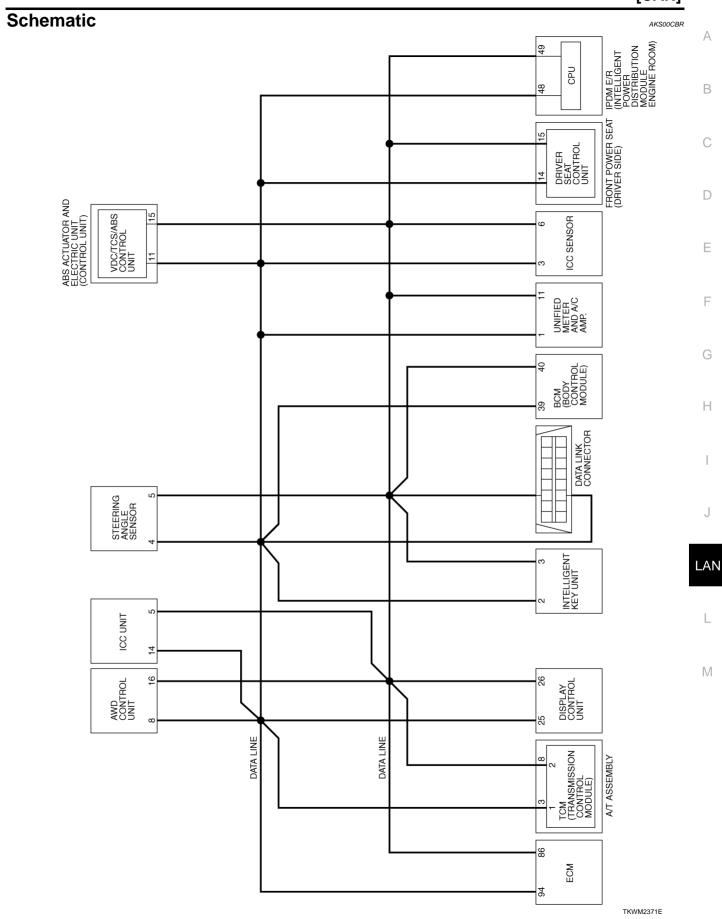
CAN SYSTEM (TYPE 7)

PFP:23710

Component Parts and Harness Connector Location

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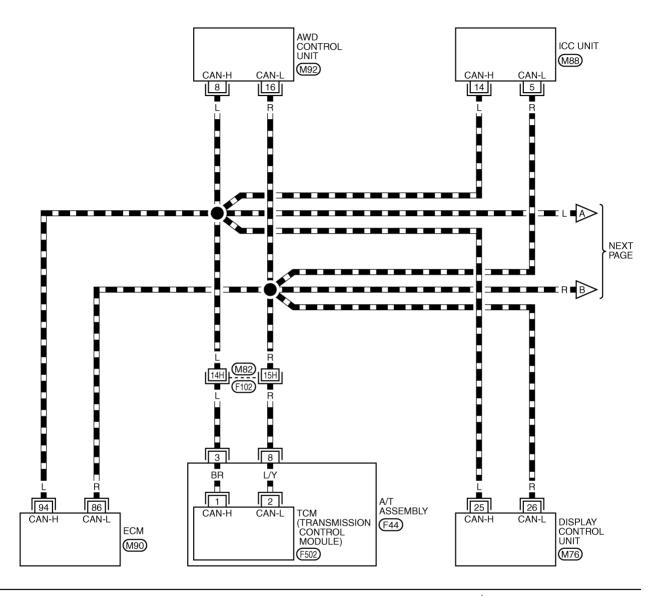


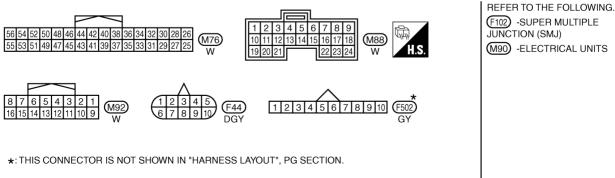
Wiring Diagram - CAN -

AKS00CBS

LAN-CAN-19

: DATA LINE

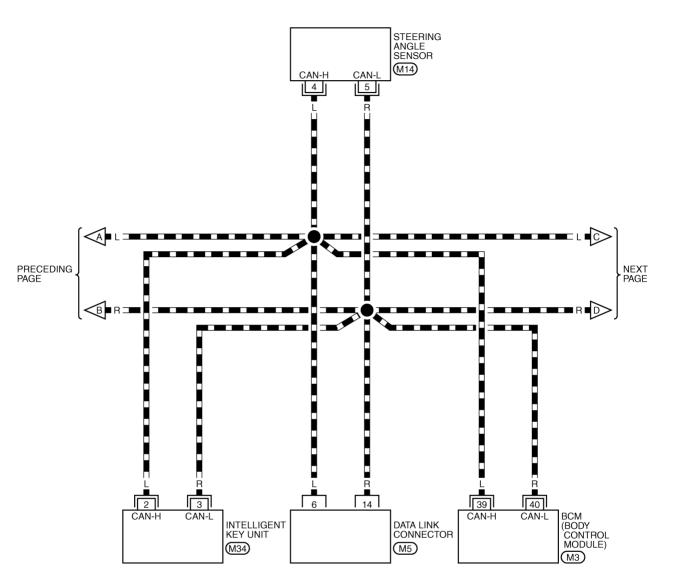


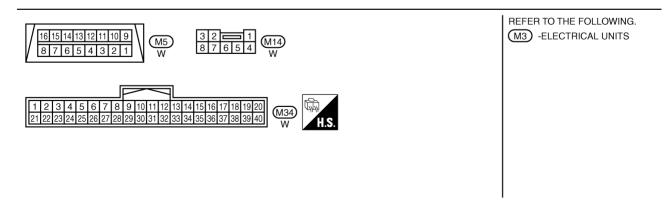


TKWM2372E

LAN-CAN-20

: DATA LINE





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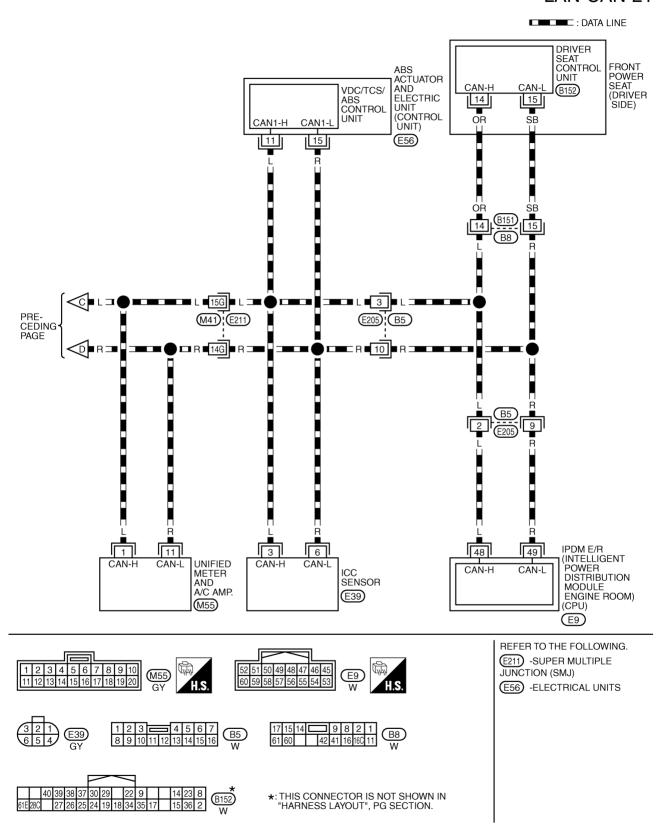
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CAN SYSTEM (TYPE 7)

[CAN]

Check Sheet AKS00CBT

			1				CAN	DIAG SU									
SELECT SYSTEM		Initial	Transmit diagnosis				AWD	ICC	Receive			METER	ICC	VDC/TCS	IPDM	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	ECM —	TCM	DISPLAY —	/4WD	/e4WD UNKWN	I-KEY	BCM /SEC UNKWN	STRG	/M&A UNKWN	SENSOR	/ABS	E/R UNKWN	CAN COMM CIRCUIT	CAN COMM CIRCUIT
A/T	_	NG		UNKWN	_	_		UNKWN	_	_	_	UNKWN	_	UNKWN	_	(U1000) CAN COMM CIRCUIT	(U1001)
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	(U1000) —	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	-	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	-	_	_	_	UNKWN		_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	(U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000) CAN COMM	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CIRCUIT (U1000) CAN COMM	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CIRCUIT (U1000) CAN COMM	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CIRCUIT (U1000)	_
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Display control unit Tr	anslation Sheet: Rewrite the followi	ng names, and put a check mark on t	he check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	_
CAN CIRC 2	BCM/SEC	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	-
CAN CIRC 4	_	CAN CIRC 9	_

Attach copy of display control unit CAN DIAG SUPPORT MONITOR check sheet

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Attach copy of Attach copy of Attach copy of Attach copy of ENGINE ALL MODE AWD/4WD A/T ICC **SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS** Attach copy of Attach copy of Attach copy of Attach copy of INTELLIGENT KEY METER A/C AMP ABS всм SELF-DIAG RESULTS **SELF-DIAG RESULTS SELF-DIAG RESULTS SELF-DIAG RESULTS** Attach copy of Attach copy of AUTO DRIVE POS. IPDM E/R SELF-DIAG RESULTS SELF-DIAG RESULTS

Revision: 2005 July **LAN-311** 2005 FX

Attach copy of	Attach copy of	Attach copy of	Attach copy of
ENGINE	A/T	ALL MODE AWD/4WD	ICC
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT
MNTR	MNTR	MNTR	MNTR
Attach copy of	Attach copy of	Attach copy of	Attach copy of
INTELLIGENT KEY	BCM	METER A/C AMP	ABS
CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT	CAN DIAG SUPPORT
MNTR	MNTR	MNTR	MNTR
Attach copy of AUTO DRIVE POS. CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR		

[CAN]

CHECK SHEET RESULTS (EXAMPLE)

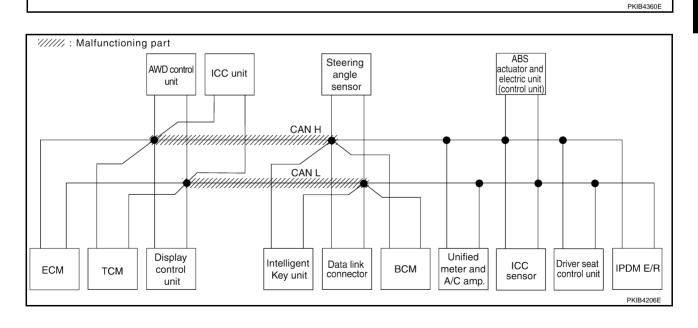
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-333</u>, "Inspection Between TCM and <u>Data Link Connector Circuit</u>".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	1-00-1	T						Receive	diagnosis						SELF-DIAG	BESUITS
022201 01012111	0010011	Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI BINC	TILOULI
ENGINE	ı	NG	UNKWN	1	UNKWN	_	_	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNK N N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	ı	NG	UNKWN	UNKWN	_	_	_	_	-	n ukw w	_	UNKWN	_	_	UNKVN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	-	_	_	_	-	_	_	-	_	_	-	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNK/N	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNK WN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
всм	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNK WN	UNKWN	UNKWN	UNK N N	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	_	NG	UNKWN	UNK WN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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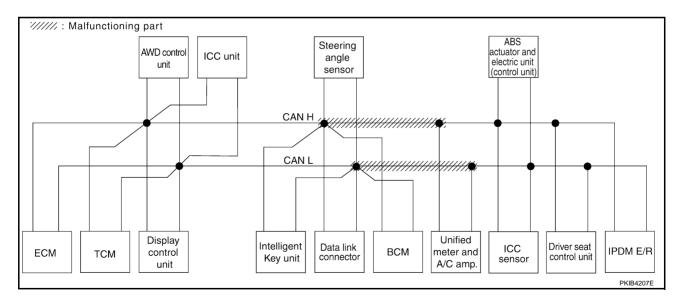
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to LAN-334, "Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit".

							CAN	DIAG SU									
SELECT SYSTEM	screen	Initial	Transmit			I	I		Receive	- 	1				I	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	ı	UNKWN	_	_	UNKWN	ı	UNKWN	_	UNKWN	_	UNKVN	UNKWN	(U1000)	CAN COMI CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	ı	_	UNKWN	UNKWN	ı	_	_	UNKVN	ı	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
Display control unit	1	NG	UNKWN	UNKWN	ı	_	_	_	ı	UNKWN	_	UNKVN	_	_	UNKVN	_	-
ALL MODE AWD/4WD	1	NG	UNKWN	UNKWN	-	_	_	_	_	_	_	_	_	_	_	_	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	ı	_	UNKWN	_	_	UNK W N	UNK WN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	ı	_	_	_	-	UNKWN	_	UNK W N	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	l	_	_	ı	ı	_	_	UNKWN	ı	_	UNK % N	(01000)	ı
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	ı	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
ABS	I	NG	UNKWN	UNK V N	UNKVN	_	UNK N N	-	-	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN				ı	UNKWN	_	UNKWN				CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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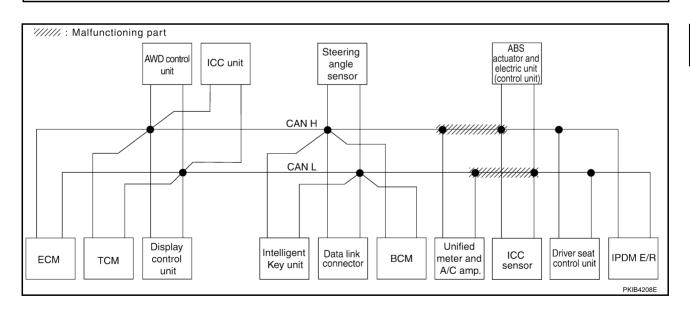
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-334, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	ı	_	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKVN	UNKVN	(U1000)	CAN CON CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	ı	1	UNKWN	UNKWN	ı	ı	_	UNKWN	ı	UNKVN	ı	CAN COMM CIRCUIT (U1000)	ı
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKWN	_	-	UNKVN	_	_
ALL MODE AWD/4WD	1	NG	UNKWN	UNKWN	_	_	_	_	-	1	_	UNKWN	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	ĺ	UNKWN	-	_	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	1	UNKWN	UNKWN	_	_	_	_	ı	UNKWN	_	UNKWN	_	ı	ı	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	_	_	ı	ı	_	UNKWN	-	ı	UNKWN	(01000)	_
METER A/C AMP	No indication	1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNK WN	UNKWN	_	UNK N N	_	_	_	UNK WN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivation		UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



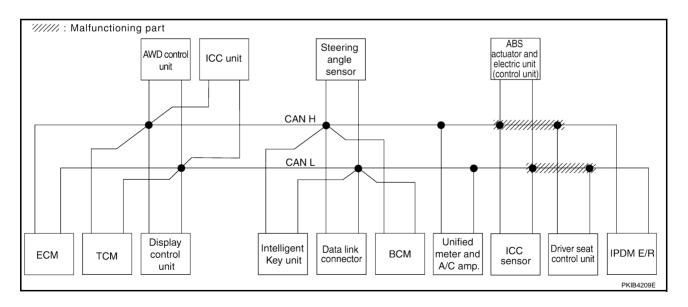
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Case 4

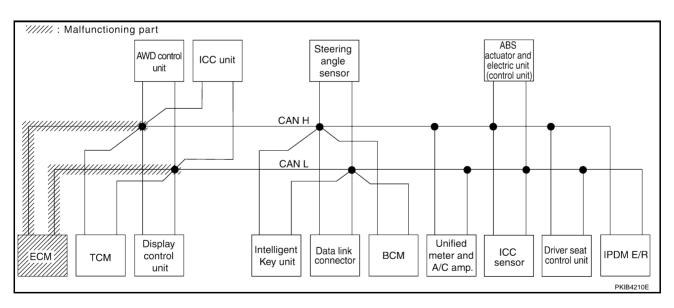
Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-335</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	ı	UNKWN	1	UNKWN	_	UNKWN	UNKWN	(U1000)	CAN COI CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN		_	_	_	ı	ı	ı	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	-	1	ı	UNKWN	1	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	ı	UNKWN	UNKWN	1	_	-	ı	ı	UNKWN	ı	UNKWN	1	ı		CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	ı	_	ı	ı	ı	ı	ı	UNKWN	ı	ı	UNKWN	J (U1000)	ı
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	ı	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	ı	NG	UNKWN	UNKWN	UNKWN	_	UNKWN		ı	ı	UNKWN	ı	-	ı	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN		_	_	ı	UNKWN	1	UNKWN	_		_	CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indivation	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	ı	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 5
Check ECM circuit. Refer to <u>LAN-336</u>, "ECM Circuit Inspection" .

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	ı	-	n uk wu	ı	UNKWN	ı	UNK WN	ı	UNKVN	UNKVN	(U1 7 000)	CAN COMM CIRCUIT (U1001)
A/T	ı	NG	UNKWN	UNKWN	ı	-	UNKWN	UNKWN	ı	ı	ı	UNKWN	ı	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNK W N	-	-	_	_	-	UNKWN	_	UNKWN	ı	-	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	NKWN	_	_	_	_	_	_	_	UNKWN	1	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNK WN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	-	_	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNK WN	_	_	_	_	_	_	_	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNK V N	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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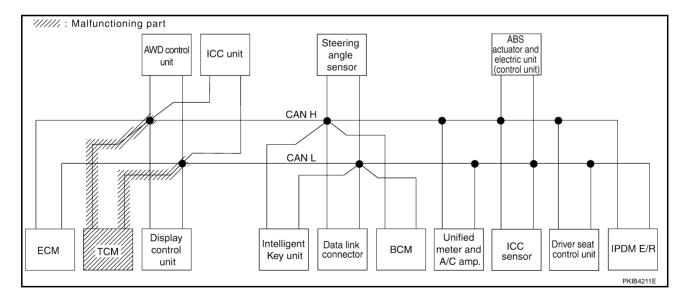
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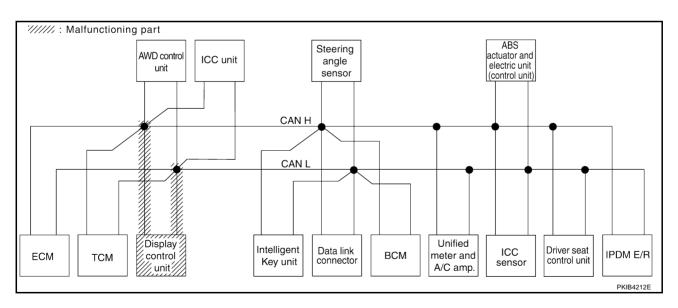
Case 6
Check TCM circuit. Refer to <u>LAN-336</u>, "TCM Circuit Inspection" .

							CAN	DIAG SU									
SELECT SYSTEM	screen	Initial	Transmit						Receive							SELF-DIAG	RESULT
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	1	UNKWN	_	_	UNKWN	ı	UNKWN	_	UNKWN	ı	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COL CIRCUI (U1001
A/T	ı	NG	UNKWN	UNKWN	ı	_	UNKWN	UNK NN	-	_	_	UNK W N	ı	UNKVN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	-	-	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNK WN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	ı	UNKWN	UNKWN	ı	_	_	_	-	UNKWN	_	UNKWN	ı	1	ı	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	I	_	_	ı	ı		_	UNKWN	I	ı	UNKWN	(U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNK W N	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	ı	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	ı	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	ı	_	UNKWN	_	1	ı	ı	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKVN	_		_	ı	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_			UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 7
Check display control unit circuit. Refer to <u>LAN-337</u>, "<u>Display Control Unit Circuit Inspection</u>".

							CAN	DIAG SU									
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	1	UNKWN	_	_	UNKWN	-	UNKWN	-	UNKWN	ı	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001)
A/T	ı	NG	UNKWN	UNKWN	1	_	UNKWN	UNKWN	-	1	_	UNKWN	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	∩ NK WN	n uk (u	-	_	_	_	_	UNK V N	_	UNK W N	_	_	UNK W N	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	-	_	_	_	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNK W N	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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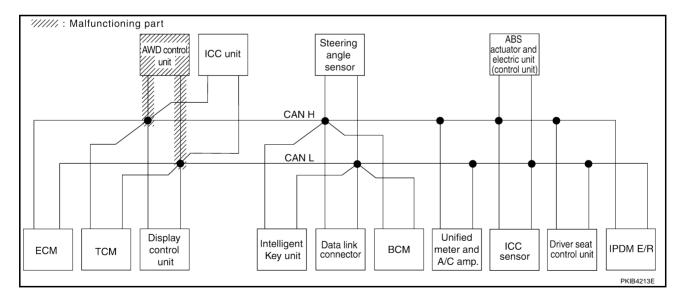
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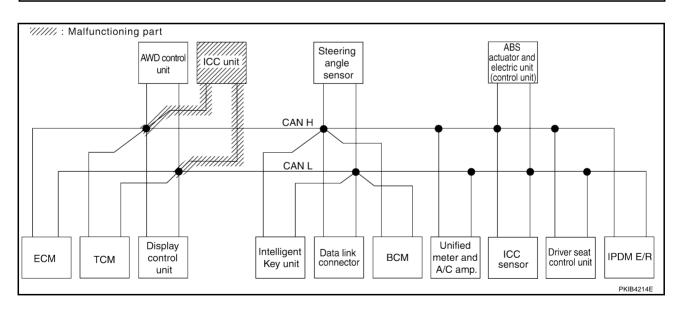
Case 8
Check AWD control unit circuit. Refer to LAN-337, "AWD Control Unit Circuit Inspection".

							CAN	DIAG SU									
SELECT SYSTEM		Initial	Transmit diagnosis	5011	TO14	21021 11	AWD	ICC	Receive	diagnosis BCM	0.770.0	METER	ICC	VDC/TCS	IPDM	SELF-DIAG	RESULTS
		ulayilosis	ulayilosis	ECM	TCM	DISPLAY	/4WD	/e4WD	I-KEY	/SEC	STRG		SENSOR		E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1	_	UNK % N	UNKWN	-	_	-	UNKWN	ı	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	-	-	_	_	_	UNKWN	_	UNKWN	-	-	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	-	-	_	_	_	_	_	_	-	-	_	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	ı	_	_	_	ı	UNKWN	1	UNKWN	ı	ı	-	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	-	_	_	_	_	_	_	UNKWN	1	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	ı	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	_	_	UNKWN	_	UNKWN	1	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	1	_	_	_	_	UNKWN		_	_	_		CAN COMM CIRCUIT (U1000)	_



Case 9
Check ICC unit circuit. Refer to <u>LAN-338</u>, "ICC Unit Circuit Inspection".

							CAN	DIAG SU									
SELECT SYSTEM	screen	Initial	Transmit						Receive							SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	_	_	UNK V N	-	UNKWN	_	UNKWN	ı	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKVN	_	_	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	1	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	1	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNKWN	UNKVN	-	_	_	ı	UNKWN	-	ı	UNKWN	UNI WN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	ı	UNKWN	UNKWN	ı	-	_	_	ı	UNKWN	ı	UNKWN	1	_		CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	ı	ı	ı	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	ı	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	_	ı	ı	UNKWN	ı	1	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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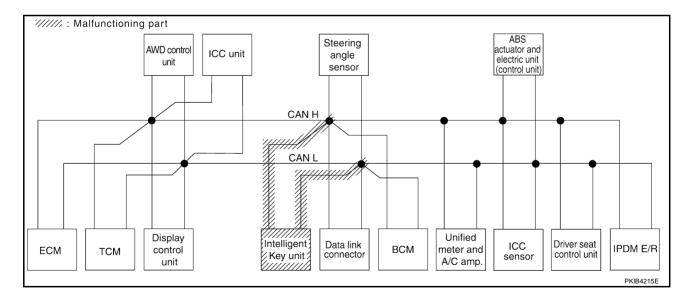
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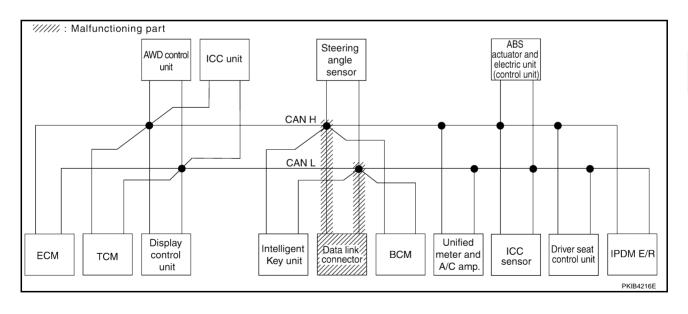
Case 10
Check Intelligent Key unit circuit. Refer to LAN-338, "Intelligent Key Unit Circuit Inspection".

SELECT SYSTEM screen			CAN DIAG SUPPORT MNTR Receive diagnosis														
			Transmit is diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER		VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULT	
ENGINE	_	NG	UNKWN	_	UNKWN	_	/4WD	UNKWN	_	UNKWN	_	/M&A UNKWN	SENSOR —	UNKWN		CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	ı	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	ı	_	ı	UNKWN	-	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	Ng ind ation	1	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



Case 11
Check data link connector circuit. Refer to <u>LAN-339</u>, "<u>Data Link Connector Circuit Inspection</u>" .

CAN DIAG SUPPORT MNTR																	
SELECT SYSTEM screen				Receive diagnosis												SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNKWN	UNKWN	-	-	_	ı	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No ind ation	ı	UNKWN	UNKWN	1	-	ı	-	ı	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
всм	Ng ind ation	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	Ng ind ation	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	ı	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indivation	NG	UNKWN	ı	UNKWN			_	ı	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	N inditation	-	UNKWN	UNKWN	-	_		_	ı	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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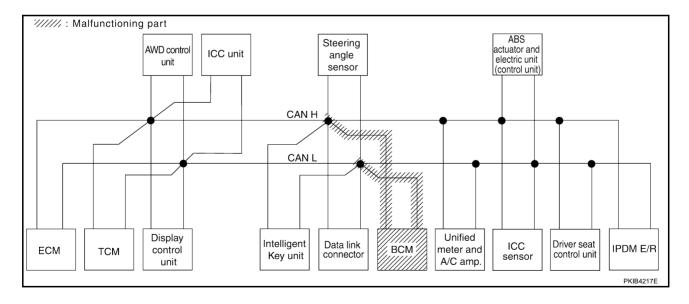
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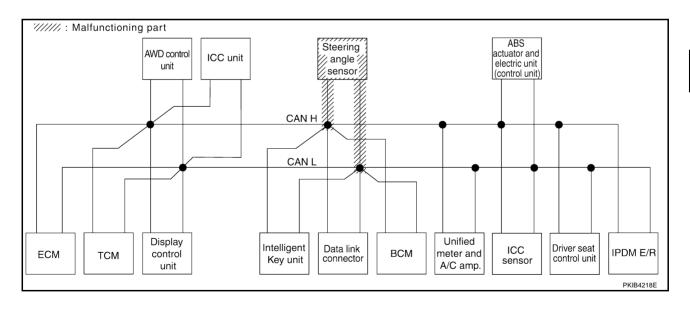
Case 12
Check BCM circuit. Refer to <u>LAN-339</u>, "BCM Circuit Inspection".

SELECT SYSTEM screen			CAN DIAG SUPPORT MNTR Receive diagnosis															
		Initial diagnosis	I Transmit	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESUL		
ENGINE	_	NG	UNKWN	_	UNKWN	_	- /4 VV D	UNKWN		UNKVN	_	UNKWN		UNKWN		CAN COMM CIRCUIT (U1000)	CAN COL CIRCUI (U1001	
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_	
Display control unit	_	NG	UNKWN	UNKWN	-	_	_	_	-	UNKWN	_	UNKWN	-	-	UNKWN	_	-	
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	_	_	_	_	_	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_	
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_	
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKVN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_	
ВСМ	N/ ind ation	NG	UNKWN	UNKWN	ı	_	_	_	ı	_	ı	UNKWN	ı	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_	
METER A/C AMP	No indication	1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_	
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	-	_	UNKWN	-	_	_	1	CAN COMM CIRCUIT (U1000)	_	
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN			_	ı	UNKWN	1	UNKWN	_	ı	_	CAN COMM CIRCUIT (U1000)	_	
IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	_	_	_	UNK WN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	_	



Case 13
Check steering angle sensor circuit. Refer to <u>LAN-340</u>, "Steering Angle Sensor Circuit Inspection".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	I	NG	UNKWN	UNKWN	-	_	_	_	_	_	-	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	ı	_		_	_	UNKWN	ı	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	-	_	_	_	-	UNKWN	_	_	UNKWN	(U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_			_	UNKWN	1	UNKWN			_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
																	PKIB4372E



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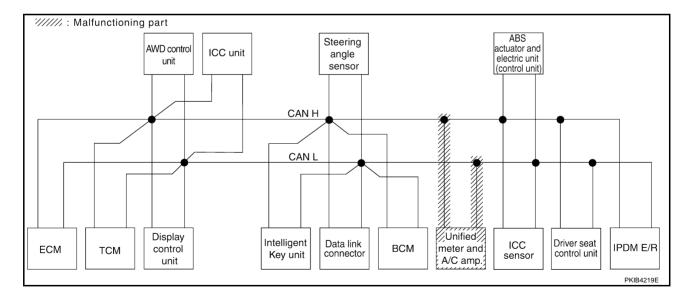
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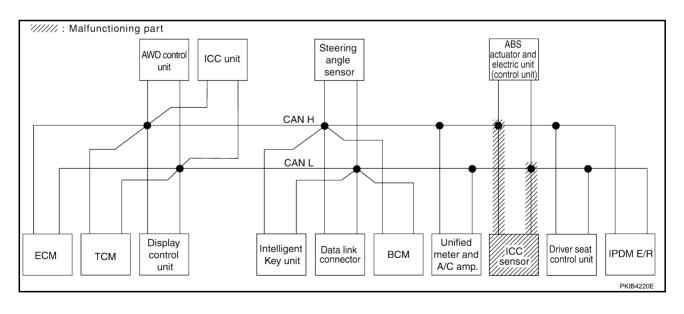
Case 14
Check unified meter and A/C amp. circuit. Refer to LAN-340, "Unified Meter and A/C Amp. Circuit Inspection".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	1-00-1	T						Receive	diagnosis						SELE-DIAC	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	022. 5	211200210
ENGINE	_	NG	UNKWN	-	UNKWN	_	_	UNKWN	-	UNKWN	_	UNK N N	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNK % N	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNK N N	_	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	_	_	_	-	_	_	UNK W N	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNK N N	_	_	_	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	n uk %u	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNK % N	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 15
Check ICC sensor circuit. Refer to <u>LAN-341</u>, "ICC Sensor Circuit Inspection".

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNKWN	_	_	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	_	_	_	-	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	-	_	_	_	-	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	-	_	UNKWN	-	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	_	ı	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
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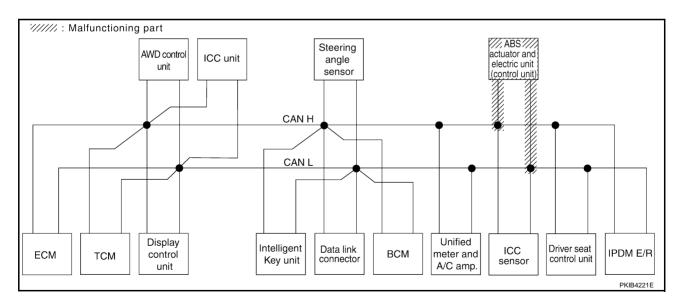
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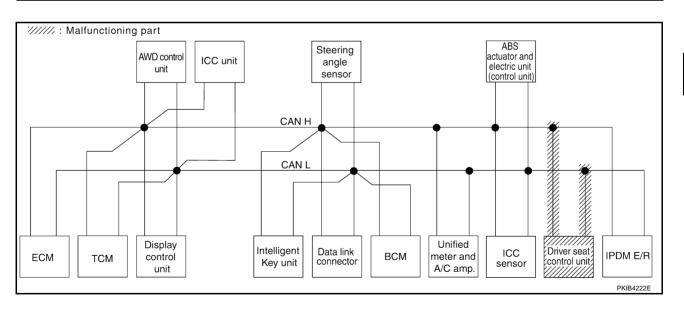
Case 16
Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-341</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

							CAN	DIAG SU									
SELECT SYSTEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	Receive of	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	-	UNKWN	_		UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	ı	1	UNKWN	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	-	-	_	_	_	UNKWN	1	UNKWN	-	-	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	1	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	1	_	UNKWN	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	-	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	W	UNK V N	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKVN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	ı	UNKWN	_	_	_	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 17
Check driver seat control unit circuit. Refer to LAN-342, "Driver Seat Control Unit Circuit Inspection".

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							CAN	DIAG SU	Receive								
SELECT SYSTEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	RESULTS
ENGINE	_	NG	UNKWN	ı	UNKWN	_	_	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	-	_	_	_	-	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-			_	ı	UNKWN	-	_			_	CAN COMM CIRCUIT (U1000)	_
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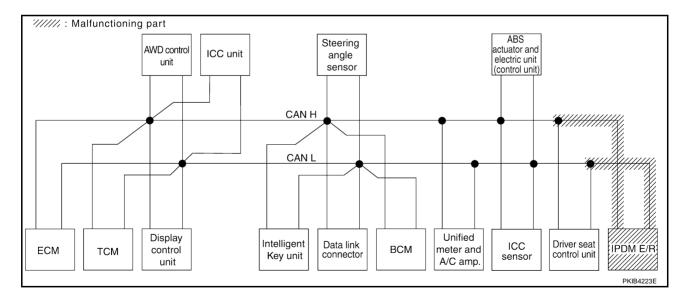
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Case 18
Check IPDM E/R circuit. Refer to LAN-343, "IPDM E/R Circuit Inspection".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAC	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNKWN	ı	-	UNKWN	ı	UNKWN	ı	UNKWN	_	UNKWN	UNKWN	(U1000)	CAN COMN CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	-	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	-	_	_	_	-	UNKWN	1	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_	_	-	_	1	UNKWN	_	_	n uk %u	(01000)	_
METER A/C AMP	No indication	1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	1	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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Case 19
Check CAN communication circuit. Refer to <u>LAN-344</u>, "CAN Communication Circuit Inspection".

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
0			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	nukwu	_	UNK W N	_	_	UNK % N	_	UNKWN	ı	UNKVN	1	UNK % N	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	1	NG	UNKWN	n uk wu	_	_	UNK V N	UNK N N	_	_	1	UNKVN	1	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNWN	_	_	_	_	_	UNKWN	-	UNKVN	1	_	UNKWN	_	_
ALL MODE AWD/4WD	1	NG	UNKWN	_	_	_	_	_	_	_	1	1	1	_	-	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNWN	UNKWN	_	_	_	_	UNKWN	1	1	UNIONN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indivition	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	-	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indivition	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	V	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKVN	-	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_			ı	UNKWN	1	UNKWN	ı			CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indivition	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 20

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to LAN-350, "IPDM E/R Ignition Relay Circuit Inspection" .

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis				1		SELF-DIAG	RESULTS
		diagnosis		ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNK W N	_	_	UNKWN	ı	UNKWN	1	UNKWN	_	υ νκγ ν	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMP CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	-	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNK V N	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Case 21

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-350, "IPDM E/R Ignition Relay Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Tuo no nonit						Receive of	diagnosis						SELF-DIAG	RESULTS
	0010011	diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	022. 2	
ENGINE	ı	NG	UNKWN	ı	UNKWN	ı	_	UNKWN	ı	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	ı	NG	UNKWN	1	1	ı	_	-	1	-	_	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	1	NG	UNKWN	UNKWN	1	-	_	_	1	_	_	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	ı	-		1	UNKWN	-	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
INTELLIGENT KEY	No indication	ı	UNKWN	UNKWN	ı	ı	-	ı	ı	UNKWN	_	UNKWN	1	1	-	CAN COMM CIRCUIT (U1000)	-
ВСМ	No indication	NG	UNKWN	UNKWN	ı	l	ı	ı	ı	ı	_	UNKWN	-	1	UNKWN	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	1	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	1	UNKWN	-	_	-	1	ı	-	-	1	1	-	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	_	-	-	UNKWN	_	UNKWN	1	-	-	CAN COMM CIRCUIT (U1000)	-
PDM E/R	No indication	-	UNKWN	UNKWN	1	-	_	_	-	UNKWN	_	_	1	1	-	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

AKS00CBU

1. CHECK HARNESS FOR OPEN CIRCUIT

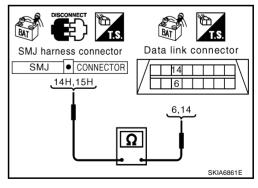
- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

AKS00CBV

1. CHECK HARNESS FOR OPEN CIRCUIT

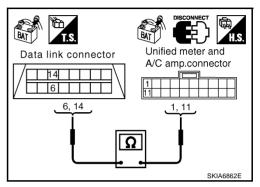
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

6 (L) - 1 (L) : Continuity should exist. 14 (R) - 11 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit** AKS00CBW

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

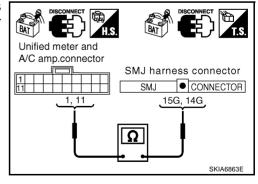
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41. 1.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

1 (L) - 15G (L) : Continuity should exist. 11 (R) - 14G (R) : Continuity should exist.

OK or NG

OK >> GO TO 3. NG >> Repair harness.



3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

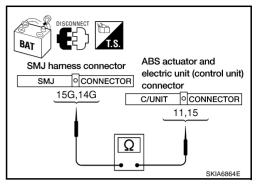
15G (L) - 11 (L) 14G (R) - 15 (R) : Continuity should exist.

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L)

: Continuity should exist.

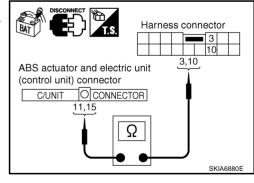
15 (R) - 10 (R)

: Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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3. CHECK HARNESS FOR OPEN CIRCUIT

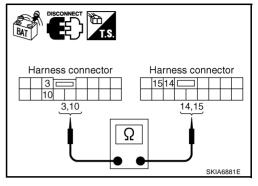
- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L), 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L) : Continuity should exist. 10 (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CBY

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

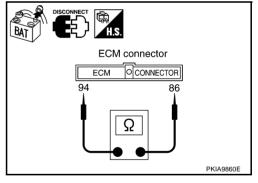
- 1. Disconnect ECM connector.
- Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. $108 - 132\Omega$

OK or NG

OK >> Replace ECM.
NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



AKS00CBZ

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

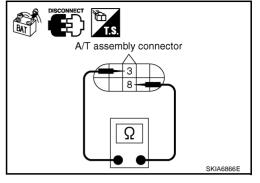
- Disconnect A/T assembly connector.
- 2. Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - **8 (R)** : Approx. **54** - **66**
$$\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG >> Repair harness between A/T assembly and display control unit.



AKS00CC0

Display Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

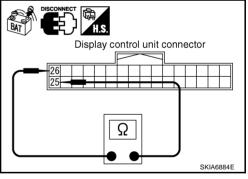
- 1. Disconnect display control unit connector.
- Check resistance between display control unit harness connector M76 terminals 25 (L) and 26 (R).

25 (L) - 26 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Replace display control unit.

NG >> Repair harness between display control unit and harness connector M82.



AKS00CC1

AWD Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of AWD control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect AWD control unit connector. 1.
- Check resistance between AWD control unit harness connector M92 terminals 8 (L) and 16 (R).

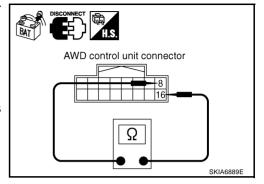
8 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

ΟK >> Replace AWD control unit.

NG

>> Repair harness between AWD control unit and harness connector M82.



AKS00CC2

ICC Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ICC unit connector.
- Check resistance between ICC unit harness connector M88 terminals 14 (L) and 5 (R).

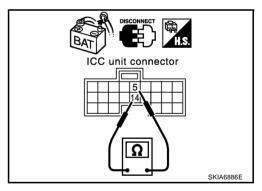
14 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ICC unit.

NG

>> Repair harness between ICC unit and harness connector M82.



AKS00CC3

Intelligent Key Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of Intelligent Key unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

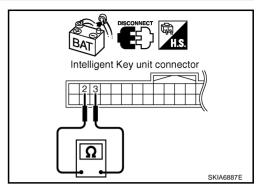
- 1. Disconnect Intelligent Key unit connector.
- Check resistance between Intelligent Key unit harness connector M34 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair harness between Intelligent Key unit and data link connector.



Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

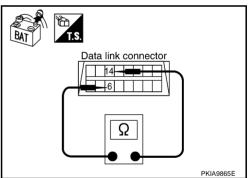
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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AKS00CC5

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

: Approx. 54 - 66 Ω

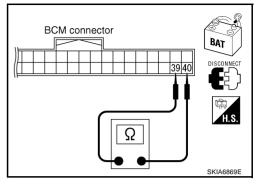
OK or NG

OK

>> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG

>> Repair harness between BCM and data link connector.



AKS00CC6

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

: Approx. 54 - 66 Ω

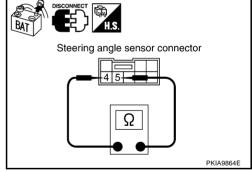
OK or NG

OK

>> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CC8

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

AKS00CC9

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

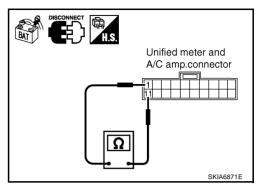
- Disconnect unified meter and A/C amp. connector.
- Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

1 (L) - **11 (R)** : Approx. **54** - **66**
$$\Omega$$

OK or NG

OK >> Replace unified meter and A/C amp.

NG >> Repair harness between unified meter and A/C amp. and harness connector M41.



ICC Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

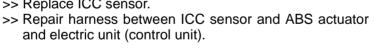
- 1. Disconnect ICC sensor connector.
- Check resistance between ICC sensor harness connector E39 terminals 3 (L) and 6 (R).

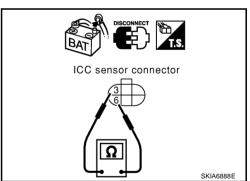
3 (L) - 6 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

>> Replace ICC sensor. OK

NG





ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

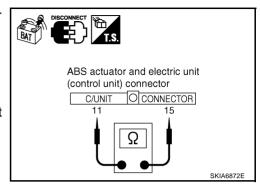
11 (L) - 15 (R) : Approx. 54 - 66Ω

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG :

>> Repair harness between ABS actuator and electric unit (control unit) and ICC sensor.



AKS00CCB

Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

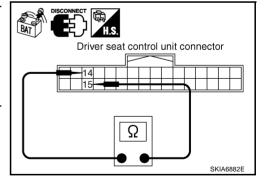
- 1. Disconnect driver seat control unit connector.
- Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

14 (OR) - 15 (SB) : Approx. 54 - 66Ω

OK or NG

OK >> Replace driver seat control unit.

NG >> Repair harness between driver seat control unit and harness connector B5.



CAN SYSTEM (TYPE 7)

[CAN]

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

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- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal. 2.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

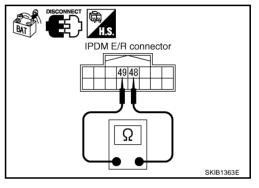
: Approx. 108 - 132 Ω

OK or NG

OK >> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and harness connector B8.



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CAN SYSTEM (TYPE 7)

[CAN]

CAN Communication Circuit Inspection

1. CHECK CONNECTOR

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- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display control unit
- AWD control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

Α

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2. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display control unit connector
- AWD control unit connector
- ICC unit connector
- Intelligent Key unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

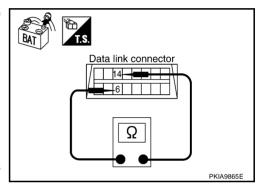
6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



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3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

4. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect A/T assembly connector.
- 2. Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

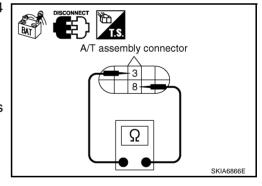
3 (L) - 8 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 5.

NG >> Repair h

>> Repair harness between A/T assembly and harness connector F102.



Data link connector

⊫-14 | | |

5. CHECK HARNESS FOR SHORT CIRCUIT

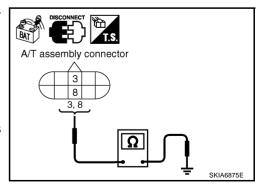
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ICC sensor connector
- ABS actuator and electric unit (control unit) connector
- Harness connector E205
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

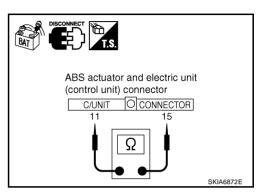
: Continuity should not exist. 11 (L) - 15 (R)

OK or NG

OK >> GO TO 7.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

> 11 (L) - Ground : Continuity should not exist. 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

8. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

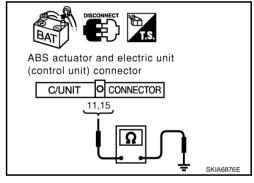
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



Harness connector Ω SKIA6877E Α

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9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5

10. CHECK HARNESS FOR SHORT CIRCUIT

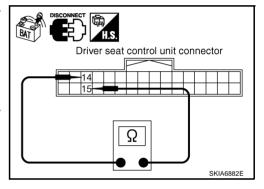
- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

OK or NG

OK >> GO TO 11.

NG

>> Repair harness between driver seat control unit and harness connector B151.



Harness connector

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11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

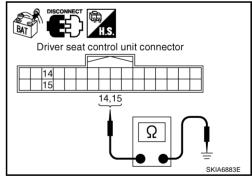
> 14 (OR) - Ground : Continuity should not exist. 15 (SB) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG

>> Repair harness between driver seat control unit and harness connector B151.



12. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect IPDM E/R connector. 1.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

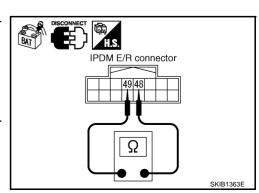
: Continuity should not exist. 48 (L) - 49 (R)

OK or NG

OK >> GO TO 13.

NG

>> Repair harness between IPDM E/R and harness connector E205.



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13. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

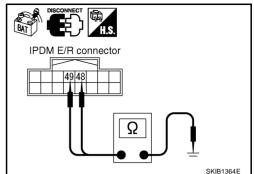
48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 14.

>> Repair harness between IPDM E/R and harness connector E205.



14. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

1. Remove ECM and IPDM E/R from vehicle.

2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

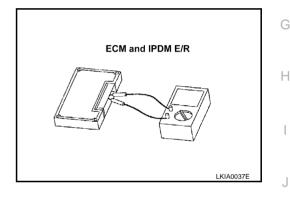
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 15.

NG >> Replace ECM and/or IPDM E/R.



15. CHECK SYMPTOM

1. Fill in described symptoms on the column "Symptom" in the check sheet.

2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 16.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

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16. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display control unit
- AWD control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

IPDM E/R Ignition Relay Circuit Inspection

AKS00CCE

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12</u>, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START"".

CAN SYSTEM (TYPE 8)

Behind lower instrument panel

on passenger side

PFP:23710

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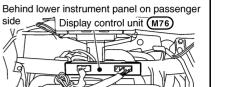
D

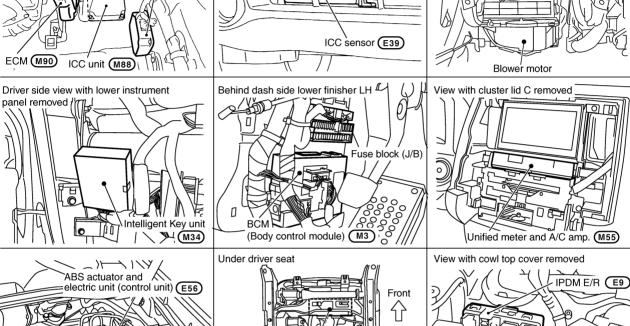
Component Parts and Harness Connector Location

(M92)

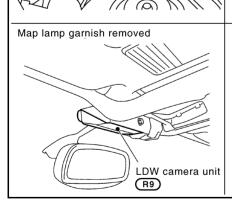
AWD control unit

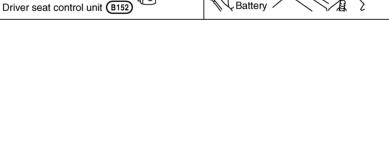
Bumper RH





PKIB5972E

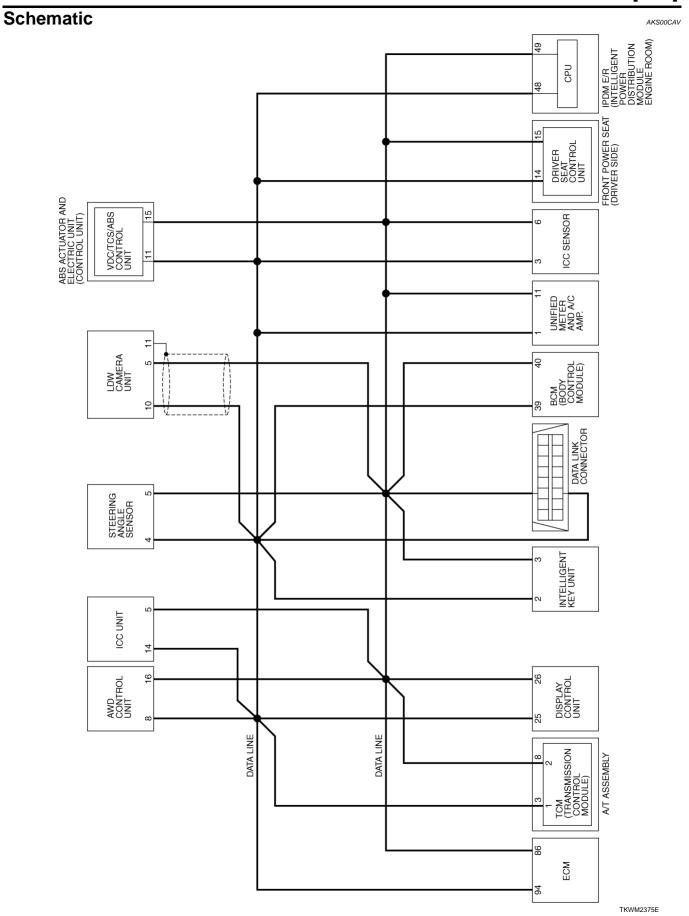




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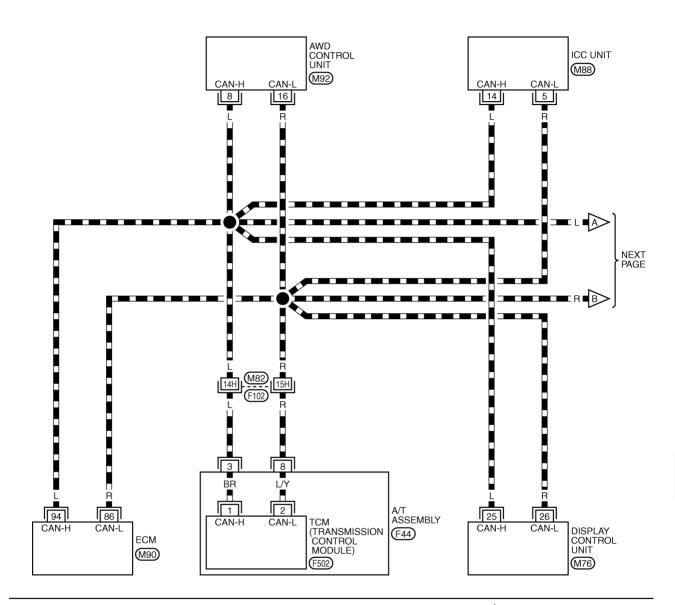
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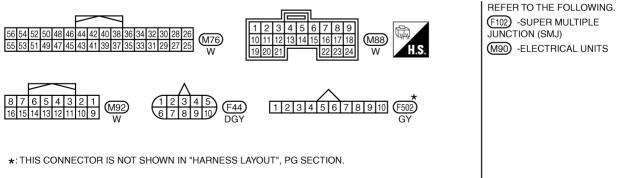
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LAN-CAN-22

: DATA LINE

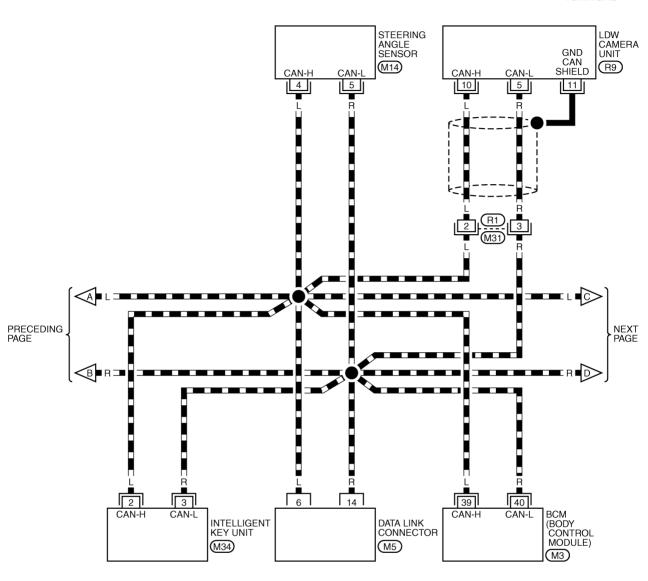


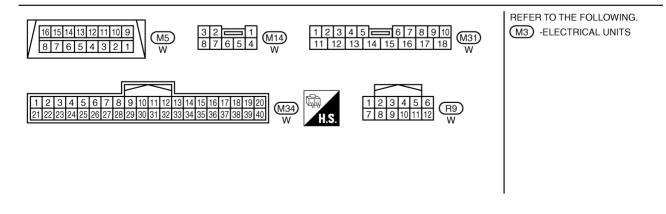


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: DATA LINE





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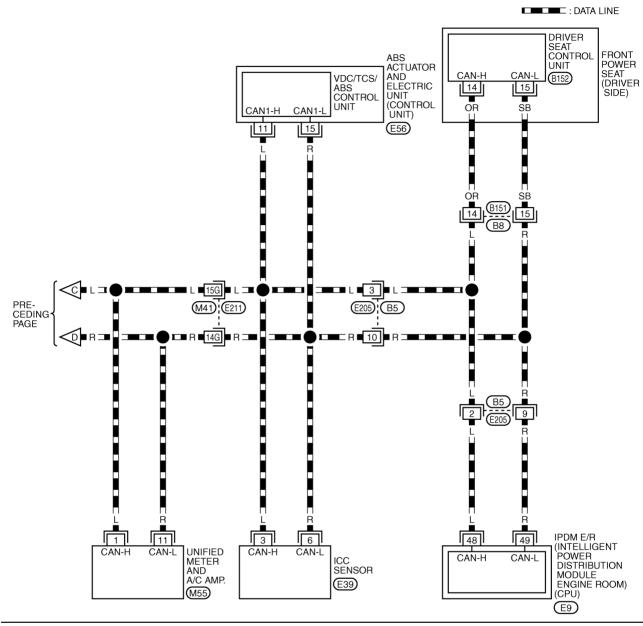
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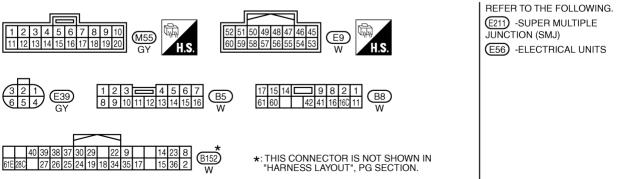
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LAN-CAN-24





TKWM2378E

Check Sheet AKS00CAX

NOTE:

Check sheet ta	ble																
			1	1			CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	1	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	-	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	_	_	ı	_	-	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	1	_	UNKWN	UNKWN	1	_	_	ı	UNKWN	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	
METER A/C AMP	No indication	1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
ABS	ı	NG	UNKWN	UNKWN	UNKWN	ı	UNKWN	-			UNKWN	-	-			CAN COMM CIRCUIT (U1000)	1
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	ı	_	-	-	UNKWN	-	UNKWN	-	1	1	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	ı	_	_	_	UNKWN	-	_	-	-	-	CAN COMM CIRCUIT (U1000)	-
Symptoms :																	
					ach cor :CT SY					A SE	uttach c LECT S	opy of SYSTEM	<i>1</i>				

PKIB4171E

CAN SYSTEM (TYPE 8)

[CAN]

Display control unit Tra	anslation Sheet: Rewrite the follow	ing names, and put a check mark on t	he check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	_
CAN CIRC 2	BCM/SEC	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	_
CAN CIRC 4	_	CAN CIRC 9	_

Attach copy of display control unit CAN DIAG SUPPORT MONITOR check sheet

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Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of A/T SELF-DIAG RESULTS	Attach copy of ALL MODE AWD/4WD SELF-DIAG RESULTS	Attach copy of ICC SELF-DIAG RESULTS
Attach copy of INTELLIGENT KEY SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS	Attach copy of LDW SELF-DIAG RESULTS	Attach copy of METER A/C AMP SELF-DIAG RESULTS
Attach copy of ABS SELF-DIAG RESULTS	Attach copy of AUTO DRIVE POS. SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS	
			PKIB4172E

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Attach copy of ENGINE CAN DIAG SUPPORT MNTR Attach copy of A/T CAN DIAG SUPPORT MNTR Attach copy of ALL MODE AWD/4WD CAN DIAG SUPPORT MNTR Attach copy of ICC
CAN DIAG SUPPORT
MNTR

Attach copy of INTELLIGENT KEY CAN DIAG SUPPORT MNTR Attach copy of BCM CAN DIAG SUPPORT MNTR Attach copy of LDW CAN DIAG SUPPORT MNTR Attach copy of METER A/C AMP CAN DIAG SUPPORT MNTR

Attach copy of ABS CAN DIAG SUPPORT MNTR Attach copy of AUTO DRIVE POS. CAN DIAG SUPPORT MNTR Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR

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CHECK SHEET RESULTS (EXAMPLE)

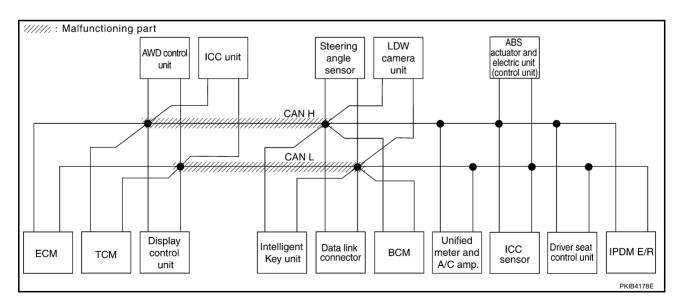
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-381, "Inspection Between TCM and Data Link Connector Circuit"</u>.

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM screen		Initial diagnosis	Transmit sdiagnosis	Receive diagnosis												SELF-DIAG RESULT	
				ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNIWN	_	UNIWN	_	UNION	UNIONN	(U1000)	CAN COL CIPYUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNYWN	_	UNION	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	-	_	_	_	_	UNIWN	_	UN WN	_	_	UNIMN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	_	_	-	-		1	_	_	-	_	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNWN	-	_	UNIWN	UNIWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNWN	_	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIP (UIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNWN	UNIWN	_	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNIWN	UNIWN	UNION	UNIWN	UNION	UNKWN	UNKWN	_	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNWN	UNIONN	_	UNI	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNIONN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNWN	-	_	_	_	-	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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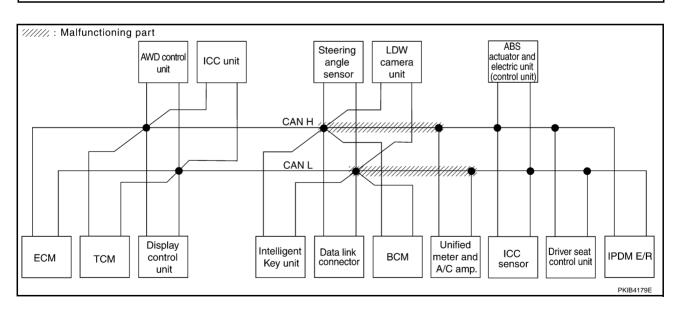
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Case 2

Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-382</u>, "Inspection <u>Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKWN	_	UNWN	-	UNAWN	UNWN	(U1000)	CAN CON CIRCUIT (U1001)
A/T	ı	NG	UNKWN	UNKWN	ı	_	UNKWN	UNKWN	_	-	_	UNWN	_	UNWN	1	CAN COMM CIF Y UIT (U1000)	
Display control unit	1	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNWN	-	-	UNWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	_	-	_	-	_	_
ICC	1	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	-	UNWN	UNIWN	-	CAN COMM CINCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNWN	_	_	1	CAN COMM CIPY UIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	ı	_	_	_	_		-	UNWN	_	1	UNIWN	(U1000)	ı
LDW	No indication	ı	ı	UNKWN	UNKWN	_	_	_	_	UNKWN	_	-	_	UNWN	ı	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	N indication	1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	1	UNKWN	1	CAN COMM CIROUIT (U1000)	_
ABS	1	NG	UNKWN	UNWN	UNIONN	_	UNI WN	_	_	_	UNIMN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	N indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	ı	ı	CAN COMM CIROUIT (U1000)	-
IPDM E/R	N/ indication	1	UNKWN	UNKWN	_		_		_	UNKWN	_	_	_	_	_	CAN COMM CIRQUIT (U1000)	_



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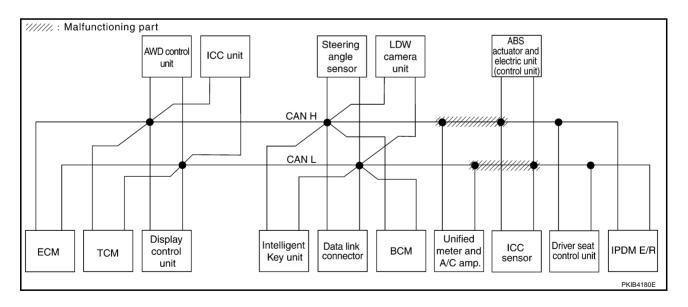
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-382, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAC	RESULTS
			diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	-	UNKWN	-	UNKWN	_	UNIWN	UNKWN	(U1000)	CIFCUIT (U1001)
A/T		NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_		UNKWN	_	UNWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNIWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	ı	_	_	_	ı	ı	ı	UNKWN	-	UNWN	-	CAN COMM CIRCUIT (U1000)	-
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	_	-	UNKWN	_	_	UNWN	UNIWN	_	CAN COMM CINCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	-	_	_	_	-	UNKWN	1	UNKWN	_	1	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	ı	_	_	_	-	-	ı	UNKWN	_	1	UNIWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	-	UNKWN	1	_	_	UNIWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNIWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNWN	UNIWN	_	UNION	_	_	_	UNIONN	_	_	_	_	CÂN COMM CIRQUIT (U1000)	_
AUTO DRIVE POS.	N indication	NG	UNKWN	1	UNKWN	_	_	_	-	UNKWN	1	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	N indication	_	UNKWN	UNKWN	_	_	_	_	-	UNKWN	-	_		_	_	CAN COMM CIRCUIT (U1000)	_



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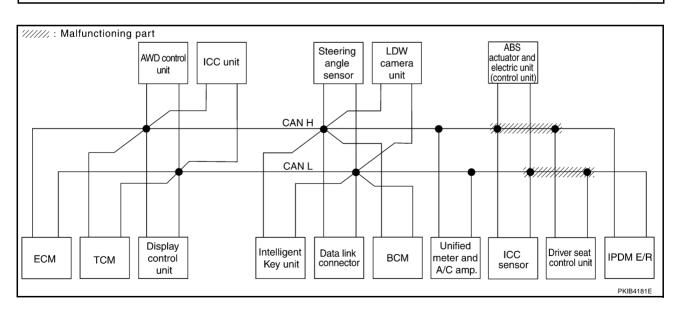
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Case 4

Check harness between ABS actuator and electric unit (control unit) and driver seat control unit. Refer to <u>LAN-383</u>, "Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen								Receive of	diagnosis						SELF-DIAG	RESULTS
OLLEGI GIGILIM		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	ı	UNKWN	UNWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	ı	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKWN	_	_	UNWWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	-	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_		_	UNKWN	_	_	UNIWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	-	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	N/ indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	N/ indication		UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	-	_	_	CAN COMM CIRCUIT (U1000)	_

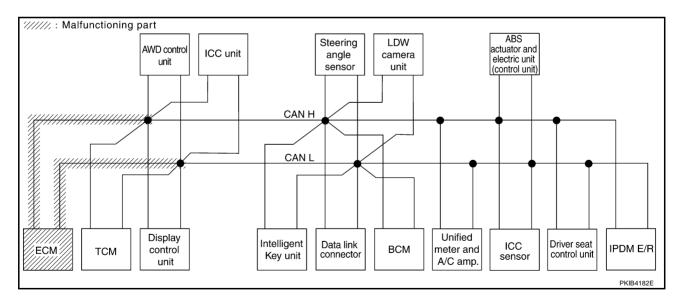


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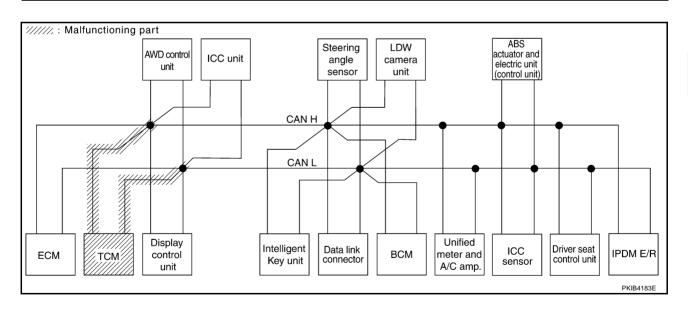
Case 5
Check ECM circuit. Refer to <u>LAN-384, "ECM Circuit Inspection"</u>.

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen								Receive	diagnosis						SELF-DIAG	RESULTS
022201 01012		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DINE	
ENGINE	1	NG	UNWN	_	UNIWN	_	_	UNIONN	_	UNIWN	_	UNWN	-	UNIWN	UNIWN	(U1000)	CAN CON CIPQUI (U1001
A/T	1	NG	UNKWN	UNWN		_	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNWWN	_	_	_	_	-	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	ı	NG	UNKWN	UNWN	UNKWN	_	_	_	_	UNKWN	_	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIPYOUT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	(U1000)	_
LDW	No indication	_	_	UNWN	UNKWN	_	_	_	_	UNKWN	_	ı	1	UNKWN	-	CAN COMM CIP (UIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNIWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	_	UNKWN	-	CAN COMM CIRQUIT (U1000)	_
ABS	1	NG	UNKWN	UNWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	_	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNWN	-	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 6
Check TCM circuit. Refer to <u>LAN-384, "TCM Circuit Inspection"</u>.

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive of	diagnosis						SELF-DIAG	BESULTS
			diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNWN	_	_	UNKWN	_	UNKWN	ı	UNKWN	_	UNKWN	UNKWN	CAN COMM CIPYUIT (U1000)	(U1001)
A/T	ı	NG	UNKWN	UNWN	1	_	UNKWN	UNION	_	ı	1	UNWN	-	UNWN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKWN	-	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	ı	ı	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNIWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIPYOUT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	-	-	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	ı	_	UNKWN	UNIWN	_	_	_	_	UNKWN	1	-	_	UNKWN	1	CAN COMM CIP (UIT (U1000)	_
METER A/C AMP	No indication	I	UNKWN	UNKWN	UNION	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	1	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNIWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNIONN	_	_	_	_	UNKWN	1	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	_	_	_	-	CAN COMM CIRCUIT (U1000)	-



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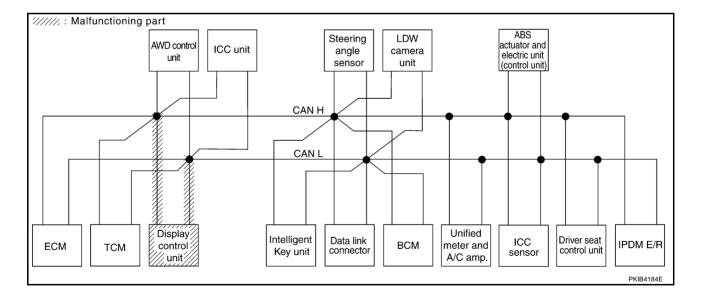
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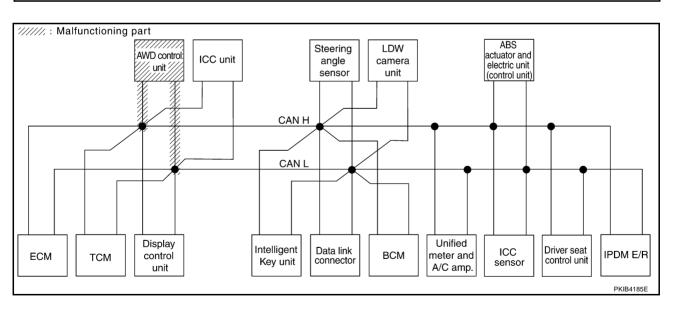
Case 7
Check display control unit circuit. Refer to <u>LAN-385</u>, "<u>Display Control Unit Circuit Inspection</u>" .

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	coroon								Receive	diagnosis						SELF-DIAG	DECLIT
SELECT STSTEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	I NESULI
ENGINE	_	NG	UNKWN		UNKWN	_	_	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COI CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	UNKWN	_	-	ı	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	1
Display control unit	_	NG	UNWN	UNWN	_	_	_	_	_	UNIWN	1	UNWN	-	-	UNWN	_	-
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	1	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	-	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	-	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
всм	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	1	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	_	UNKWN	-	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UMWN	UNKWN	UNKWN	UNKWN	UNKWN	1	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	١	UNKWN	_	_	_	_	UNKWN	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 8
Check AWD control unit circuit. Refer to <u>LAN-385</u>, "AWD Control Unit Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen								Receive of	diagnosis						SELF-DIAG	BESUITS
CEECOT GTGTEIN		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DINO	TILOULIC
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UMWN	UNKWN	_	ı	1	UNKWN		UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNWN	-	_	_	_	_	_	-	-	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_		_	1	ı	UNKWN	1	1	UNKWN	CAN COMM CIRCUIT (U1000)	-
LDW	No indication	ı	_	UNKWN	UNKWN	_	_	_	_	UNKWN	ı	ı	1	UNKWN	-	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UM W N	UNKWN	UNKWN	UNKWN	1	1	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	ı
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNION	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	1	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	-	_	UNKWN	ı	-	-	_	_	CAN COMM CIRCUIT (U1000)	_



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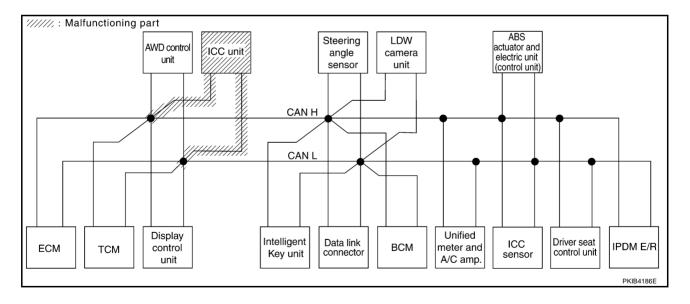
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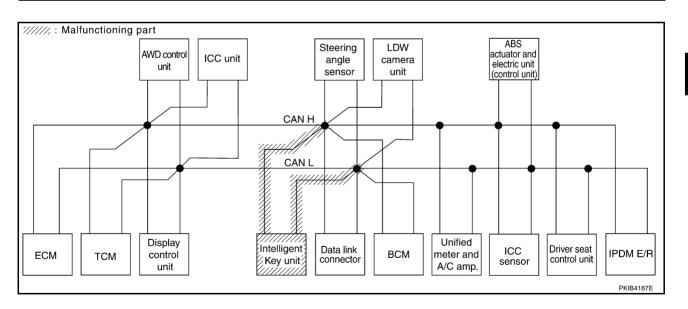
Case 9
Check ICC unit circuit. Refer to <u>LAN-386, "ICC Unit Circuit Inspection"</u>.

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	ecroon								Receive	diagnosis						SELF-DIAG	BESUIT
OLLEGI GIGIEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	TILOULIN
ENGINE	1	NG	UNKWN	1	UNKWN	_	_	UNIONN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COL CIPYUI (U1001
A/T	ı	NG	UNKWN	UNKWN	1	_	UNKWN	UNION	_	_	_	UNKWN	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNWN	UNAWN	_	_	_	_	UNWN	_	_	UNIWN	UNIWN	1	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	ı	_	_	_	_	_	_	UNKWN	_	1	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	ı	1	UNKWN	UNKWN	_	_	_	_	UNKWN	_	-	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNION	UNKWN	UNKWN	_	1	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	1	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	-



Case 10
Check Intelligent Key unit circuit. Refer to <u>LAN-386</u>, "Intelligent Key Unit Circuit Inspection".

							CAN	DIAG SU	PPORT N	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKWN	ı	UNKWN	ı	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	Í	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	ı	ı	UNKWN	_	UNKWN	Ī	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	1	-	UNKWN	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_		_	1	ı	UNKWN	1	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	_	UNKWN	ı	_	ı	UNKWN	1	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNWN	UNKWN	1	1	-	UNKWN	ı	CAN COMM CIRCUIT (U1000)	-
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN		_	ı	UNKWN	1	1	1	1	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	_	_	UNKWN	ı	UNKWN	ı	_		CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	-	_	UNKWN	ı	-	-	_	1	CAN COMM CIRCUIT (U1000)	_



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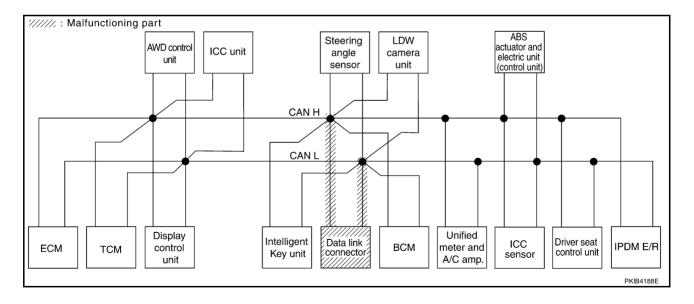
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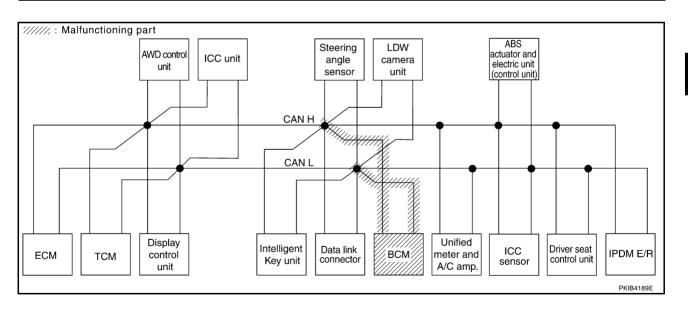
Case 11
Check data link connector circuit. Refer to <u>LAN-387</u>, "<u>Data Link Connector Circuit Inspection</u>" .

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen	Initial	T						Receive	diagnosis						SELF-DIAG	RESULTS
022201 01012			Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	ı	_	UNKWN	I	UNKWN	-	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	ı	NG	UNKWN	UNKWN	-	1	UNKWN	UNKWN	1	_	_	UNKWN	-	UNKWN		CAN COMM CIRCUIT (U1000)	1
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	indication		UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CÂN COMM CIRCUIT (U1000)	_
LDW	indication	ı	1	UNKWN	UNKWN	_	_	_	_	UNKWN	_	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	N indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	N/ indication	NG	UNKWN	ı	UNKWN	_	_	_	-	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	N/ indication	1	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 12
Check BCM circuit. Refer to <u>LAN-387</u>, "BCM Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive of	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	ı	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNWN	-	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIR V UIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	-	UNWN	-	UNKWN	-	-	UNKWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	ı	ı	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNIWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNIWN	-	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	indication	NG	UNKWN	UNKWN	_	_	_	_	_	-	-	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	_	UNWN	1	_	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNWN	1	1	_	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN		_	ı	UNKWN	1	-	-	1	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	_	_	_	_	UNIOWN	ı	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	ı
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNIONN	-	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



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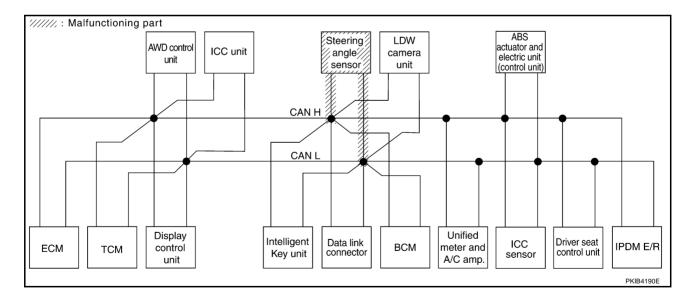
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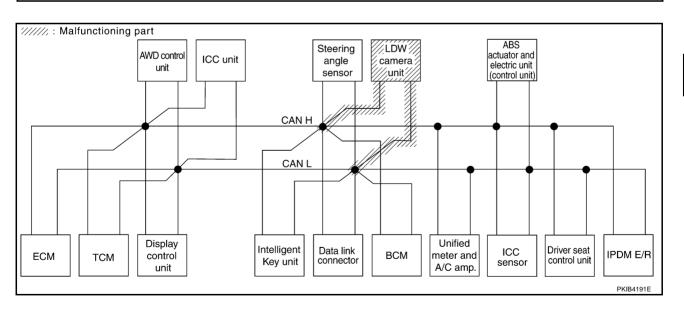
Case 13
Check steering angle sensor circuit. Refer to <u>LAN-388</u>, "Steering Angle Sensor Circuit Inspection".

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen								Receive	diagnosis						SELF-DIAG	BESUITS
OLLEGI GIGIEM		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DINO	TILOULIN
ENGINE	_	NG	UNKWN	1	UNKWN	ı	_	UNKWN	-	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001
A/T	_	NG	UNKWN	UNKWN	_	-	UNKWN	UNKWN		_	_	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	-	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	1	-	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	1	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	ı	UNKWN	ı	_		ı	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	ı	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	-		_	-	CAN COMM CIRCUIT (U1000)	_



Case 14
Check LDW camera unit circuit. Refer to <u>LAN-388</u>, "<u>LDW Camera Unit Circuit Inspection</u>" .

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen								Receive	diagnosis						SELF-DIAG	BESUITS
SELECT STOTEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	SELF-DIAC	RESOLIC
ENGINE	_	NG	UNKWN	1	UNKWN		_	UNKWN	_	UNKWN	1	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	1	UNKWN	UNKWN	_		1	UNKWN		UNKWN	1	CAN COMM CIRCUIT (U1000)	ı
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	-	-	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	-	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	-	-	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	indication	_	_	UNKWN	UNKWN	_	_	_	_	UNKWN	-	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	1	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	_	_	1	-	CAN COMM CIRCUIT (U1000)	_



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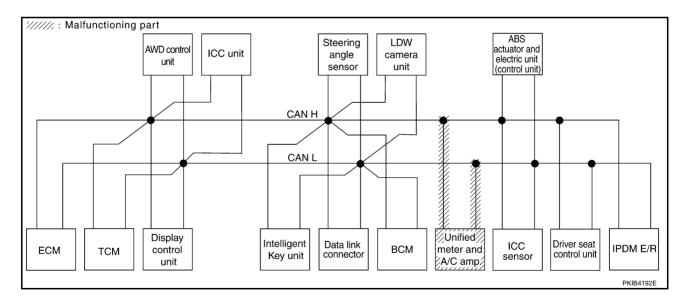
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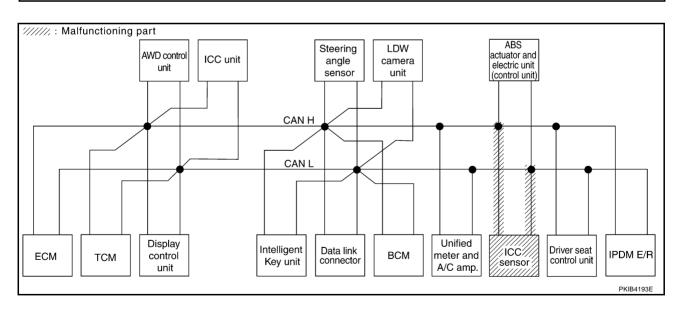
Case 15
Check unified meter and A/C amp. circuit. Refer to LAN-389, "Unified Meter and A/C Amp. Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	coroon								Receive	diagnosis						SELF-DIAG	DECLITE
OLLEGI GIGIEM		Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI -DIAC	THEODER
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	-	UNWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN CON CIRCUI (U1001)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	_	ı	-	UNWNN		UNKWN	1	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	-	UNWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	ı	-	UM WN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNWN	_	_	_	CAN COMM CIPOUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	_		_	1	-	UNIWN	1	1	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	ı	-	UNKWN	UNKWN	_	_	_	_	UNKWN	1	_	1	UNKWN	1	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	1	-	UNKWN	ı	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	_	UNIWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



Case 16
Check ICC sensor circuit. Refer to LAN-390, "ICC Sensor Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive of	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	1	_	UNKWN	_	UNKWN	1	UNKWN		UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	-	-	UNKWN	_	UNKWN	-	_	UNKWN		_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	_	_	1	-	UNKWN	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	1	_	_	_	UNKWN	_	_	UNIWN	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	1	UNKWN	UNKWN	_	1	_	_	_	UNKWN	1	UNKWN	1	1	1	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	I	_	_	_	ı	ı	UNKWN	1	1	UNKWN	(U1000)	_
LDW	No indication	ı	-	UNKWN	UNKWN	ı	_	_	_	UNKWN	ı	ı	1	UNKWN	1	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	1	-	UNKWN	ı	CAN COMM CIRCUIT (U1000)	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	I	UNKWN	_	_	ı	UNKWN	1	1		1	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	-	_	_	_	UNKWN	1	UNKWN	_	_		CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	-	_	_	_	UNKWN	ı	-		_	1	CAN COMM CIRCUIT (U1000)	_



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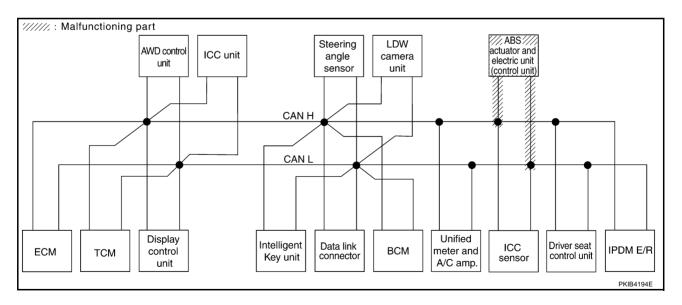
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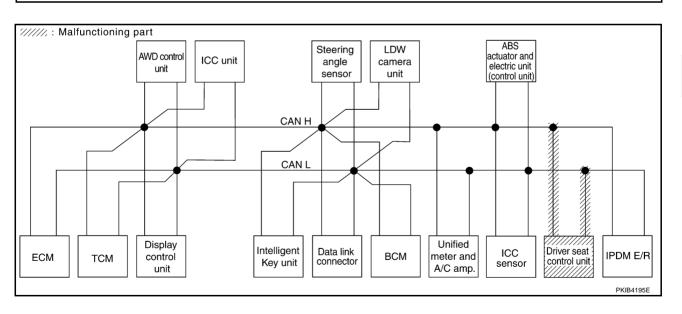
Case 17
Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-390</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

							CAN	DIAG SU	PPORT N	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKWN	1	UNKWN	_	UNWN	UNKWN	CAN COMM CIRCUIT (U1000)	(U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	-	UNKWN	_	UNWN	-	CAN COMM CIRCUIT (U1000)	_
Display control unit	ı	NG	UNKWN	UNKWN	-	_	_	_	_	UNKWN	ı	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UM WN	_	CAN COMM CIRQUIT (U1000)	_
ICC	ı	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	1	_	UNKWN	UM WN	1	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	1	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	ı	ı	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	l	_	UNKWN	UNKWN	_	_	_	_	UNKWN	1	ı	ı	UNIWN	l	CAN COMM CIRQUIT (U1000)	
METER A/C AMP	No indication	ı	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	_	_	UN WN	1	CAN COMM CIROUIT (U1000)	_
ABS	١	¥	UNWWN	UNWN	UNIONN	_	UNI WN	_	_	_	UNIONN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	1	UNKWN	_	_	_	_	UNKWN	-	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 18
Check driver seat control unit circuit. Refer to <u>LAN-391</u>, "<u>Driver Seat Control Unit Circuit Inspection</u>".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen								Receive of	diagnosis						SELF-DIAG	RESULTS
OLLEGI GIGILIM		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DINO	TILOULIU
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	-	_	UNKWN	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
Display control unit	1	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	1	_	UNKWN	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	-	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	_	_	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	UNKWN		CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	N indication	NG	UNKWN	١	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	1	CÂN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



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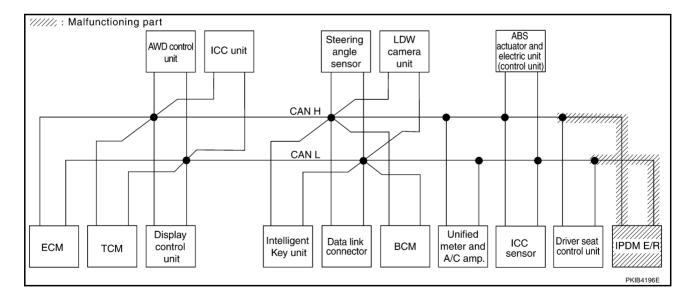
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Case 19
Check IPDM E/R circuit. Refer to LAN-391, "IPDM E/R Circuit Inspection".

							CAN	DIAG SU	PPORT M	INTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive	diagnosis						SELF-DIAG	RESULTS
			Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNKWN	1	UNKWN	ı	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNWWN	(U1000)	CAN CON CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	-	_	UNWN	_	_
ALL MODE AWD/4WD	ı	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	1	NG	UNKWN	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNI	CAN COMM CIRCUIT (U1000)	_
LDW	No indication	1	1	UNKWN	UNKWN	_	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	1	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	-	_	_	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	N indication	1	UNKWN	UNKWN	-	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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Case 20
Check CAN communication circuit. Refer to <u>LAN-392</u>, "CAN Communication Circuit Inspection".

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen	Initial	Transmit						Receive of	diagnosis						SELF-DIAG	RESULTS
			diagnosis	ECM	TCM	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	1	NG	UNWN	1	UNWN	ı	_	UNKWN	_	UNWN	-	UNWN	_	UN W N	UNKWN	(U1000)	CAN COM CIRCUIT (U1001)
A/T	1	NG	UNKWN	UNWN	1	1	UNWN	UNKWN	_	1	-	UMMN	-	UM W N	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	ı	NG	UNWN	UNWN	İ	ı	_	_	ı	UNAWN	ı	UNWN	-	-	UN W N	_	-
ALL MODE AWD/4WD	I	NG	UNWN	ĺ	İ	ı	_	_	_	Ī	ı	-	-	_	_	CAN COMM CIRCUIT (U1000)	-
ICC	1	NG	UN WN	UNWN	UNWN	-	_	_	_	UNWN	_	_	UNWN	UNWN	_	CAN COMM CIPY UIT (U1000)	_
INTELLIGENT KEY	indication	-	UNKWN	UNKWN	1	1	_	_	-	UNKWN	-	UNKWN	_	-	_	CAN COMM CIPYUIT (U1000)	_
BCM	indication	NG	UNKWN	UNKWN	ı	1	_	_	-	1	ı	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	ı
LDW	indication	-	_	UNKWN	UNKWN	ı	-	_	-	UNKWN	ı	ı	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	N indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	1	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	ı	⊌	UNWN	UNWN	UNWN	ı	UNIWN	_	-	ı	UNIWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	ı
AUTO DRIVE POS.	N indication	NG	UNKWN	ı	UNKWN	ı	ı	_	ı	UNKWN	İ	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)	I
IPDM E/R	N/ indication	_	UNKWN	UNKWN	1	1		_	_	UNKWN	-	_	_	-	_	CAN COMM CIRCUIT (U1000)	_

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Case 21

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to LAN-399, "IPDM E/R Ignition Relay Circuit Inspection" .

							CAN	DIAG SU	PPORT N	INTR							
SELECT SYSTEM	screen		-						Receive	diagnosis						SELF-DIAG	RESULTS
CEECOT GTGTEIN		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNIWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	UNIWN	UNKWN	(U1000)	CAN CON CIPYUI (U1001
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	UNKWN	_	ı	_	UNKWN	-	UNKWN	1	CAN COMM CIRCUIT (U1000)	1
Display control unit	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	_	_	_	-	_	UNKWN	_	UNWN	1	CAN COMM CIRQUIT (U1000)	1
ICC	_	NG	UNKWN	UNKWN	UNAWN	_	_	_	_	UNKWN	_	_	UNKWN	UNIWN	-	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	(U1000)	_
LDW	No indication	1	-	UNKWN	UNIWN	_	_	_	_	UNKWN	_	_	_	UNIWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNIWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNIONN	_	_	_	_	UNKWN	_	UNKWN	_	_	_	CÂN COMM CIRQUIT (U1000)	_
IPDM E/R	No indication	ı	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Case 22

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-399, "IPDM E/R Ignition Relay Circuit Inspection" .

							CAN	DIAG SU	PPORT M	NTR							
SELECT SYSTEM	screen								Receive	diagnosis						SELE-DIAC	RESULTS
OLLEGI GIGILIM		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	ICC /e4WD	I-KEY	BCM /SEC	STRG	METER /M&A	ICC SENSOR	VDC/TCS /ABS	IPDM E/R	OLLI DIAC	THEODERO
ENGINE	_	NG	UNKWN	1	UNKWN	-	_	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	1	NG	UNKWN	1	1	ı	_	_	_	_	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display control unit	-	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	_	_	UNKWN	_	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	1	1	_	_	_	_	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ICC	_	NG	UNKWN	UNKWN	UNKWN	-	_	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
INTELLIGENT KEY	No indication	_	UNKWN	UNKWN	_	-	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	_	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
LDW	No indication	_	_	UNKWN	UNKWN	-	_	_	_	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	ı	UNKWN	-	_	_	_	_	_	_	_	_	_	CÂN COMM CIROUIT (U1000)	_
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	_	_	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	-	1	_	_	_	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

AKS00CAY

1. CHECK HARNESS FOR OPEN CIRCUIT

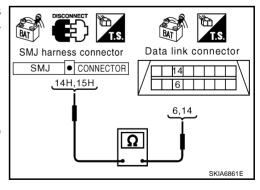
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

AKS00CAZ

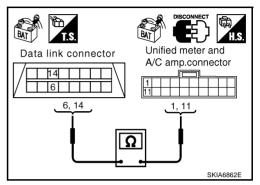
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit** AKS00CBI

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

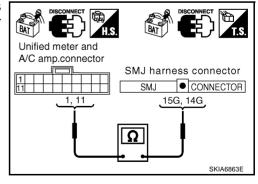
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41. 1.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

```
1 (L) - 15G (L)
                             : Continuity should exist.
11 (R) - 14G (R)
                             : Continuity should exist.
```

OK or NG

OK >> GO TO 3. NG >> Repair harness.



3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

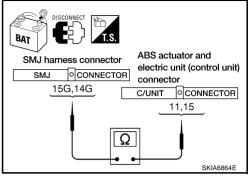
15G (L) - 11 (L) 14G (R) - 15 (R) : Continuity should exist.

: Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between ABS Actuator and Electric Unit (Control Unit) and Driver Seat Control Unit Circuit

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and harness connector E205 terminals 3 (L), 10 (R).

11 (L) - 3 (L)

: Continuity should exist.

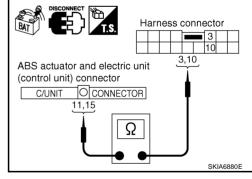
15 (R) - 10 (R)

: Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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3. CHECK HARNESS FOR OPEN CIRCUIT

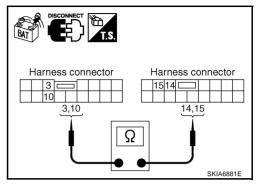
- 1. Disconnect harness connector B8.
- 2. Check continuity between harness connector B5 terminals 3 (L), 10 (R) and harness connector B8 terminals 14 (L), 15 (R).

3 (L) - 14 (L) : Continuity should exist. 10 (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00CB1

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

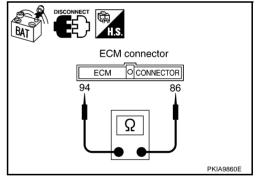
- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. $108 - 132\Omega$

OK or NG

OK >> Replace ECM.
NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



AKS00CB2

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

AKS00CB3

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2. CHECK HARNESS FOR OPEN CIRCUIT

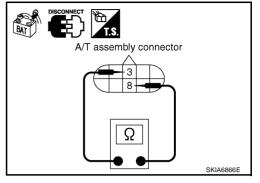
- Disconnect A/T assembly connector.
- 2. Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - 8 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG >> Repair harness between A/T assembly and display control unit.



Display Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

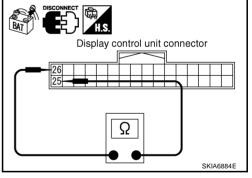
- 1. Disconnect display control unit connector.
- Check resistance between display control unit harness connector M76 terminals 25 (L) and 26 (R).

25 (L) - 26 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Replace display control unit.

NG >> Repair harness between display control unit and harness connector M82.



AWD Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of AWD control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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AKS00CB4

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect AWD control unit connector. 1.
- Check resistance between AWD control unit harness connector M92 terminals 8 (L) and 16 (R).

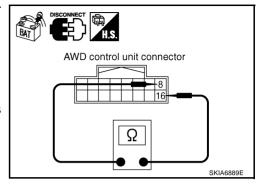
8 (L) - **16 (R)** : Approx. **54** - **66**
$$\Omega$$

OK or NG

ΟK >> Replace AWD control unit.

NG

>> Repair harness between AWD control unit and harness connector M82.



AKS00CB5

ICC Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

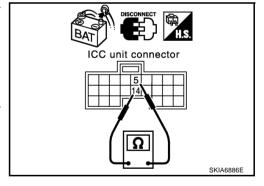
- 1. Disconnect ICC unit connector.
- Check resistance between ICC unit harness connector M88 terminals 14 (L) and 5 (R).

14 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ICC unit.

NG >> Repair harness between ICC unit and harness connector M82.



AKS00CB6

Intelligent Key Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of Intelligent Key unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

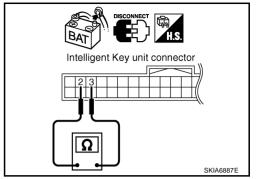
- 1. Disconnect Intelligent Key unit connector.
- Check resistance between Intelligent Key unit harness connector M34 terminals 2 (L) and 3 (R).

2 (L) - 3 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair harness between Intelligent Key unit and data link connector.



Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

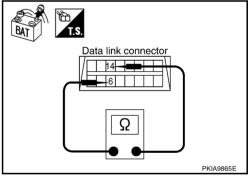
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. **54 - 66**
$$\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

AKS00CB7

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AKS00CB8

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

: Approx. 54 - 66 Ω

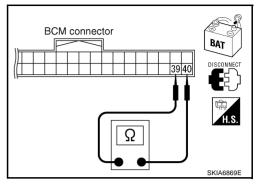
OK or NG

OK

>> Replace BCM. Refer to <u>BCS-16</u>, "Removal and Installation of BCM".

NG >>

>> Repair harness between BCM and data link connector.



AKS00CB9

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- 2. Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

: Approx. 54 - 66 Ω

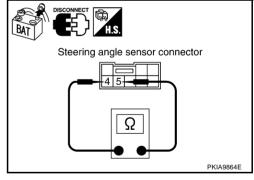
OK or NG

OK

>> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00CBJ

LDW Camera Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (unit side and harness side).
- LDW camera unit connector
- Harness connector R1
- Harness connector M31

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

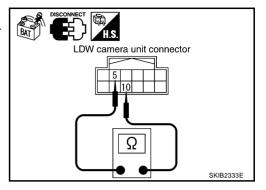
- Disconnect LDW camera unit connector.
- Check resistance between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

10 (L) - 5 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace LDW camera unit.

NG >> GO TO 3.



3. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect harness connector R1.
- Check resistance between harness connector M31 terminals 2 (L) and 3 (R).

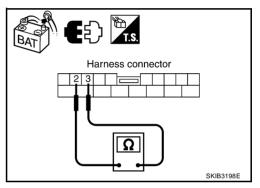
2 (L) - 3 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

>> Replace harness between LDW camera unit and harness connector R1.



AKS00CBA

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector. 1.
- Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

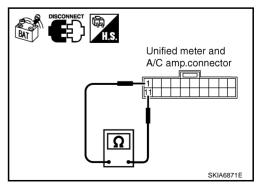
1 (L) - 11 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

NG

OK >> Replace unified meter and A/C amp.

> >> Repair harness between unified meter and A/C amp. and harness connector M41.



LAN

[CAN]

ICC Sensor Circuit Inspection

1. CHECK CONNECTOR

AKS00CBE

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ICC sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect ICC sensor connector.
- 2. Check resistance between ICC sensor harness connector E39 terminals 3 (L) and 6 (R).

: Approx. 54 - 66 Ω

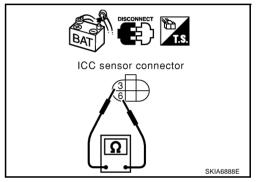
OK or NG

OK

>> Replace ICC sensor.

NG

>> Repair harness between ICC sensor and ABS actuator and electric unit (control unit).



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CBC

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

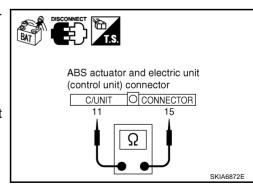
: Approx. 54 - 66 Ω

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG

>> Repair harness between ABS actuator and electric unit (control unit) and ICC sensor.



CAN SYSTEM (TYPE 8)

[CAN]

AKS00CBD

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Driver Seat Control Unit Circuit Inspection

1. CHECK CONNECTOR

Turn ignition switch OFF.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
- Driver seat control unit connector
- Harness connector B151
- Harness connector B8

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect driver seat control unit connector.
- 2. Check resistance between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

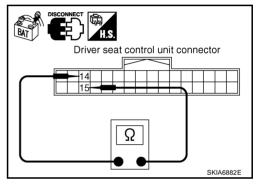
: Approx. 54 - 66 Ω

OK or NG

OK >> Replace driver seat control unit.

NG

>> Repair harness between driver seat control unit and harness connector B5.



AKS00CBF

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect IPDM E/R connector.
- 2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

: Approx. 108 - 132 Ω

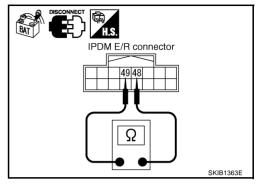
OK or NG

OK

>> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and harness connector B8.



AKS00CBF

CAN Communication Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display control unit
- AWD control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly
- Between ECM and LDW camera unit
- Between ECM and driver seat control unit

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

В

F

Н

2. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display control unit connector
- AWD control unit connector
- ICC unit connector
- Intelligent Key unit connector
- BCM connector
- Steering angle sensor connector
- Harness connector M31
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

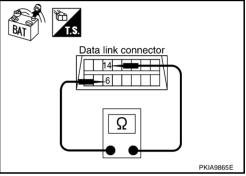
6 (L) - 14 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



LAN

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display control unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and ICC unit
 - Harness between data link connector and Intelligent Key unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and harness connector M31
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

4. CHECK HARNESS FOR SHORT CIRCUIT

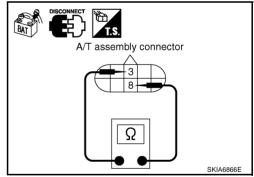
- 1. Disconnect A/T assembly connector.
- 2. Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - 8 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 5.

NG >> Repair harness between A/T assembly and harness connector F102.



Data link connector

14

5. CHECK HARNESS FOR SHORT CIRCUIT

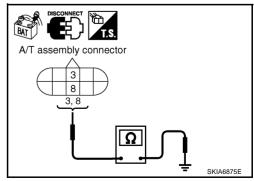
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



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6. CHECK HARNESS FOR SHORT CIRCUIT

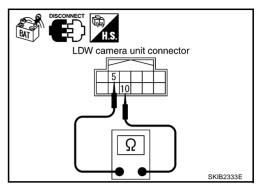
- Disconnect LDW camera unit connector. 1.
- Check continuity between LDW camera unit harness connector R9 terminals 10 (L) and 5 (R).

: Continuity should not exist.

OK or NG

OK >> GO TO 7.

NG >> Replace harness between LDW camera unit and harness connector R1.



7. CHECK HARNESS FOR SHORT CIRCUIT

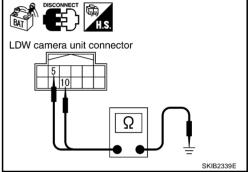
Check continuity between LDW camera unit harness connector R9 terminals 10 (L), 5 (R) and ground.

> 10 (L) - Ground : Continuity should not exist. 5 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG >> Replace harness between LDW and harness connector R1.



ABS actuator and electric unit

O CONNECTOR

(control unit) connector

C/UNIT

8. CHECK HARNESS FOR SHORT CIRCUIT

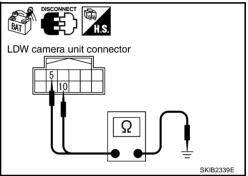
- Disconnect following connectors.
- ICC sensor connector
- ABS actuator and electric unit (control unit) connector
- Harness connector E205
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 9.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



LAN

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9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

11 (L) - Ground : Continuity should not exist. 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and ICC sensor
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205

10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect harness connector B8.
- Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

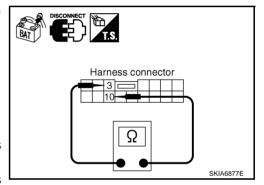
3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



ABS actuator and electric unit

11,15

OCONNECTOR

(control unit) connector

C/UNIT

11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

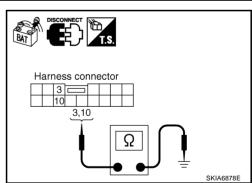
3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between harness connector B5 and harness connector B8
 - Harness between harness connector B5 and harness connector B5



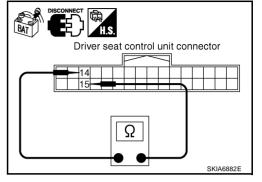
12. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect driver seat control unit connector.
- 2. Check continuity between driver seat control unit harness connector B152 terminals 14 (OR) and 15 (SB).

OK or NG

OK >> GO TO 13.

NG >> Repair harness between driver seat control unit and harness connector B151.



13. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B152 terminals 14 (OR), 15 (SB) and ground.

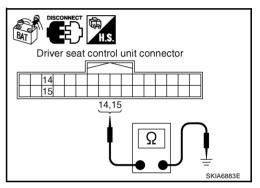
14 (OR) - Ground : Continuity should not exist.15 (SB) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 14.

>> Repair harness between driver seat control unit and harness connector B151.



14. CHECK HARNESS FOR SHORT CIRCUIT

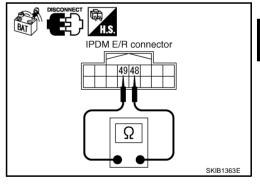
- 1. Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

OK or NG

NG

OK >> GO TO 15.

>> Repair harness between IPDM E/R and harness connector E205.



15. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

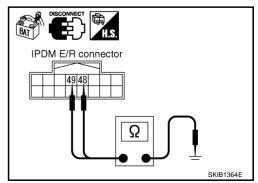
48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 16.

>> Repair harness between IPDM E/R and harness connector E205.



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16. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- 2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

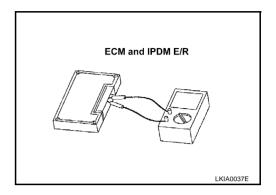
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 17.

NG >> Replace ECM and/or IPDM E/R.



17. CHECK SYMPTOM

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 18.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

18. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display control unit
- AWD control unit
- ICC unit
- Intelligent Key unit
- BCM
- Steering angle sensor
- LDW camera unit
- Unified meter and A/C amp.
- ICC sensor
- ABS actuator and electric unit (control unit)
- Driver seat control unit
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

Revision: 2005 July LAN-398 2005 FX

CAN SYSTEM (TYPE 8)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00CBG

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START"</u>.

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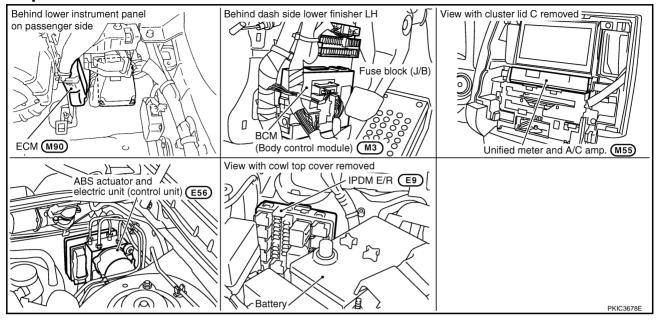
ı

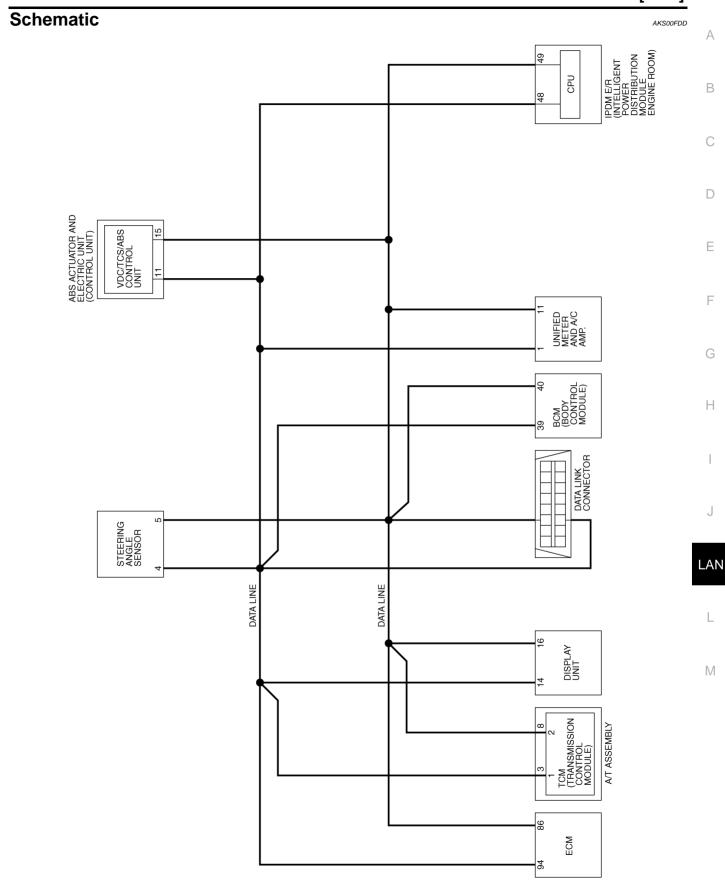
CAN SYSTEM (TYPE 9)

PFP:23710

Component Parts and Harness Connector Location

AKS00FDC





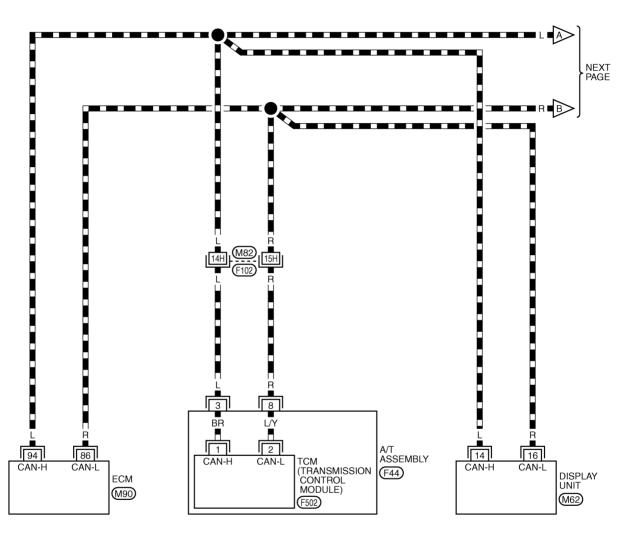
TKWB2711E

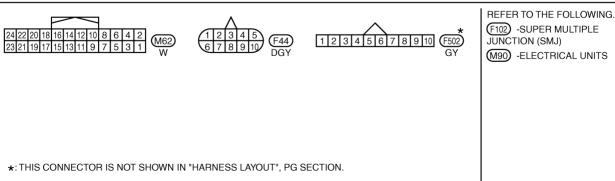
Wiring Diagram - CAN -

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LAN-CAN-25

: DATA LINE





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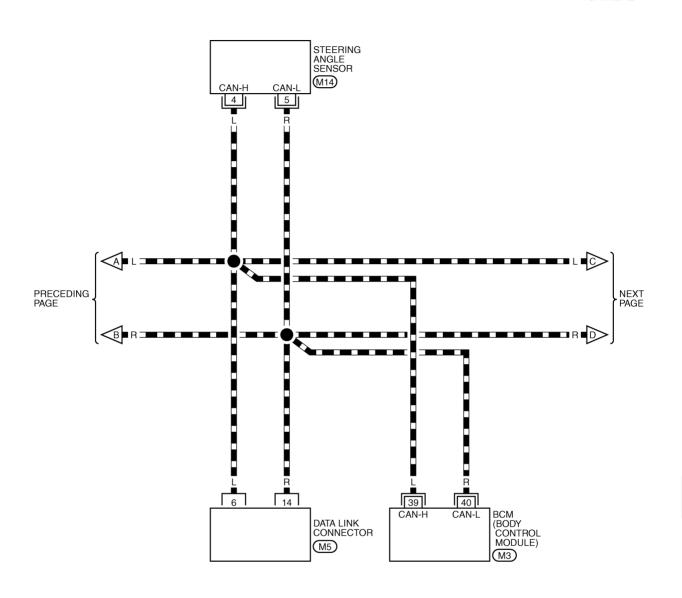
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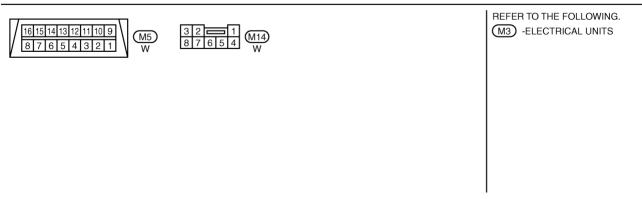
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LAN-CAN-26

: DATA LINE

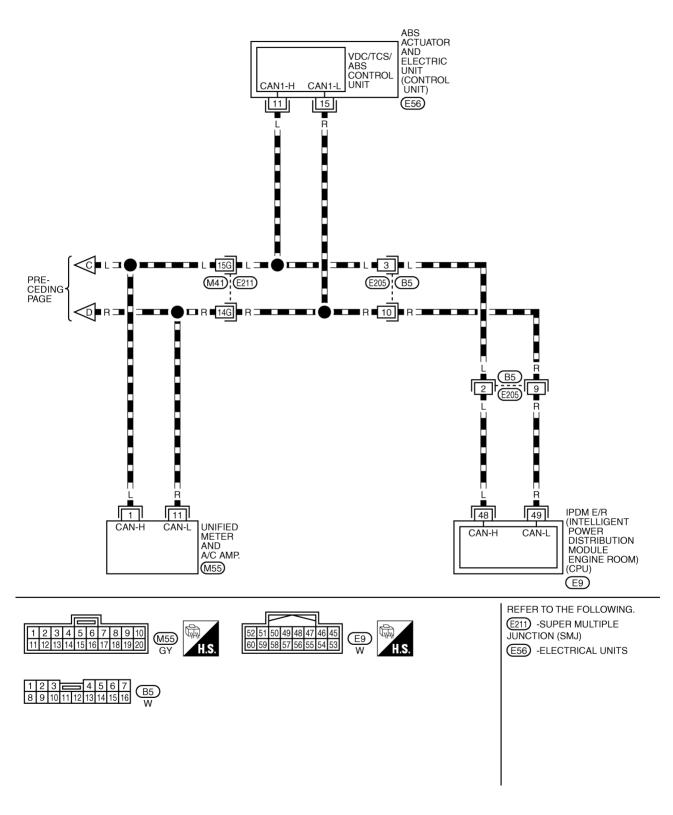




TKWB2713E

LAN-CAN-27

□■□■□ : DATA LINE



TKWB2714E

CAN SYSTEM (TYPE 9)

[CAN]

Check Sheet

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	en	1.20.1	T				Receive	diagnosis				SELF-DIAG	RESULTS
022201 0101211 00101	,,,	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	_	UNKWN	1	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	1	_	_	1	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	1	UNKWN	1	UNKWN	_	1
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_		_	CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Symptoms:

Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM

Display unit Trans	lation Sheet: Rewrite the following r	names, and put a check mark on the	check sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	_
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	_	CAN9	_

Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of A/T SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS
Attach copy of METER A/C AMP SELF-DIAG RESULTS	Attach copy of ABS SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS
Attach copy of ENGINE CAN DIAG SUPPORT MNTR	Attach copy of A/T CAN DIAG SUPPORT MNTR	Attach copy of BCM CAN DIAG SUPPORT MNTR
Attach copy of METER A/C AMP CAN DIAG SUPPORT MNTR	Attach copy of ABS CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR

[CAN]

CHECK SHEET RESULTS (EXAMPLE)

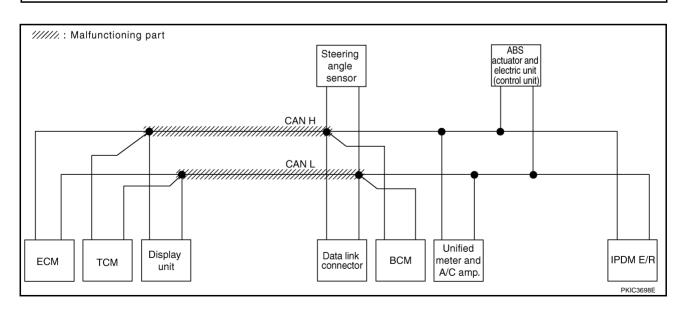
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-421</u>, "Inspection Between TCM and Data <u>Link Connector Circuit</u>".

					CAN E	IAG SUPPO							
SELECT SYSTEM scree	en	Initial	Transmit			1		diagnosis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNK VN	1	UNKVN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	I	1	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	I
Display unit	_	NG	UNKWN	UNKWN	_	_	UNK VN	_	UNKVN	1	UNKWN	_	ı
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNK N N	UNK VN	UNKVN	UNKWN	ı	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	1
ABS	_	NG	UNKWN	UNK NN	UNK VN	_	_	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNK N N	-	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	-



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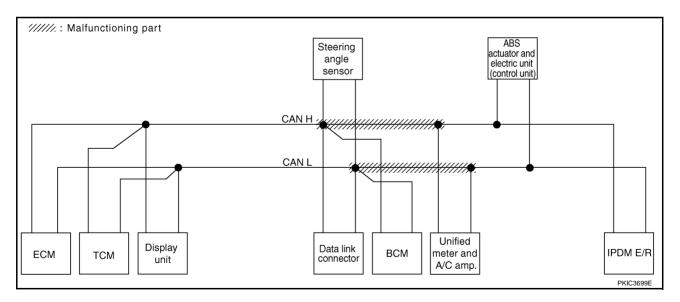
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to LAN-422, "Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit".

					CAN	DIAG SUPPO		diagnosis					
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKVN	UNK NN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	ı	_	UNK VN	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKVN	_	UNKWN	_	ı
всм	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNK VN	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	Ng ind Ation	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	_	NG	UNKWN	UNK VN	UNK VN	_	_	UNKVN	-	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIC3684E



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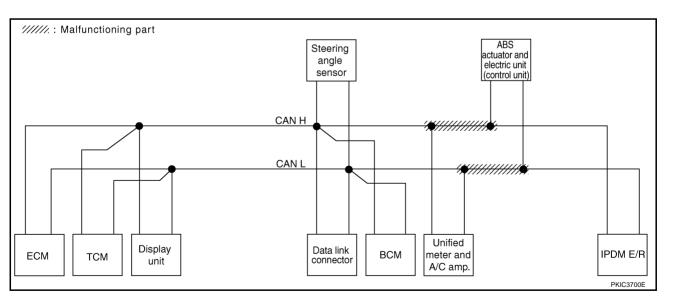
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-422, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	1	I	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	1	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	I	I	UNKWN	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNK N N	_	CAN COMM CIFCUIT (U1000)	_
ABS	_	NG	UNKWN	UNK VN	UNKVN	_	_	UNKVN	_	_	_	CÀN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	_



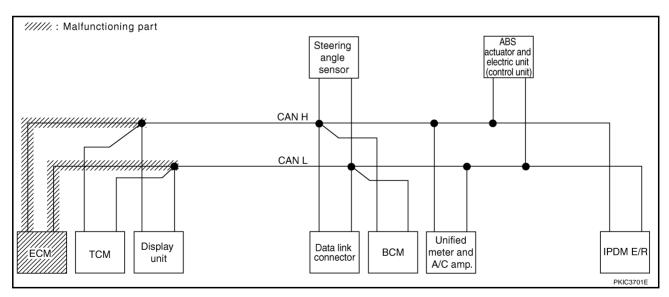
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Case 4
Check ECM circuit. Refer to <u>LAN-423</u>, "ECM Circuit Inspection" .

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit		1	T	Receive	diagnosis		T	-	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKVN	_	UNKVN	_	UNKVN	UNKVN	UNKVN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	-	1	UNKWN	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	1	_	UNKWN	_	CAN COMM CIRQUIT (U1000)	_
ABS	_	NG	UNKWN	UNK N N	UNKWN	_	ı	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNK NN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
	1	ı										(/	

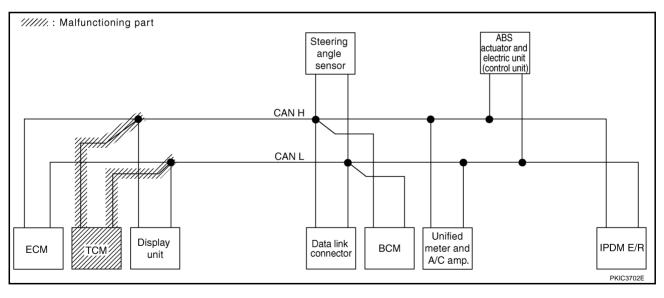


CAN SYSTEM (TYPE 9)

[CAN]

Case 5
Check TCM circuit. Refer to <u>LAN-423</u>, "TCM Circuit Inspection" .

					CAN D	IAG SUPPO							
SELECT SYSTEM scre	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	diagnosis STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	-	I	ı	UNK WN	UNKWN	_	CÂN COMM CIRQUIT (U1000)	
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
ABS	-	NG	UNKWN	UNKWN	UNK V N	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	ı
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	-	_	-	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R		_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CIRCUIT	



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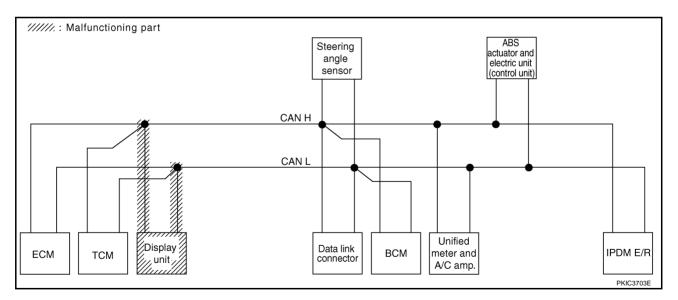
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Case 6
Check display unit circuit. Refer to <u>LAN-424</u>, "<u>Display Unit Circuit Inspection</u>" .

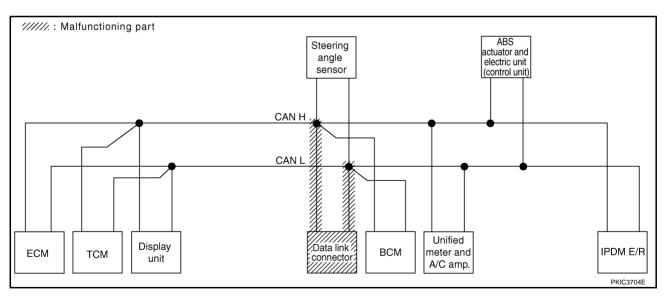
					CAN E	DIAG SUPPO		diagnosis					
SELECT SYSTEM scree	n	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	-	UNK V N	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	ı	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIC3688E



Case 7

Check data link connector circuit. Refer to LAN-424, "Data Link Connector Circuit Inspection" .

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	n	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
V T	ı	NG	UNKWN	UNKWN	_	_	ı	_	UNKWN	UNKWN	ı	CÂN COMM CIRCUIT (U1000)	_
Display unit	ı	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	-	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	ı	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	-	_	-	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	-	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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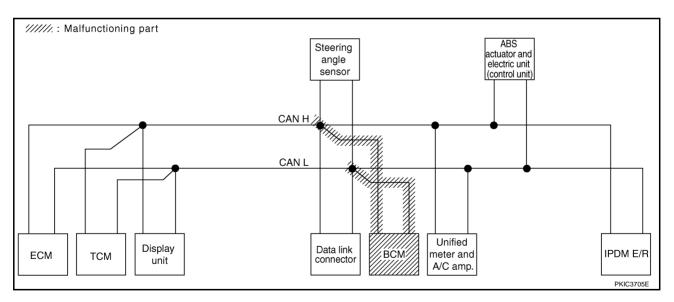
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Case 8
Check BCM circuit. Refer to <u>LAN-425, "BCM Circuit Inspection"</u>.

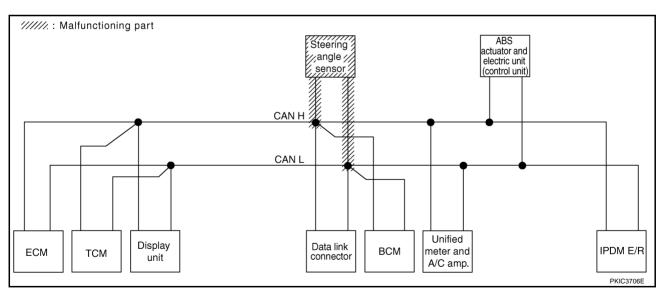
SELECT SYSTEM scree					CAN D	DIAG SUPPO		diagnosis				SELF-DIAG	DECLITE.
SELECT STSTEM SCIEB	11	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN		UNKWN	_	UNKVN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A /T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CÂN COMM CIRCUIT (U1000)	
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKVN	_	UNKWN	_	UNKWN	_	_
BCM	Ng indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNK WN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIC3690E



Case 9

Check steering angle sensor circuit. Refer to LAN-425, "Steering Angle Sensor Circuit Inspection".

SELECT SYSTEM scree					0,	1AG 001 1 0	RT MNTR						
SELECT SYSTEM scree	n	1	T				Receive of	diagnosis				SELF-DIAG	RESULTS
GEEEST 6 T 6 T E III 60100		Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	OLL! BING	
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	ı	CÂN COMM CIRCUIT (U1000)	_
Display unit	ı	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	-	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	ı
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKVN	_	_	-	CAN COMM CIRCUIT (U1000)	-
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-



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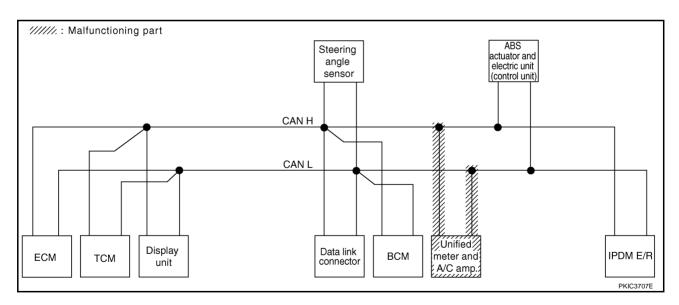
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Case 10
Check unified meter and A/C amp. circuit. Refer to LAN-426, "Unified Meter and A/C Amp. Circuit Inspection".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM screer	n	Initial	Transmit				Receive	diagnosis				SELF-DIAG	RESULTS
3223 7 3 7 3 7 2 M 301 301		Initial diagnosis	diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
VT	_	NG	UNKWN	UNKWN	_	_	_	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKVN	_	UNKWN	_	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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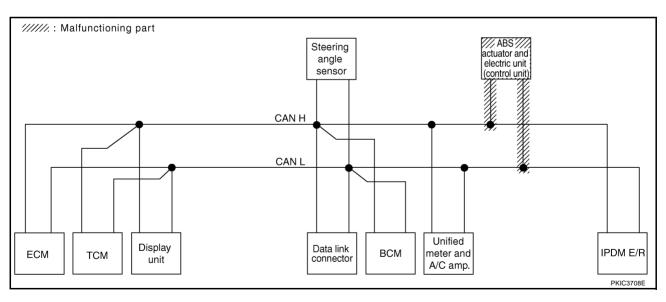
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Case 11

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-426</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

					CAN D	IAG SUPPO	RT MNTR						
SELECT SYSTEM scree	n	Initial	Transmit				Receive of	diagnosis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMP CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	-	UNKWN	_	-
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	1	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	1
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIPCUIT (U1000)	_
ABS	_	₩	UNKVN	UNKWN	UNKWN	_	_	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	-	-	_	CAN COMM CIRCUIT (U1000)	1
	•											н	



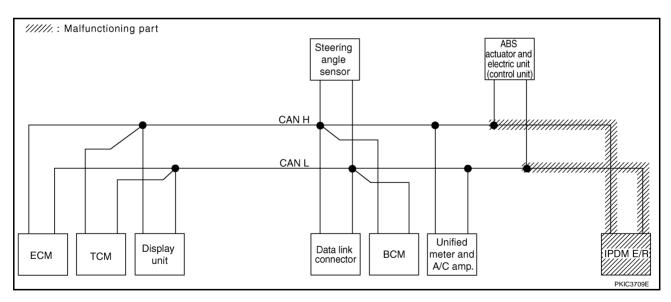
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Case 12
Check IPDM E/R circuit. Refer to LAN-427, "IPDM E/R Circuit Inspection".

					CAN D	IAG SUPPO							
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	diagnosis STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	_	UNK N N	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	-	1	_	_	CAN COMM CIRCUIT (U1000)	_
													PKIC3694E



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Case 13
Check CAN communication circuit. Refer to <u>LAN-428</u>, "CAN Communication Circuit Inspection".

					CAN E	DIAG SUPPO		diagnosis				_	
SELECT SYSTEM scr	een	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	
ENGINE	_	NG	UNKWN	_	UNKVN	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKVN	UNKVN	_	_	UNKVN	_	UNKVN	_	UNKWN	_	_
BCM	Ng indication	NG	UNKWN	UNKWN	-	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indivition	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	¥	UNKVN	UNKVN	UNKWN	_	_	UNKVN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
	•	•		•		•		•		•	•		

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Case 14

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-433, "IPDM E/R Ignition Relay Circuit Inspection"</u>.

					CAN D	IAG SUPPO		diagnosis				-	
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	- SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	-	UNKVN	_	UNKWN	1	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	_	UNKWN	_	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	_	_	UNKVN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-
												(U1000)	

Case 15

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-433, "IPDM E/R Ignition Relay Circuit Inspection" .

					CAN	IAG SUPPO	RT MNTR Receive of	diagnasia					
SELECT SYSTEM scree	en	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	-	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	_	NG	UNKWN	ı	_	_	ı	ı	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	-	UNKWN	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	1	ı	UNKWN	ı	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	-	UNKWN	_	ı	-	_	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	UNKWN	ı	_	1	_	CAN COMM CIRCUIT (U1000)	_

Inspection Between TCM and Data Link Connector Circuit

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1. CHECK HARNESS FOR OPEN CIRCUIT

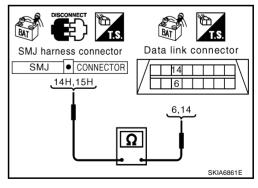
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

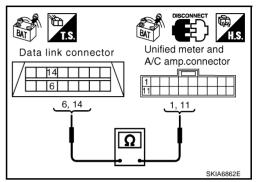
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp. harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

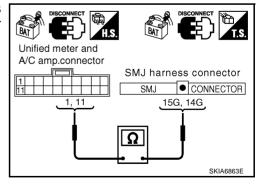
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp. harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

```
1 (L) - 15G (L) : Continuity should exist.
11 (R) - 14G (R) : Continuity should exist.
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OK or NG

OK >> GO TO 3. NG >> Repair harness.



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3. CHECK HARNESS FOR OPEN CIRCUIT

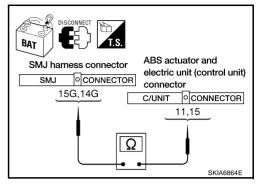
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



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ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

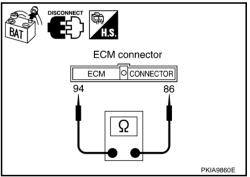
- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. 108 - 132Ω

OK or NG

OK >> Replace ECM.
NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



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TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

Revision: 2005 July **LAN-423** 2005 FX

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2. CHECK HARNESS FOR OPEN CIRCUIT

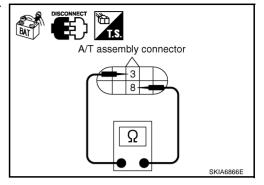
- Disconnect A/T assembly connector.
- Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - 8 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG >> Repair harness between A/T assembly and display unit.



AKS00FDL

Display Unit Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect display unit connector.
- Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

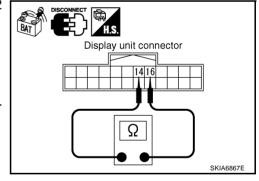
14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace display unit.

NG

>> Repair harness between display unit and harness connector M82.



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Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

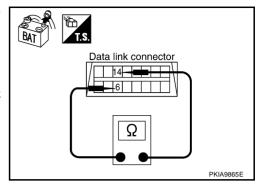
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

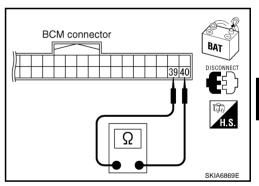
- Disconnect BCM connector.
- Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

39 (L) - 40 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace BCM. Refer to BCS-16, "Removal and Installation of BCM".

NG >> Repair harness between BCM and data link connector.



Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

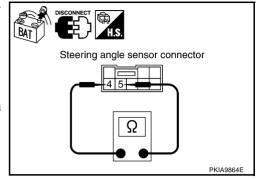
4 (L) - 5 (R) : Approx.
$$54 - 66\Omega$$

OK or NG

OK >> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



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Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

1 (L) - 11 (R) : Approx. 54 -
$$66\Omega$$

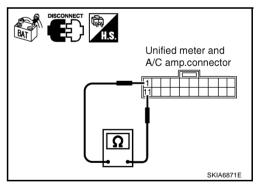
OK or NG

OK

>> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00FDQ

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect ABS actuator and electric unit (control unit) connector.
- Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

11 (L) - 15 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace ABS actuator and electric unit (control unit).

NG >> Repair harness between ABS actuator and electric unit (control unit) and harness connector E205.

ABS actuator and electric unit (control unit) connector OCONNECTOR C/UNIT SKIA6872F

AKS00FDR

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

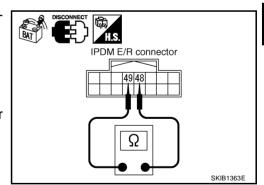
2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

OK or NG

OK >> Replace IPDM E/R.

NG >> Repair harness between IPDM E/R and ABS actuator and electric unit (control unit).



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CAN Communication Circuit Inspection

1. CHECK CONNECTOR

AKS00FDS

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR SHORT CIRCUIT

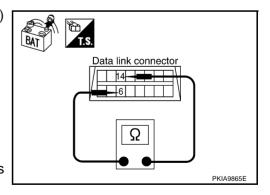
- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



$\overline{3}$. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

4. CHECK HARNESS FOR SHORT CIRCUIT

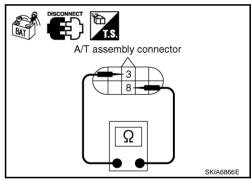
- 1. Disconnect A/T assembly connector.
- 2. Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG >> Repair h

>> Repair harness between A/T assembly and harness connector F102.



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5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

3 (L) - Ground : Continuity should not exist. 8 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.

A/T assembly connector

A/Kia6875E

Data link connector

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6. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- 2. Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

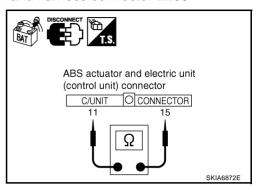
11 (L) - 15 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 7

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



ABS actuator and electric unit

7. CHECK HARNESS FOR SHORT CIRCUIT

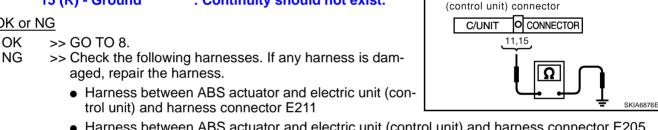
Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

> 11 (L) - Ground : Continuity should not exist.

> 15 (R) - Ground : Continuity should not exist.

OK or NG

Harness between ABS actuator and electric unit (control unit) and harness connector E205



8. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

> 3 (L) - 10 (R) : Continuity should not exist.

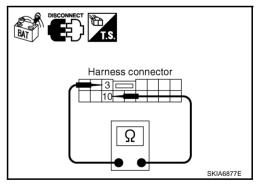
OK or NG

NG

OK >> GO TO 9.

>> Repair harness between harness connector B5 and har-

ness connector B5.



9. CHECK HARNESS FOR SHORT CIRCUIT

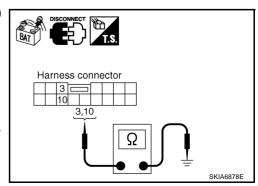
Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. 10 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 10.

NG >> Repair harness between harness connector B5 and harness connector B5.



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10. CHECK HARNESS FOR SHORT CIRCUIT

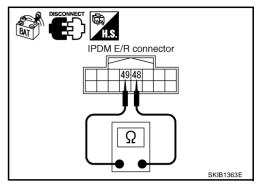
- 1. Disconnect IPDM E/R connector.
- 2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

48 (L) - 49 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 11.

NG >> Repair harness between IPDM E/R and harness connector E205.



11. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

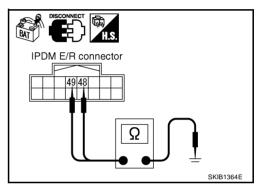
48 (L) - Ground : Continuity should not exist.
49 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 12.

>> Repair harness between IPDM E/R and harness connector E205.



12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

- 1. Remove ECM and IPDM E/R from vehicle.
- Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

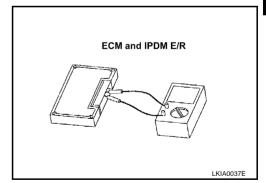
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. 108 - 132Ω

OK or NG

OK >> GO TO 13.

NG >> Replace ECM and/or IPDM E/R.



13. снеск сумртом

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 14.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

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14. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

CAN SYSTEM (TYPE 9)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00FDT

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to <u>PG-28</u>, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12</u>, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START".

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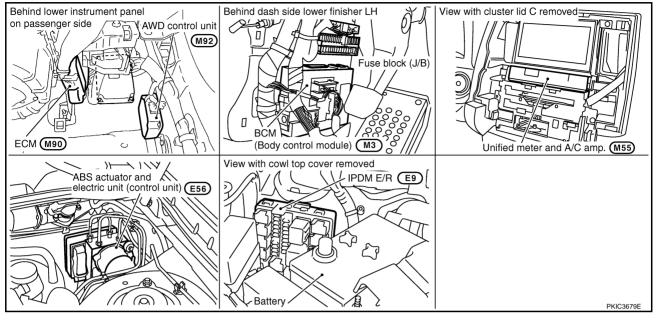
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CAN SYSTEM (TYPE 10)

PFP:23710

Component Parts and Harness Connector Location

AKS00FDU



[CAN] **Schematic** AKS00FDV Α IPDM E/R
(INTELLIGENT
POWER
DISTRIBUTION
MODULE
ENGINE ROOM) 49 В CPU 48 С D ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) Е VDC/TCS/ABS CONTROL UNIT F UNIFIED METER AND A/C AMP. G Н DATA LINK CONNECTOR J STEERING ANGLE SENSOR LAN AWD CONTROL UNIT 9 16 ω M DATA LINE DATA LINE TCM (TRANSMISSION CONTROL MODULE) A/T ASSEMBLY

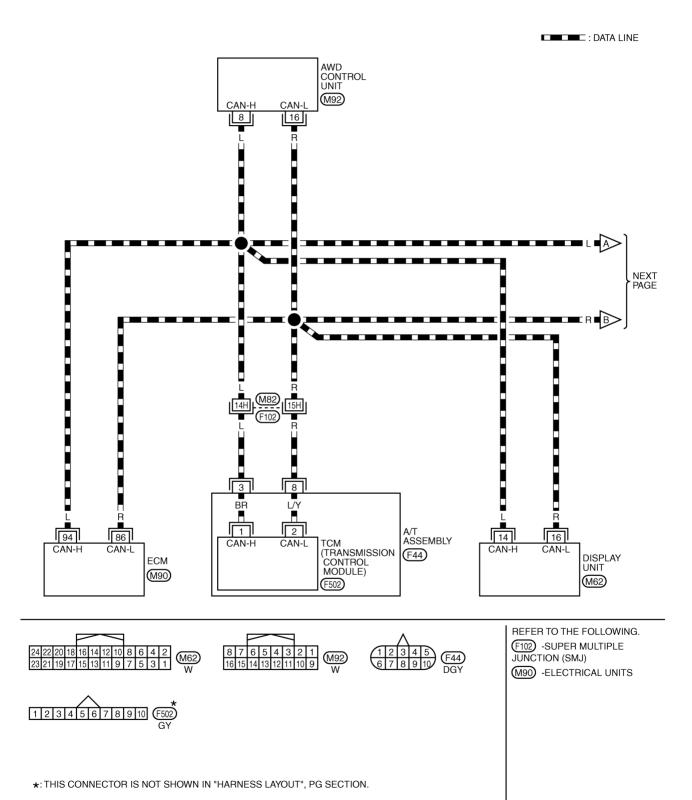
TKWB2715E

ECM

Wiring Diagram - CAN -

AKS00FDW

LAN-CAN-28



TKWB2716E

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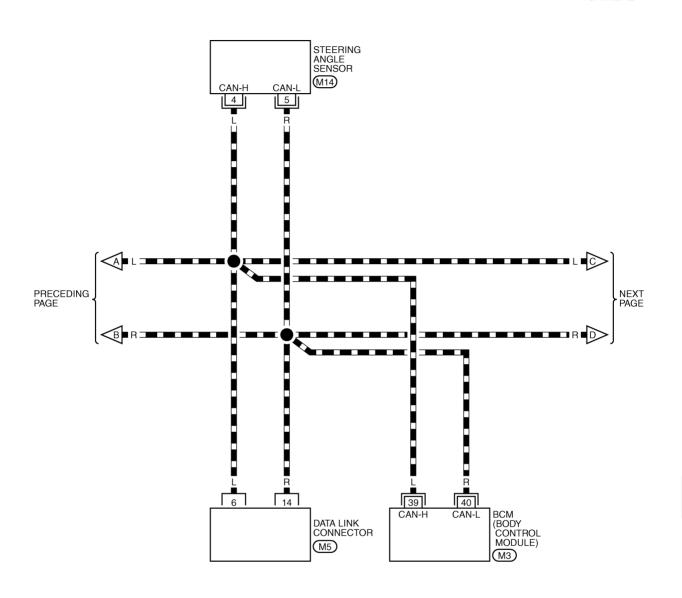
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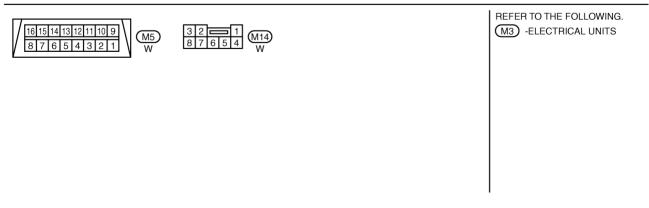
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LAN-CAN-29

: DATA LINE





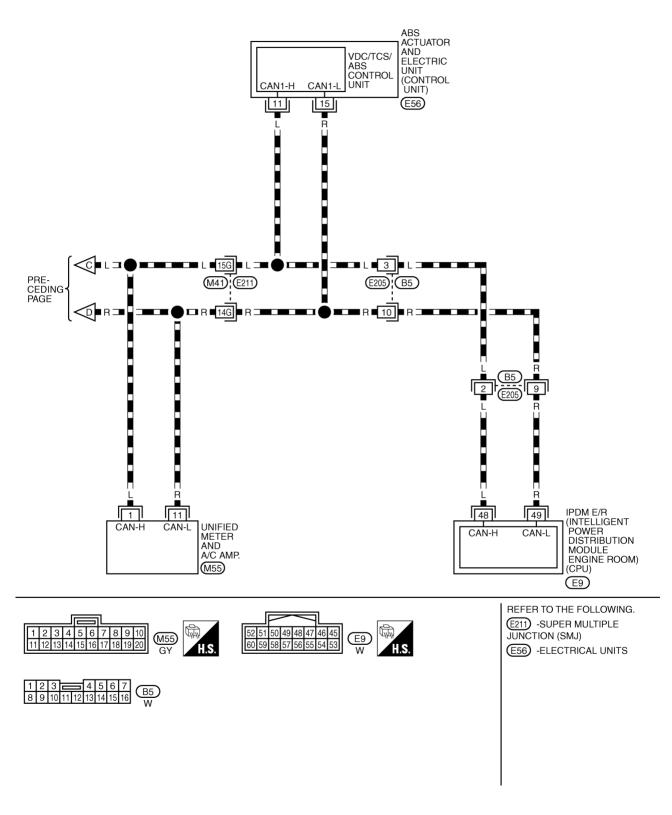
TKWB2717E

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LAN-CAN-30

: DATA LINE



TKWB2718E

Check Sheet

AKSOOFDX

NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	1-141-1	Tononia				Re	ceive diagno	osis				SELF-DIAG	RESULTS
3223		Initial diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	-	UNKWN	I	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	ı	_	UNKWN	_	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	_	_	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	ı	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN			_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

Symptoms :			

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

Display unit Transl	ation Sheet: Rewrite the following	names, and put a check mark on the c	heck sheet table.
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CANCOMM	Initial diagnosis	CAN5	METER/M&A
CAN1	Transmit diagnosis	CAN6	_
CAN2	BCM/SEC	CAN7	IPDM E/R
CAN3	ECM	CAN8	_
CAN4	-	CAN9	_

Attach copy of display unit CAN DIAG MONITOR check sheet

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Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of A/T SELF-DIAG RESULTS	Attach copy of ALL MODE AWD/4WD SELF-DIAG RESULTS	Attach copy of BCM SELF-DIAG RESULTS
Attach copy of METER A/C AMP SELF-DIAG RESULTS	Attach copy of ABS SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS	
Attach copy of ENGINE CAN DIAG SUPPORT MNTR	Attach copy of A/T CAN DIAG SUPPORT MNTR	Attach copy of ALL MODE AWD/4WD CAN DIAG SUPPORT MNTR	Attach copy of BCM CAN DIAG SUPPORT MNTR
Attach copy of METER A/C AMP CAN DIAG SUPPORT MNTR	Attach copy of ABS CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR	
			PKIC

CHECK SHEET RESULTS (EXAMPLE)

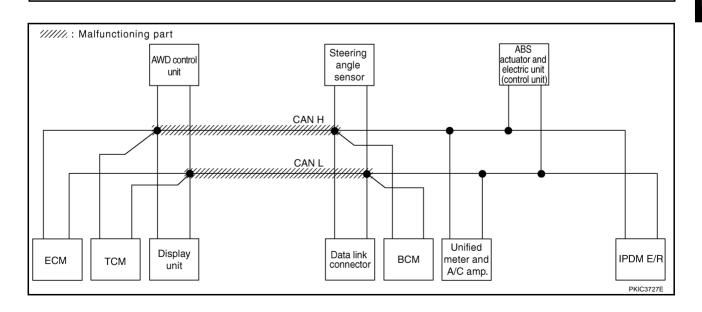
NOTE:

If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-456</u>, "Inspection Between TCM and <u>Data Link Connector Circuit</u>".

A/T — NG UNKWN — — UNKWN — — UNKWN — — CAN COMM CIRCUIT (U1000) — Display unit — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — UNKWN — — UNKWN — — — UNKWN — — — — — UNKWN — — — — — — — — — — — — — — — UNKWN —							CAN DIA	G SUPPOF							
ENGINE	SELECT SYSTEM scre	en	Initial	Transmit				Re		osis			1	SELF-DIAG	RESULTS
ENGINE — NG UNKWN — — UNKWN — — UNKWN — — — UNKWN — — — UNKWN — — — UNKWN — — — — UNKWN —					ECM	TCM	DISPLAY		BCM /SEC	STRG					
Display unit Display Unit Disp	ENGINE	_	NG	UNKWN		UNKWN	_	_	UNKVN	_	UNKVN	UNKVN	UNKWN	CIRCUIT (U1000)	CIRCUIT (U1001)
Display unit Disp	A /T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
BCM No indication NG UNKWN UNKWN — — — — — UNKWN — — UNKWN — — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN CQMM CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT CIRCUIT 	Display unit	_	NG	UNKWN	UNKWN	ı	_	ı	UNKVN	ı	UNKVN	ı	UNKVN	_	I
BCM NO indication NG indication UNKWN UNKWN — — — — — UNKWN — — UNKWN — — UNKWN — UNKWN UNKWN UNKWN UNKWN UNKWN — — UNKWN	ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	ı	-	_	-	_	_	_	-
METER A/C AMP NO indication — UNKWN UNKWN UNKWN UNKWN UNKWN — — UNKWN — CIRCUIT (U1000) ABS — NG UNKWN UNKWN UNKWN — UNKWN — UNKWN — CAN CQMM CIRCUIT (U1000) —	ВСМ		NG	UNKWN	UNKWN	_	_	-	_	_	UNKWN	_	UNKWN	CIRCUIT	-
ABS — NG UNKWN UNKWN — UNKWN — UNKWN — UNKWN — — — CAN CQMM CIRQUIT — (U1500)	METER A/C AMP		_	UNKWN	UNKVN	UNKWN	UNKVN	UNKWN	UNKWN	_	-	UNKWN	_	CIRCUIT (U1000)	
No CQMM	ABS	_	NG	UNKWN	UNKVN	UNKWN	_	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R indication — UNKWN —	IPDM E/R	No indication	_	UNKWN	UNKWN	-	_	ı	UNKWN	-	-	_	_	CAN COMM CIRCUIT (U1000)	_



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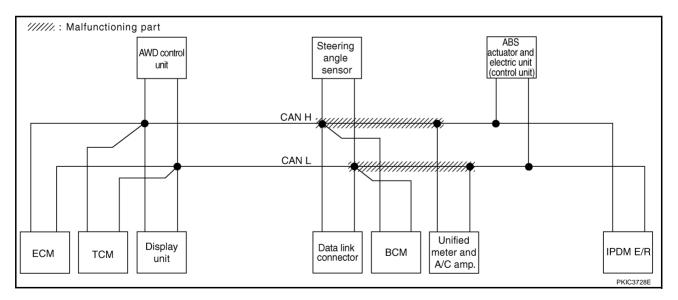
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Case 2
Check harness between data link connector and unified meter and A/C amp. Refer to <u>LAN-457</u>, "Inspection <u>Between Data Link Connector and Unified Meter and A/C Amp. Circuit"</u>.

						CAN DIA	G SUPPOF							
SELECT SYSTEM scre	en	Initial	Transmit				Re AWD	ceive diagn		METER	VDC/TCS	IPDM	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	/4WD	/SEC	STRG	/M&A	/ABS	E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	_	UNKVN	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKVN	_	UNKWN	_	-
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	_	-	_	_	_	_	_	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	-	_	_	UNKWN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	-	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	UNKWN	_	UNKVN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indiation	_	UNKWN	UNKWN	-	_	_	UNKWN	-	_	_	-	CAN COMM CIRCUIT (U1000)	_
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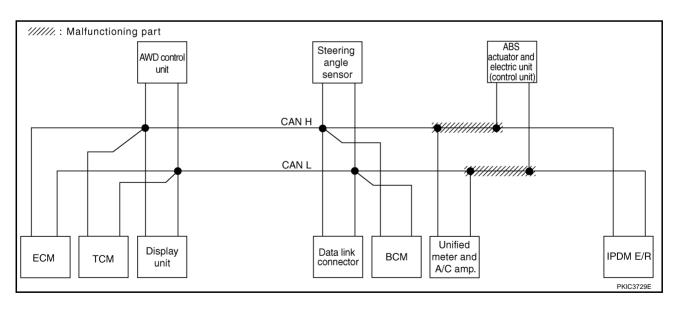
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Case 3

Check harness between unified meter and A/C amp. and ABS actuator and electric unit (control unit). Refer to LAN-457, "Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric Unit (Control Unit) Circuit".

						CAN DIA	G SUPPOF							
SELECT SYSTEM scre	een	Initial diagnosis	Transmit diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	-	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNK VN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKVN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	_	-	1	_	UNKWN	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	_	_	UNKWN	_	UNKVN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKVN	-	CAN COMM CIRCUIT (U1000)	-
ABS	_	NG	UNKWN	UNKVN	UNKWN	-	UNKWN	_	UNKVN	-	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	-	-	_	CAN COMM CIRCUIT (U1000)	_
		I			ı	ı	ı					l	(0.000)	



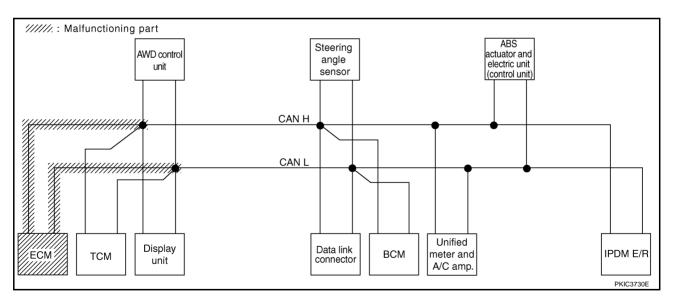
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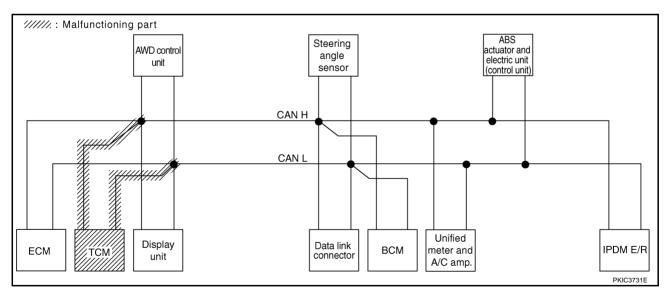
Case 4
Check ECM circuit. Refer to <u>LAN-458</u>, "ECM Circuit Inspection" .

						CAN DIA	AG SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit		1	ı		ceive diagn	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	_	_	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	UNKWN	_	ı	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKVN	_	_	_	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKVN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKVN	-	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	-	UNKWN	UNKVN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKVN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	-	_	_	_	CAN COMM CIRCUIT (U1000)	_



Case 5
Check TCM circuit. Refer to <u>LAN-458</u>, "TCM Circuit Inspection" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scr	een	Initial	Transmit				Re	ceive diagn	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNK VN	_	_	UNKWN	ı	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMP CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKVN	_	_	UNKVN	ı	ı	UNKVN	UNKVN	ı	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
	•				•	•					•	•		•
IFUNI EA	indication		ONKWIN	ONRWIN				ONKWIN						



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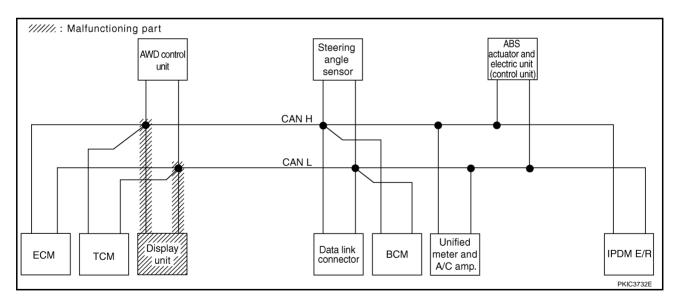
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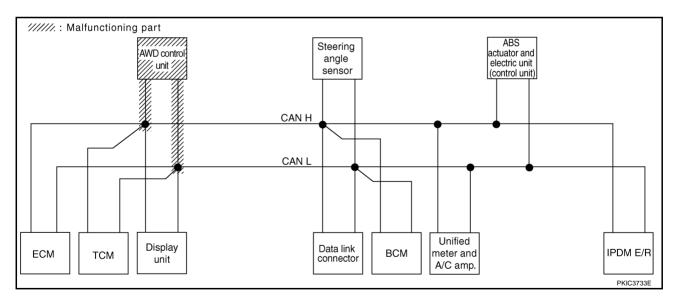
Case 6
Check display unit circuit. Refer to <u>LAN-459</u>, "<u>Display Unit Circuit Inspection</u>" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scree	·n	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	ı	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (U1001)
A /T	_	NG	UNKWN	UNKWN	_	_	UNKWN	-		UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
Display unit	_	NG	UNK WN	UNKVN	_	_	-	UNKVN	_	UNKVN	_	UNKVN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	1	ı	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	ı	-	_	UNKWN	-	UNKWN	CÂN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	-	_	-	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
					•	•			•		•	•	, ,	



Case 7
Check AWD control unit circuit. Refer to <u>LAN-459</u>, "AWD Control Unit Circuit Inspection" .

ATT — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — — — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — — — — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — — UNKWN — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — UNKWN — UNKW							CAN DIA	G SUPPOF	RT MNTR						
Magnosis diagnosis ECM TCM DISPLAY AWD BCM /SEC STRG METER VDC/TCS IPDM /ABS E/R	SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
ENGINE — NG UNKWN — UNKWN — UNKWN — UNKWN UNKWN UNKWN UNKWN CIRCUIT (U1000) A/T — NG UNKWN UNKWN — UNKWN — UNKWN — UNKWN UNKWN — CROUT (U1000) Display unit — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — — — ALL MODE AWD/4WD — NG UNKWN — — — — — — — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) BCM NO indication NG UNKWN UNKWN — — — — — UNKWN — UNKWN — UNKWN CIRCUIT — (U1000) METER A/C AMP NO indication — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — UNKWN — — — — CAN COMM CIRCUIT — (U1000) ABS — NG UNKWN UNKWN UNKWN UNKWN — UNKWN — UNKWN — — — — CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000)					ECM	тсм	DISPLAY			STRG					
A/T — NG UNKWN UNKWN — UNKWN — UNKWN UNKWN — CIRCUIT (U1000) Display unit — NG UNKWN UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT (U1000) BCM NO Indication NG UNKWN UNKWN — — — — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) METER A/C AMP NO INDICATE AND UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) ABS — NG UNKWN UNKWN UNKWN UNKWN — UNKWN — UNKWN — — — CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000) CAN COMM CIRCUIT — (U1000)	ENGINE	_	NG	UNKWN	I	UNKWN	_	_	UNKWN	ı	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CAN CON CIRCUIT (U1001)
ALL MODE AWD/4WD — NG UNKWN — — — — — — — — — — — — — — — — — — —	A/T	_	NG	UNKWN	UNKWN	_	_	UNKVN	1	ı	UNKWN	UNKWN	ı	CIRCUIT	-
BCM No indication NG UNKWN UNKWN — — — — — UNKWN — UNKWN — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — UNKWN	Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	UNKWN		
BCM	ALL MODE AWD/4WD	_	NG	UNKVN	-	-	-	-	1	_	-	_	-	CAN COMM CIRCUIT (U1000)	_
ABS — NG UNKWN UNKWN — UNKWN — UNKWN — UNKWN — — — CAN COMM CIPCUIT — (U100)	всм		NG	UNKWN	UNKWN	-	_	-	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
ABS — NG UNKWN UNKWN — UNKWN — UNKWN — UNKWN — — — CAN COMM CIPCUIT — (U100)	METER A/C AMP		-	UNKWN	UNKWN	UNKWN	UNKWN	UNKVN	UNKWN	_	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
	ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKVN	_	UNKWN	-	_	_	CAN COMM CIRCUIT	
IPDM E/R Indication — UNKWN UNKWN — <td>IPDM E/R</td> <td>No indication</td> <td>-</td> <td>UNKWN</td> <td>UNKWN</td> <td>-</td> <td>_</td> <td>-</td> <td>UNKWN</td> <td>_</td> <td>_</td> <td>_</td> <td>_</td> <td>CIRCUIT</td> <td>_</td>	IPDM E/R	No indication	-	UNKWN	UNKWN	-	_	-	UNKWN	_	_	_	_	CIRCUIT	_



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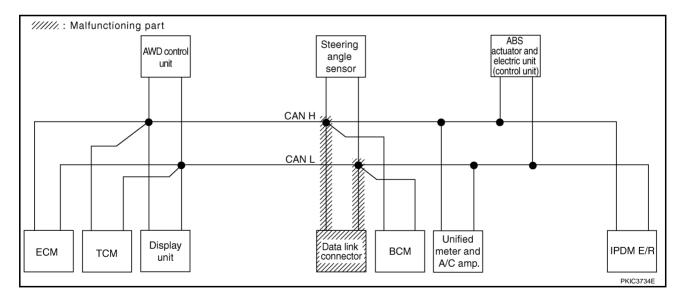
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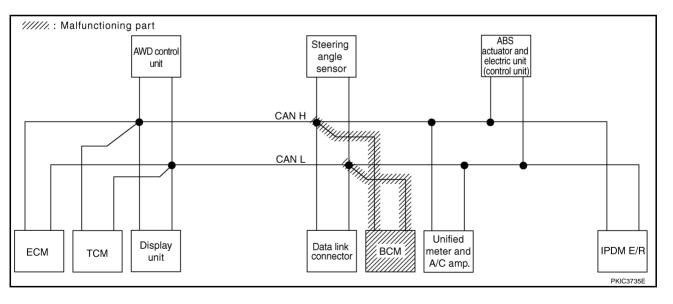
Case 8
Check data link connector circuit. Refer to <u>LAN-460</u>, "<u>Data Link Connector Circuit Inspection</u>" .

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	een	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAC	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKWN	_	ı	UNKWN	ı	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A /T	_	NG	UNKWN	UNKWN	_	_	UNKWN	ı	ı	UNKWN	UNKWN	ı	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	-	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	-	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indi N ition	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indi X ition	_	UNKWN	UNKWN	_	_	ı	UNKWN	ı	I	_	ı	CAN COMM CIRCUIT (U1000)	_
	•				•	•					•			•



Case 9
Check BCM circuit. Refer to <u>LAN-460, "BCM Circuit Inspection"</u>.

						CAN DIA	G SUPPOF							
SELECT SYSTEM scre	een	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKVN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMI CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indiation	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNK V N	_	1	UNKWN	1	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	ı	_	ı	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNK VN	_	-	-	-	CAN COMM CIRCUIT (U1000)	_
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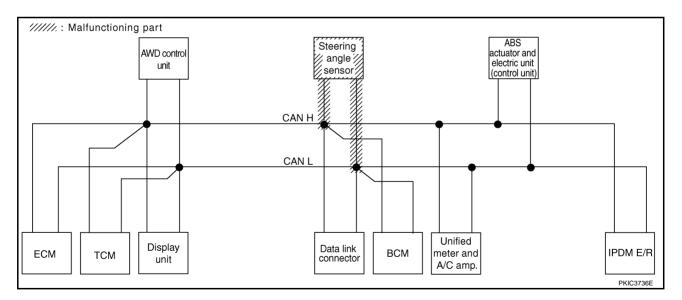
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Case 10
Check steering angle sensor circuit. Refer to <u>LAN-461</u>, "Steering Angle Sensor Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	Transmit		1		Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	ı	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	-	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	-	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	ı	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	1	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	1	UNKVN	-	ı	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	_	ı	UNKWN	_	I	ı	ı	CAN COMM CIRCUIT (U1000)	ı
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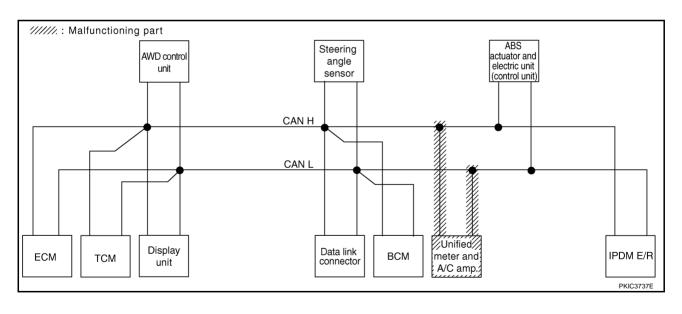
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Case 11

Check unified meter and A/C amp. circuit. Refer to LAN-461, "Unified Meter and A/C Amp. Circuit Inspection".

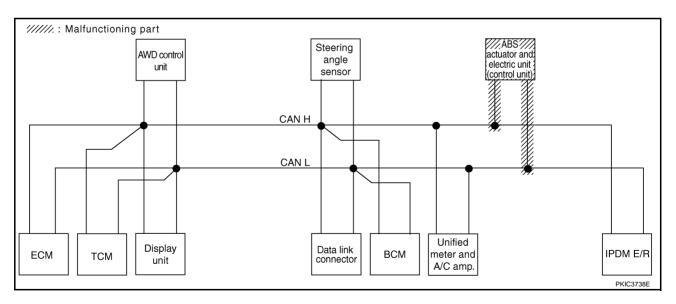
						CAN DIA	AG SUPPOF							
SELECT SYSTEM scre	en	Initial	Transmit		I			ceive diagno	osis		1		SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	1	UNKWN	_	_	UNKWN	_	UNKVN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
V T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKVN	_	UNKWN	_	ı
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	-	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U1000)	ı
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	-
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	1	_	_	CAN COMM CIRCUIT (U1000)	_



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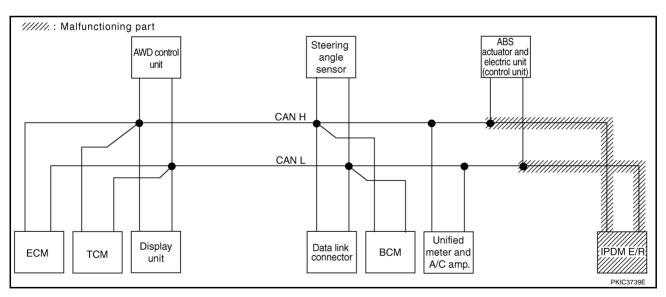
Case 12
Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-462</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

						CAN DIA	AG SUPPOF							
SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	тсм	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	-	-	UNKWN	_	UNKWN	UNKVN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	ı	UNKWN	UNKVN	I	CAN COMM CIRCUIT (U1000)	ı
Display unit	_	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	-	_	-	_	UNKWN	UNKVN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	_	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKVN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	₩	UNKVN	UNKWN	UNKWN	_	UNKWN	_	UNKVN	_	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	_



Case 13
Check IPDM E/R circuit. Refer to LAN-462, "IPDM E/R Circuit Inspection".

						CAN DIA	G SUPPOF	RT MNTR						
SELECT SYSTEM scre	en	Initial	T				Re	ceive diagno	osis				SELF-DIAG	BESULTS
GELEGI GIGIEM CORC	,011	diagnosis	Transmit diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	_	_	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COL CIRCUI (U1001
A /T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	_	NG	UNKWN	UNKWN	-	_	-	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	-	_	_	_	UNKWN	_	UNKVIN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	_	_	_	_	CAN COMM CIRQUIT (U1000)	_



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Case 14
Check CAN communication circuit. Refer to <u>LAN-463</u>, "CAN Communication Circuit Inspection".

A/T — NG UNKWN UNKWN — — UNKWN — UNKWN — CAN COMM CIRCUIT (U1000) Display unit — NG UNKWN UNKWN — — — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT (U1000) ALL MODE AWD/4WD — NG UNKWN — — — — — — — — — — — — — — — — — — —							CAN DIA	G SUPPOF							
ENGINE — NG UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN UNKWN UNKWN — CAN COMM CIRCUIT CIRCUIT (U1001) A/T — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT (U1001) Display unit — NG UNKWN UNKWN — — — UNKWN — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT (U1001) ALL MODE AWD/4WD — NG UNKWN UNKWN — — — — — — — — UNKWN — UNKWN — UNKWN — — — — — — — — — — — — — — — — — — —	SELECT SYSTEM scre	een					I				METED	VDC/TCS	IDDM	SELF-DIAG	RESULTS
A/T — NG UNKWN UNKWN — — UNKWN — UNKWN — UNKWN — CAN COMM — CAN CO			diagnosis	diagnosis	ECM	TCM	DISPLAY			STRG					
A/T — NG UNKWN UNKWN — — UNKWN — UNKWN — CIRCUIT — Display unit — NG UNKWN UNKWN — — — UNKWN — UNKWN — UNKWN — UNKWN — — — ALL MODE AWD/4WD — NG UNKWN — — — — — — — — — — — — — — — — — — —	ENGINE	_	NG	UNKVN	_	UNKVIN	_	_	UNKWN	_	UNKWN	UNKWN	UNKVN	(U1 0 00)	CAN COM CIRCUIT (U1001)
ALL MODE AWD/4WD — NG UNKWN — — — — — — — — — — — — — — — — — — —	A/T	_	NG	UNKWN	UNKWN	_	_	UNKVN	_	_	UNK V N	UNKVN	_	CAN COMM CIRCUIT (U1000)	ı
ALL MODE AWD/4WD — NG UNKWN — — — — — — — — — — — — — — — — — — —	Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	-
BCM	ALL MODE AWD/4WD	_	NG	UNK V N	-	_	-	-	-	-	_	_	-	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP Indication — UNKWN UNKWN UNKWN UNKWN UNKWN — — UNKWN — <td>BCM</td> <td>No ind ation</td> <td>NG</td> <td>UNKWN</td> <td>UNKWN</td> <td>_</td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>UNKWN</td> <td>-</td> <td>UNKWN</td> <td>CAN COMM CIRCUIT</td> <td>_</td>	BCM	No ind ation	NG	UNKWN	UNKWN	_	-	-	_	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT	_
ABS - UNION UNION UNION - UNION - UNION - CIRCUIT -	METER A/C AMP	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
IDDM E/D NO LINICANA	ABS	_	W	UNKVN	UNK V N	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CIRCUIT (U1000)	
individual — ONAWN — — — ONAWN — — — (U1000)	IPDM E/R	No indication	_	UNKWN	UNKWN	_	-	-	UNKWN	-	-	_	_	CAN COMM CIRCUIT (U1000)	_

CAN SYSTEM (TYPE 10)

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Case 15

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-469</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection"</u>.

						CAN DIA	G SUPPOF							
SELECT SYSTEM scre	een	Initial	Transmit		I	1		ceive diagn	osis		I	1	SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	TCM	DISPLAY	AWD /4WD	BCM /SEC	STRG	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	_	NG	UNKWN	ı	UNKVN	_	_	UNKWN	_	UNKWN	UNK N N	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
Display unit	-	NG	UNKWN	UNKWN	_	_	_	UNKWN	_	UNKWN	_	UNKWN	_	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	_	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER A/C AMP	No indication	_	UNKWN	UNKWN	UNK V N	UNKWN	UNKWN	UNKWN	ı	ı	UNK N N	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	_	_	UNKWN	-	-	_	_	CAN COMM CIRCUIT (U1000)	_

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Case 16

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to LAN-469, "IPDM E/R Ignition Relay Circuit Inspection".

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							CAN DIA	G SUPPOF	RT MNTR						
ENGINE	SELECT SYSTEM scre	en	Initial	Transmit				Re	ceive diagno	osis				SELF-DIAG	RESULTS
ENGINE — NG UNKWN — UNKWN — UNKWN — UNKWN UNKWN UNKWN UNKWN — CIRCUIT (U1001) CON COMM (U1000) — CON COMM — CON COMM — — CON COMM — — — — UNKWN — — — UNKWN — — — UNKWN — — — — UNKWN — — — — UNKWN — — — — — UNKWN — — — — — UNKWN — — — — — — —<					ECM	ТСМ	DISPLAY			STRG					
A/T — NG UNKWN — — — — — — — — UNKWN — UNKWN — CIRCUIT — (U1000) Display unit — NG UNKWN UNKWN — — — UNKWN — UNKWN — UNKWN — UNKWN — — — — — CAN COMM CIRCUIT — (U1000) BCM NO Indication NG UNKWN UNKWN — — — — — UNKWN — UNKWN — UNKWN — CAN COMM CIRCUIT — (U1000) METER A/C AMP NO INDICATE AND UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — — — UNKWN — CAN COMM CIRCUIT — (U1000) ABS — NG UNKWN — UNKWN — — — — — — — — — CAN COMM CIRCUIT — (U1000) IPDM E/R NO INDICATE AND UNKWN UNKWN — — — — — — — — — CAN COMM CIRCUIT — (U1000)	ENGINE	_	NG	UNKWN	I	UNKWN	_	I	UNKWN	I	UNKWN	UNKWN	UNKWN	CIRCUIT (U1000)	CIRCUIT
ALL MODE AWD/4WD — NG UNKWN UNKWN — — — — UNKWN UNKWN — CAN COMM CIRCUIT — (U1000) BCM NO indication NG UNKWN UNKWN — — — — UNKWN UNKWN — UNKWN CIRCUIT (U1000) METER A/C AMP NO indication — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — — UNKWN — CAN COMM CIRCUIT — (U1000) ABS — NG UNKWN — UNKWN — — — — — — — — CAN COMM CIRCUIT — (U1000) IPDM E/R NO INDICATION — UNKWN UNKWN — — — — UNKWN — — — — CAN COMM CIRCUIT — (U1000)	A/T	-	NG	UNKWN	l	ı	_	1	1	l	_	UNKWN	1	CAN COMM CIRCUIT (U1000)	ı
ALL MODE AWD/4WD	Display unit	_	NG	UNKWN	UNKWN	_	_	ı	UNKWN	ı	UNKWN	_	UNKWN	_	_
BCM No indication NG UNKWN UNKWN — — — — UNKWN — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — — UNKWN — — UNKWN — — UNKWN — — — UNKWN — — UNKWN — — UNKWN — — UNKWN — — — UNKWN — — — UNKWN — — — UNKWN — — — — — UNKWN — — — — — — UNKWN — —	ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	_	1	ı	_	UNKWN	UNKWN	_	CIRCUIT (U1000)	_
METER A/C AMP NO Indication — UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN — UNKWN	BCM		NG	UNKWN	UNKWN	_	_	1	1	-	UNKWN	_	UNKWN	CIRCUIT (U1000)	_
ABS — NG UNKWN — UNKWN — — — — — — CIR O IT — (U1000) IPDM E/R	METER A/C AMP		1	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	I	_	UNKWN	I	CIRCUIT (U1000)	ı
IPDM E/R NO	ABS	_	NG	UNKWN	1	UNKWN	_	1	I	I	_	ı	1	CIPCUIT (U1000)	ı
	IPDM E/R		_	UNKWN	UNKWN	_	_	-	UNKWN	_	_	_	-	CIRCUIT	_

Inspection Between TCM and Data Link Connector Circuit

AKS00FDY

1. CHECK HARNESS FOR OPEN CIRCUIT

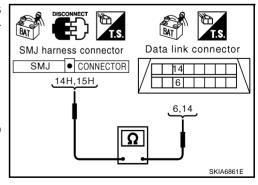
- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and harness connector M82.
- Check continuity between harness connector M82 terminals 14H (L), 15H (R) and data link connector M5 terminals 6 (L), 14 (R).

14H (L) - 6 (L) : Continuity should exist. 15H (R) - 14 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



[CAN]

Inspection Between Data Link Connector and Unified Meter and A/C Amp. Circuit

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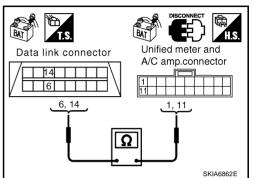
1. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Disconnect ECM connector and unified meter and A/C amp. connector.
- Check continuity between data link connector M5 terminals 6 (L), 14 (R) and unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R).

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



Inspection Between Unified Meter and A/C Amp. and ABS Actuator and Electric **Unit (Control Unit) Circuit** AKSOOFFO

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- 2. Disconnect the battery cable from the negative terminal.
- Check following terminals and connectors for damage, bend and loose connection (connector side and harness side).
- Harness connector M41
- Harness connector E211

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

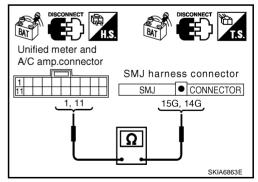
2. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect unified meter and A/C amp. connector and harness connector M41.
- Check continuity between unified meter and A/C amp, harness connector M55 terminals 1 (L), 11 (R) and harness connector M41 terminals 15G (L), 14G (R).

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



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$\overline{3}$. Check harness for open circuit

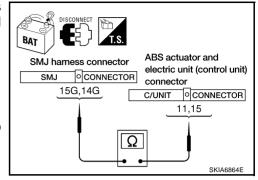
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check continuity between harness connector E211 terminals 15G (L), 14G (R) and ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R).

15G (L) - 11 (L) : Continuity should exist. 14G (R) - 15 (R) : Continuity should exist.

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-7. "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.



AKS00FE1

ECM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of ECM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

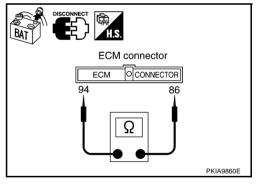
- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector M90 terminals 94 (L) and 86 (R).

94 (L) - 86 (R) : Approx. $108 - 132\Omega$

OK or NG

OK >> Replace ECM.
NG >> Repair harnes

>> Repair harness between ECM and harness connector M82.



AKS00FE2

TCM Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- A/T assembly connector
- Harness connector F102
- Harness connector M82

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

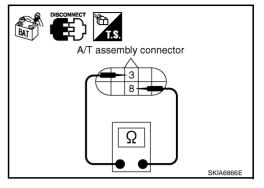
- 1. Disconnect A/T assembly connector.
- 2. Check resistance between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

3 (L) - 8 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace control valve with TCM.

NG >> Repair harness between A/T assembly and display unit.



Display Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- Check terminals and connector of display unit for damage, bend and loose connection (unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

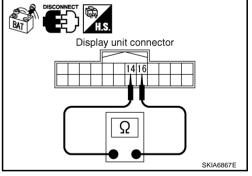
- 1. Disconnect display unit connector.
- 2. Check resistance between display unit harness connector M62 terminals 14 (L) and 16 (R).

14 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace display unit.

NG >> Repair harness between display unit and harness connector M82.



AWD Control Unit Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of AWD control unit for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

and loose connection (unit side and har-

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$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- Disconnect AWD control unit connector. 1.
- Check resistance between AWD control unit harness connector M92 terminals 8 (L) and 16 (R).

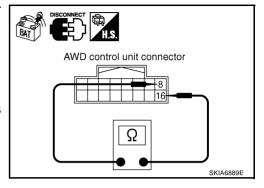
8 (L) - 16 (R) : Approx. 54 -
$$66\Omega$$

OK or NG

OK >> Replace AWD control unit.

NG

>> Repair harness between AWD control unit and harness connector M82.



AKS00FE5

Data Link Connector Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF. 1.
- Disconnect the battery cable from the negative terminal.
- Check data link connector and terminals for damage, bend and loose connection (connector side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

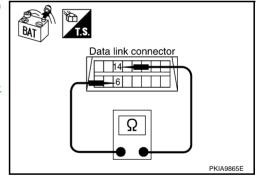
Check resistance between data link connector M5 terminals 6 (L) and 14 (R).

6 (L) - 14 (R) : Approx. 54 - 66
$$\Omega$$

OK or NG

OK >> Diagnose again. Refer to LAN-7, "TROUBLE DIAG-NOSES WORK FLOW".

NG >> Repair harness between data link connector and BCM.



AKS00FF6

BCM Circuit Inspection

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- Check terminals and connector of BCM for damage, bend and loose connection (control module side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect BCM connector.
- 2. Check resistance between BCM harness connector M3 terminals 39 (L) and 40 (R).

: Approx. 54 - 66 Ω

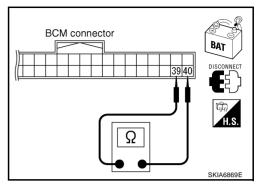
OK or NG

OK

>> Replace BCM. Refer to <u>BCS-16</u>, "Removal and Installation of BCM".

NG >

>> Repair harness between BCM and data link connector.



AKS00FF7

Steering Angle Sensor Circuit Inspection

1. CHECK CONNECTOR

1. Turn ignition switch OFF.

- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of steering angle sensor for damage, bend and loose connection (sensor side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect steering angle sensor connector.
- 2. Check resistance between steering angle sensor harness connector M14 terminals 4 (L) and 5 (R).

: Approx. 54 - 66 Ω

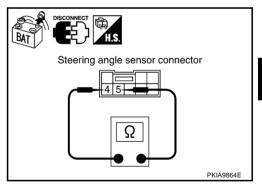
OK or NG

OK

>> Replace steering angle sensor.

NG

>> Repair harness between steering angle sensor and data link connector.



AKS00FE8

Unified Meter and A/C Amp. Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of unified meter and A/C amp. for damage, bend and loose connection (meter side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

$\overline{2}$. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect unified meter and A/C amp. connector.
- 2. Check resistance between unified meter and A/C amp. harness connector M55 terminals 1 (L) and 11 (R).

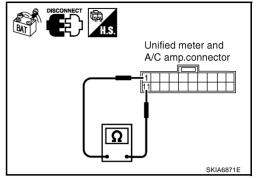
: Approx. 54 - 66 Ω

OK or NG

OK >> Replace unified meter and A/C amp.

NG

>> Repair harness between unified meter and A/C amp. and harness connector M41.



ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00FE9

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check terminals and connector of ABS actuator and electric unit (control unit) for damage, bend and loose connection (control unit side and harness side).

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

: Approx. 54 - 66 Ω

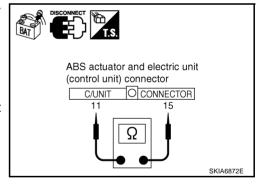
OK or NG

OK

>> Replace ABS actuator and electric unit (control unit).

NG

>> Repair harness between ABS actuator and electric unit (control unit) and harness connector E205.



AKS00FEA

IPDM E/R Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E205
- Harness connector B5

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

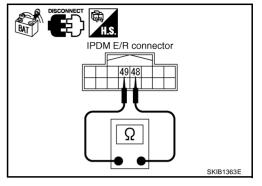
: Approx. 108 - 132 Ω

OK or NG

OK >> Replace IPDM E/R.

NG

>> Repair harness between IPDM E/R and ABS actuator and electric unit (control unit).



AKS00FFB

CAN Communication Circuit Inspection

1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Check following terminals and connectors for damage, bend and loose connection (control module side, control unit side, unit side, sensor side, meter side and harness side).
- ECM
- A/T assembly
- Display unit
- AWD control unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and A/T assembly

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

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$\overline{2}$. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect following connectors.
- ECM connector
- Harness connector M82
- Display unit connector
- AWD control unit connector
- BCM connector
- Steering angle sensor connector
- Unified meter and A/C amp. connector
- Harness connector M41
- 2. Check continuity between data link connector M5 terminals 6 (L) and 14 (R).

OK or NG

OK >> GO TO 3.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M5 terminals 6 (L), 14 (R) and ground.

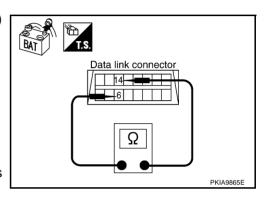
6 (L) - Ground : Continuity should not exist. 14 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between data link connector and ECM
 - Harness between data link connector and harness connector M82
 - Harness between data link connector and display unit
 - Harness between data link connector and AWD control unit
 - Harness between data link connector and BCM
 - Harness between data link connector and steering angle sensor
 - Harness between data link connector and unified meter and A/C amp.
 - Harness between data link connector and harness connector M41



Data link connector

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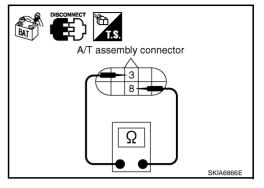
4. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect A/T assembly connector.
- Check continuity between A/T assembly harness connector F44 terminals 3 (L) and 8 (R).

OK or NG

OK >> GO TO 5.

NG >> Repair harness between A/T assembly and harness connector F102.



5. CHECK HARNESS FOR SHORT CIRCUIT

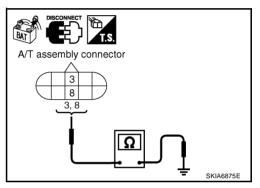
Check continuity between A/T assembly harness connector F44 terminals 3 (L), 8 (R) and ground.

> 3 (L) - Ground : Continuity should not exist. : Continuity should not exist. 8 (R) - Ground

OK or NG

OK >> GO TO 6.

NG >> Repair harness between A/T assembly and harness connector F102.



6. CHECK HARNESS FOR SHORT CIRCUIT

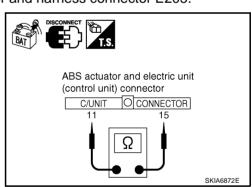
- Disconnect ABS actuator and electric unit (control unit) connector and harness connector E205.
- Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L) and 15 (R).

OK or NG

OK >> GO TO 7.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



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7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between ABS actuator and electric unit (control unit) harness connector E56 terminals 11 (L), 15 (R) and ground.

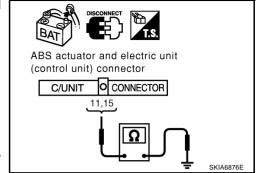
11 (L) - Ground : Continuity should not exist. 15 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 8.

NG

- >> Check the following harnesses. If any harness is damaged, repair the harness.
 - Harness between ABS actuator and electric unit (control unit) and harness connector E211
 - Harness between ABS actuator and electric unit (control unit) and harness connector E205



8. CHECK HARNESS FOR SHORT CIRCUIT

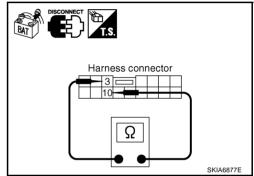
Check continuity between harness connector B5 terminals 3 (L) and 10 (R).

3 (L) - 10 (R) : Continuity should not exist.

OK or NG

OK >> GO TO 9.

NG >> Repair harness between harness connector B5 and harness connector B5.



9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B5 terminals 3 (L), 10 (R) and ground.

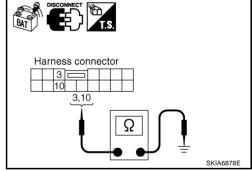
3 (L) - Ground : Continuity should not exist.10 (R) - Ground : Continuity should not exist.

OK or NG

NG

OK >> GO TO 10.

>> Repair harness between harness connector B5 and harness connector B5.



10. CHECK HARNESS FOR SHORT CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (R).

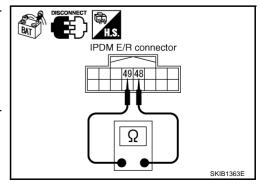


OK or NG

NG

OK >> GO TO 11.

>> Repair harness between IPDM E/R and harness connector E205.



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11. CHECK HARNESS FOR SHORT CIRCUIT

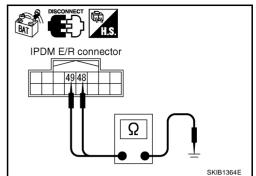
Check continuity between IPDM E/R harness connector E9 terminals 48 (L), 49 (R) and ground.

48 (L) - Ground : Continuity should not exist. 49 (R) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 12.

NG >> Repair harness between IPDM E/R and harness connector E205.



12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

1. Remove ECM and IPDM E/R from vehicle.

2. Check resistance between ECM terminals 94 and 86.

94 - 86 : Approx. $108 - 132\Omega$

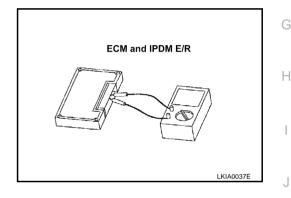
3. Check resistance between IPDM E/R terminals 48 and 49.

48 - 49 : Approx. $108 - 132\Omega$

OK or NG

OK >> GO TO 13.

NG >> Replace ECM and/or IPDM E/R.



13. СНЕСК ЅҮМРТОМ

- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

OK or NG

OK >> GO TO 14.

NG >> Refer to LAN-16, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"

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14. CHECK UNIT REPRODUCIBILITY

Performs the following procedure for each unit, and then perform reproducibility test.

- Turn ignition switch OFF.
- Disconnect the battery cable from the negative terminal.
- 3. Disconnect the unit connector.
- 4. Connect the battery cable to the negative terminal.
- 5. Make sure that the symptom filled in the "Symptom" of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
- 6. Make sure that the same symptom is reproduced.
- A/T assembly
- Display unit
- AWD control unit
- BCM
- Steering angle sensor
- Unified meter and A/C amp.
- ABS actuator and electric unit (control unit)
- ECM
- IPDM E/R

Check results

Reproduce>>Install removed unit, and then check the other unit.

Not reproduced>>Replace removed unit.

CAN SYSTEM (TYPE 10)

[CAN]

IPDM E/R Ignition Relay Circuit Inspection

AKS00FEC

Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to PG-28, "IPDM E/R Power/Ground Circuit Inspection".
- Ignition power supply circuit. Refer to <u>PG-12, "IGNITION POWER SUPPLY IGNITION SW. IN "ON" AND/OR "START"</u>.

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