SECTION LAN SYSTEM

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PRECAUTIONS

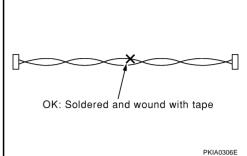
DRECALITIONS

[CAN]

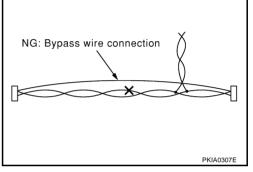
Pr	RECAUTIONS PFP:0001	
	ecautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT ELT PRE-TENSIONER"	A
wit typ	e Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along h a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain bes of collision. Information necessary to service the system safely is included in the SRS and SB section of s Service Manual.	В
	ARNING:	С
•	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 per- formed by an authorized NISSAN/INFINITI dealer.	D
•	Improper maintenance, including incorrect removal and installation of the SRS, can lead to per- sonal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.	Е
•	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.	F
Pr	recautions When Using CONSULT-II GKS000B	
Wł	nen connecting CONSULT-II to data link connector, connect them through CONSULT-II CONVERTER.	G
	NUTION:	0
	CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be tected in self-diagnosis depending on control unit which carry out CAN communication.	Н
СН	IECK POINTS FOR USING CONSULT-II	
1.	······································	
-	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?	J
-	If YES, GO TO 3.	
-	If NO, GO TO 4.	LAN
3.	Based on self-diagnosis results unrelated to CAN communication, carry out the inspection.	LAN
4.	Malfunctions may be detected in self-diagnosis depending on control units carrying out CAN communica- tion. Therefore, erase the self-diagnosis results.	
5.	Diagnose CAN communication system. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW".	L
Pr CA	ecautions for Trouble Diagnosis	M
•	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.	

Precautions for Harness Repair CAN SYSTEM

• 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.)



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[CAN]

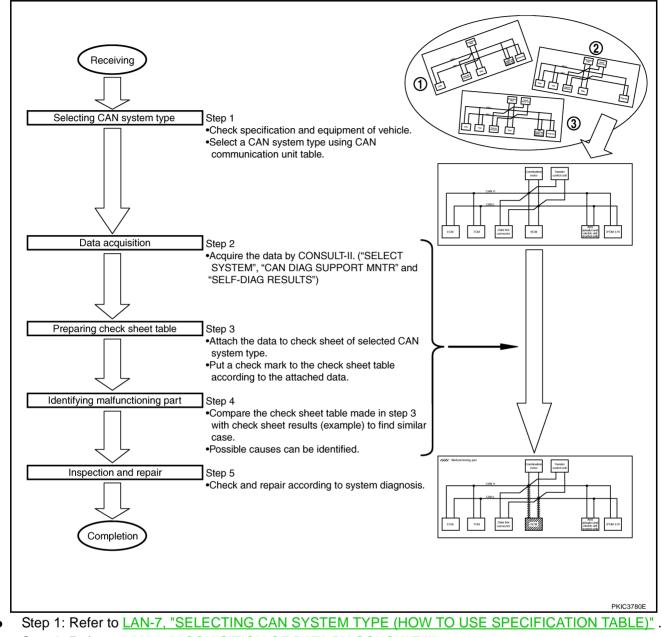
	[CAN]
TROUBLE DIAGNOSES WORK FLOW	PFP:00004
When Displaying CAN Communication System Errors WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM	GKS0008E
CAN communication line is open. (CAN H, CAN L, or both)	
CAN communication line is shorted. (Ground, between CAN lines, or other harnesses)	
 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 sense to CAN communication are removed and installed, malfunction may be detected (or DTC other 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 detected by self-diagnosis according to the units.	on may be

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TROUBLE DIAGNOSIS FLOW CHART



- Step 2: Refer to LAN-8, "ACQUISITION OF DATA BY CONSULT-II" .
- Step 3: Refer to LAN-9, "HOW TO USE CHECK SHEET TABLE" .
- Step 4: Refer to LAN-10, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced" .
- Step 5: Refer to LAN-182, "TROUBLE DIAGNOSIS FOR SYSTEM".

[CAN]

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

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

	cation		oting				a fram	the fel	louina	tabla			
Go to CAN syst		enseie	ecting y		AIN SYSI	Tru		the loi	lowing	lable.			٦ ١
Axle		2V	VD					41	VD				
Engine	VQ4	10DE	YD25	5DDTi		VQ4	0DE			YD25	DDTi		Check basic specification of the vehicle.
Transmission	M/T	A/T	M/T	A/T	м	/Т	A	/Т	M	/T	A	/T	1
Brake control		A	BS			ABS		ABS		ABS		ABS	<u>)</u>
AN system type	1	2	3	4	5	6	7	8	9	10	11	12	
CAN system trouble diagnosis	XX:XX	XX:XX	XX-XX.	XX:XX	XX:XX	XX-XX	XX-XX	XX:XX	XX:XX	XX-XX.	XX-XX	XX:XX	Which number is selected when sequentially selecting from the top of
				-									the specification table? The number is "CAN system type" of the applicable vehicle.
													In the case of this example: It corresponds to type 8.

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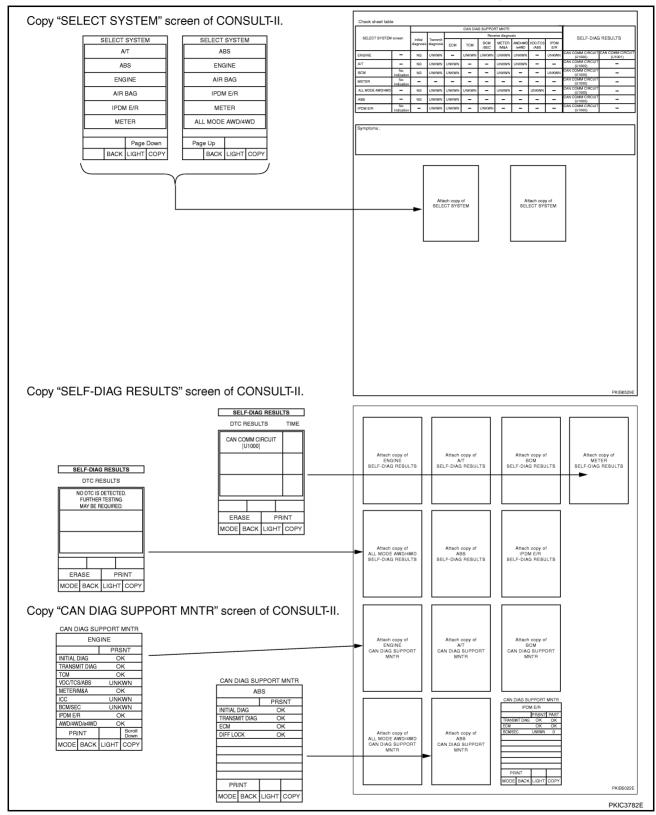
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ACQUISITION OF DATA BY CONSULT-II

Attach the data acquired by CONSULT-II on the check sheet determined according to CAN system type.



[CAN]

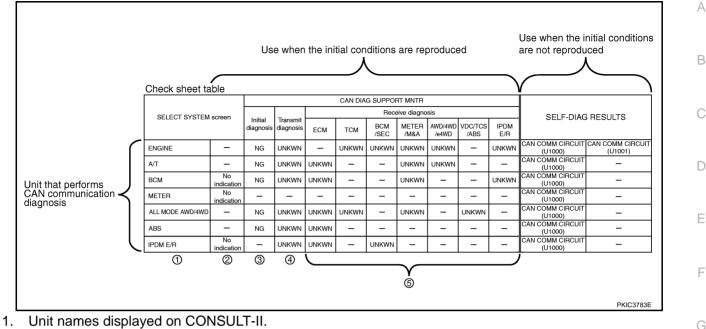
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HOW TO USE CHECK SHEET TABLE



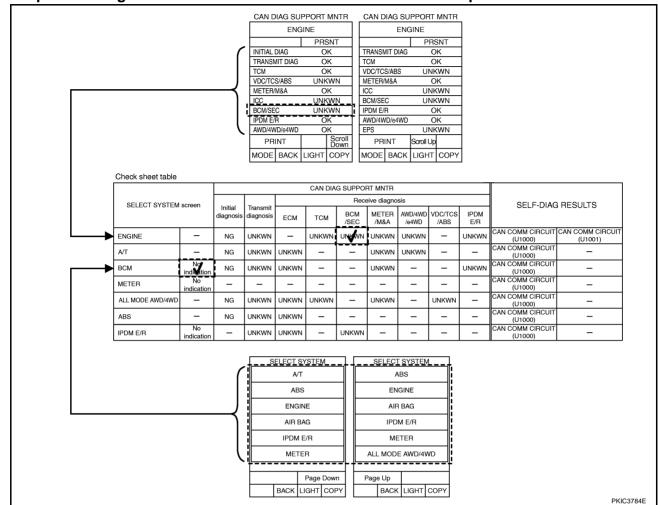
- "No indication": Put a check mark to it if the unit name described in step 1 is not displayed on "SELECT SYSTEM" screen of CONSULT-II. (Unit communicating with CONSULT-II via CAN communication line) "-": Column not used (Unit communicating with CONSULT-II excluding CAN communication line)
- "NG": Display "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. "-": Column not used (Transmit diagnosis is not performed.)
- "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-10</u>, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced".
- When the initial conditions are not reproduced, refer to <u>LAN-13</u>, "Example of Filling in Check Sheet When <u>Initial Conditions Are Not Reproduced</u>".



Example of Filling in Check Sheet When Initial Conditions Are Reproduced

1. 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.

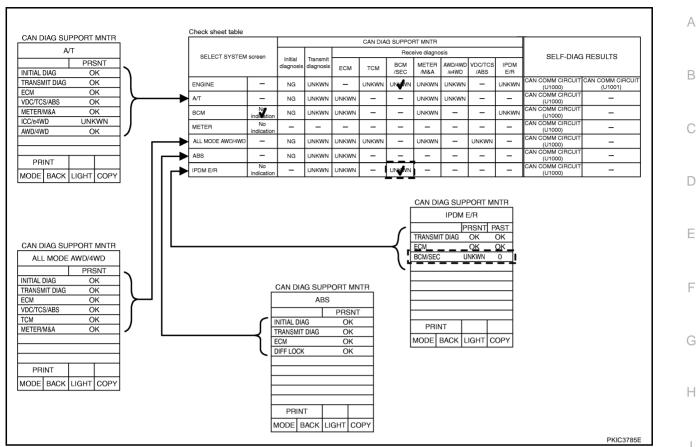
NOTE:

Put a check mark to "No indication" of BCM because BCM 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 "VDC/TCS/ABS", "ICC", "BCM/SEC" and "EPS". But put a check mark to "BCM/SEC" 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", "ALL MODE AWD/4WD", "ABS" and "IPDM E/R" as well as "ENGINE". And then, put a check mark to the check sheet table.

NOTE:

- For "A/T", "UNKWN" is displayed on "ICC/e4WD". But, do not put a check mark to their columns of reception diagnosis of the check sheet table because "UNKWN" is not listed.
- For "ALL MODE AWD/4WD", "UNKWN" is not displayed. Do not put a check mark to it.
- For "ABS", "UNKWN" is not displayed. Do not put a check mark to it.
- For "IPDM E/R", "UNKWN" is displayed on "BCM/SEC". Put a check mark to it.

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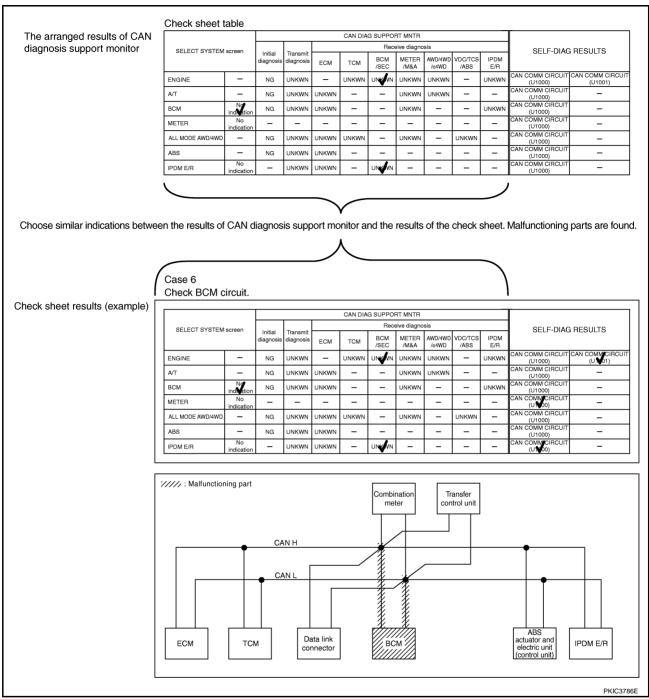
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[CAN]



NOTE:

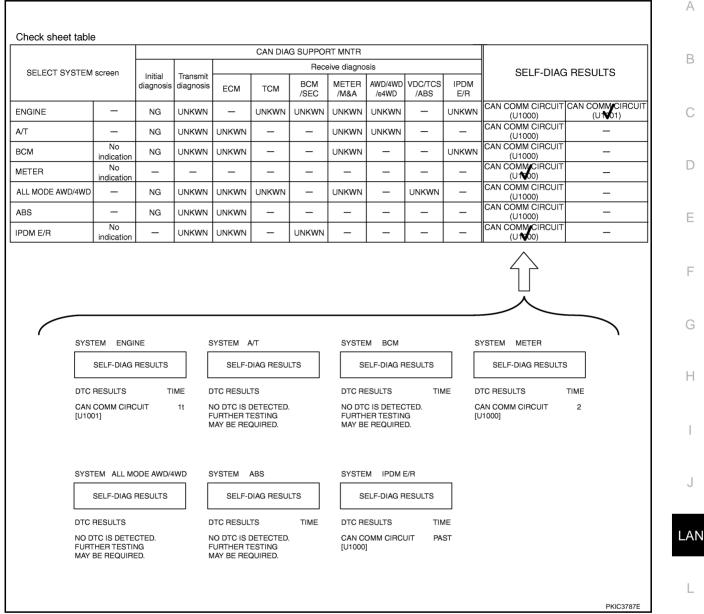
There is a case that some of "CAN DIAG SUPPORT MNTR" and "SELF-DIAG RESULTS" are not needed for diagnosis. In the case, "UNKWN" and "CAN COMM CIRCUIT [U1000]" in "Check sheet results (example)" change to "–". Then, ignore check marks on the check sheet table.

- 4. Perform system diagnosis for possible causes identified.
- 5. 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-26, "CAN Communica-</u> tion Unit".

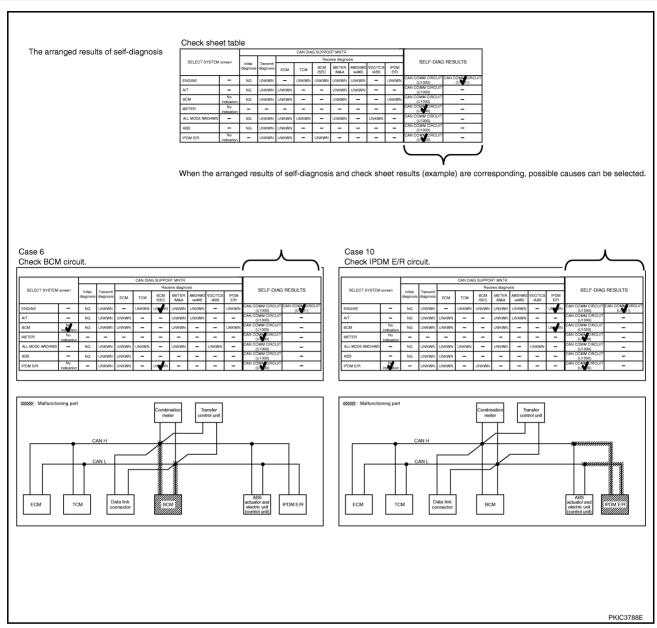
[CAN]

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", "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.
 - NOTE:
 - For "ENGINE", "CAN COMM CIRCUIT [U1001]" is displayed. Put a check mark to it.
 - For "A/T", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
 - For "BCM", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
 - For "METER", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.
 - For "ALL MODE AWD/4WD", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
 - For "ABS", "NO DTC IS DETECTED" is displayed. Do not 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.

CAN Diagnostic Support Monitor DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ECM VQ40DE

(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 UNKWN
	VDC/TCS/ABS UNKWN	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 OK
	AWD/4WD/e4WD OK	EPS UNKWN
	PRINT Scroll Down	PRINT Scroll Up
	MODE BACK LIGHT COPY	MODE BACK LIGHT COPY

"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
	ТСМ	Make sure of normal reception from TCM.	OK/UNKWN
	VDC/TCS/ABS	VDC/TCS/ABS is not diagnosed.	UNKWN
ENGINE	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	ICC	ICC is not diagnosed.	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	Make sure of normal reception from transfer control unit.	OK/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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25DDTi	(Example)	CAN D	IAG SU	PPORT	MNTR		
	(Example)		ENG	AINE			
				PR	SNT		
		INITIAL I	DIAG	C	ιK		
		TRANSM	AIT DIAG	C	ιK		
		TCM		C	ιK		
		VDC/TC:	S/ABS	С	ιK		
		METER/	M&A	C	к		
		BCM/SE	C	С	к		
		HVAC		UN	(WN		
		PR	INT				
		MODE	BACK	LIGHT	COPY		
						PKIC379	}8E

"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
	ТСМ	Make sure of normal reception from TCM.	OK/UNKWN
ENGINE	VDC/TCS/ABS	VDC/TCS/ABS is not diagnosed.	ОК
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN
	HVAC	HVAC is not diagnosed.	UNKWN

Display Results (Present)

OK: Normal

NG: Malfunction

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

[CAN]

UNKWN

OK/UNKWN

DESCRIPTION C FOR TCM	OF "CAN DIAG SUP	PORT MNTR" SCREEN		CAN DIAG SUPPORT MN A/T PRSNT NITIAL DIAG OK TRANSMIT DIAG OK ECM OK VDC/TCS/ABS OK METER/M&A OK CC/64WD UNKWT WWD/4WD OK PRINT OK PRINT CC		A B C
"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Descriț	otion		Present	D
	INITIAL DIAG	Make sure that microcomputer in E	ECU works nor	mally.	OK/NG	F
	TRANSMIT DIAG	Make sure of normal transmission			OK/UNKWN	<u>_</u>
	ECM	Make sure of normal reception from	m ECM.		OK/UNKWN	
A/T	VDC/TCS/ABS	VDC/TCS/ABS is not diagnosed.			ОК	F
	METER/M&A	Make sure of normal reception from	m combination	meter.	OK/UNKWN	

ICC/e4WD is not diagnosed.

Make sure of normal reception from transfer control unit.

Display Results (Present)

ICC/e4WD

AWD/4WD

• 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 [(Example

ample)	CAN D	IAG SU	PPORT	MNTR	
• •		BC	M		
			PR	SNT	
	INITIAL	DIAG	0	ĸ	
	TRANSM	/IT DIAG	0	ĸ	
	ECM		0	К	
	IPDM E/	R	0	K	
	METER/	M&A		K	
	I-KEY		UNM	(WN	
	PR	INT			
	MODE	BACK	LIGHT	COPY	PKIC2532E
					0_00

"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
ВСМ	ECM	Make sure of normal reception from ECM.	OK/UNKWN
DCIVI	IPDM E/R	Make sure of normal reception from IPDM E/R.	OK/UNKWN
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	I-KEY	I-KEY is not diagnosed.	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 (E) FOR TRANSFER CONTROL UNIT

						-	_		
xample)	CAN D	IAG SU	PPORT	MNTR					
• •	ALI	MODE	AWD/4	WD				ŀ	4
			PR	SNT	1				
	INITIAL	DIAG	0	ĸ	1				
	TRANSM	/IT DIAG	0	ĸ	1				
	ECM		0	ĸ				E	2
	VDC/TC	S/ABS	0	ĸ				L	2
	TCM		0	Ř					
	METER/	M&A	0	ĸ					
								(2
	PR	INT							
	MODE	BACK	LIGHT	COPY	1				
						PKIC259	94E		
				-)

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description			
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG	F	
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN		
	ECM	Make sure of normal reception from ECM.	OK/UNKWN		
ALL MODE AWD/ 4WD	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN	F	
	ТСМ	Make sure of normal reception from TCM.	OK/UNKWN		
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN	G	

Display Results (Present)

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

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(Example) CAN DIAG SUPPORT MNTR ABS PRSNT INITIAL DIAG OK J TRANSMIT DIAG OK ECM OK LAN PRINT L MODE BACK LIGHT COPY PKIA8949E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present	M
	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG	1 v 1
ABS	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN	
	ECM	Make sure of normal reception from ECM.	OK/UNKWN	

Display Results (Present)

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

[CAN]

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[CAN]

DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN

ample)	CAN D	IAG SU	PPORT	MNTR	
. ,		IPDN	1 E/R		
			PRSNT	PAST	
	TRANSM	IIT DIAG	OK	OK	
	ECM		OK	OK	
	BCM/SEC	0	OK	OK	
	PRI	NT			
	MODE	BACK	LIGHT	COPY	SKIB0595E

"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)

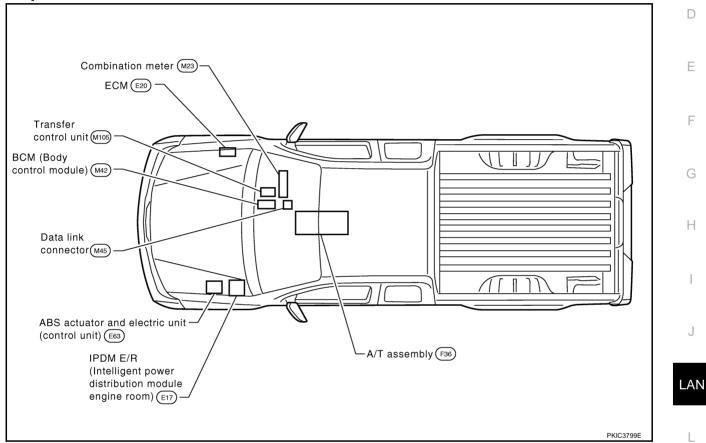
- OK: Normal
- 0: There is malfunction now.
- 1 39: Displays when it is normal at present and finds malfunction in the past. It increases like 0→1→2...38→39 after returning to the normal condition whenever IGN OFF→ON. If it is over 39, it is fixed to 39 until the self-diagnostic results are erased. It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

CAN COMMUNICATION

System Description

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.

Component Parts and Harness Connector Location



M

PFP:23710

GKS0008H

GKS00081

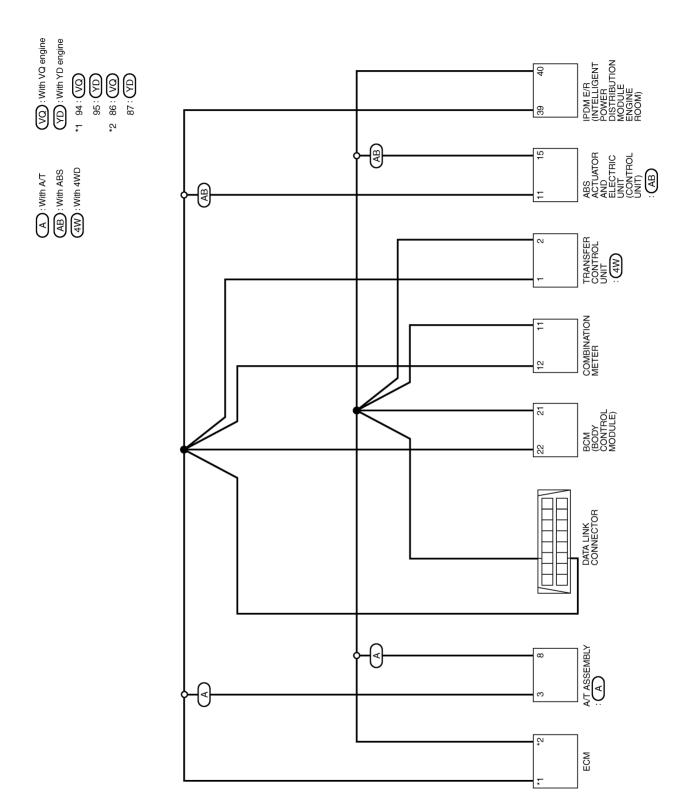
А

В

С

Schematic

[CAN]



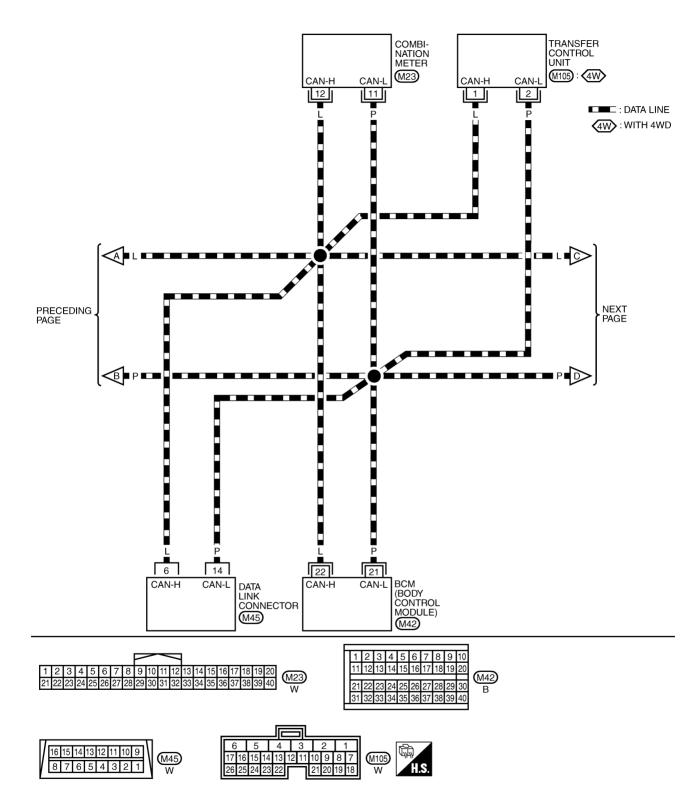
MKWA4151E

[CAN] Wiring Diagram — CAN — GKS0008K А LAN-CAN-01 DATA LINE A : WITH A/T В M : WITH M/T VQ : WITH VQ ENGINE (YD): WITH YD ENGINE С M ┎╼╾╼╾╼╾╼╾╴∊╺[2]╸∊╺╴Ѧ┝╸Ӧ╶╼╾╶└╺┋╝╸∊╸Ѧ 2 D E9 F4 (F2) (E8)E101 M91 NEXT PAGE F F) **— (** A) **—** P **—** 3 *1 94 : VQ G 95 : YD *2 86 : VQ 87 : **(YD**) Н I J P 3 LAN 8 ΒR L/Y Р **1** *2 2 A/T тсм L ASSEMBLY (TRANSMISSION CONTROL MODULE) CAN-H CAN-L CAN-H CAN-L F36 : A ECM E20 (F502) Μ REFER TO THE FOLLOWING. (M91) - SUPER MULTIPLE 108 109 110 111 112 113 119 120 121 98 99 100 101 102 103 104 JUNCTION (SMJ) 117 118 (E20) 9 10 11 12 (F2) 4 5 6 78 3 H.S 90 91 92 93 94 95 В 23 24 w 114 115 116 82 83 84 85 86 87 88 89 Ъ (F502) GR 12 89 (F4) (F36) 3 4 5 6 12345678910 W G 14 15 16 *: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

MKWA3922E

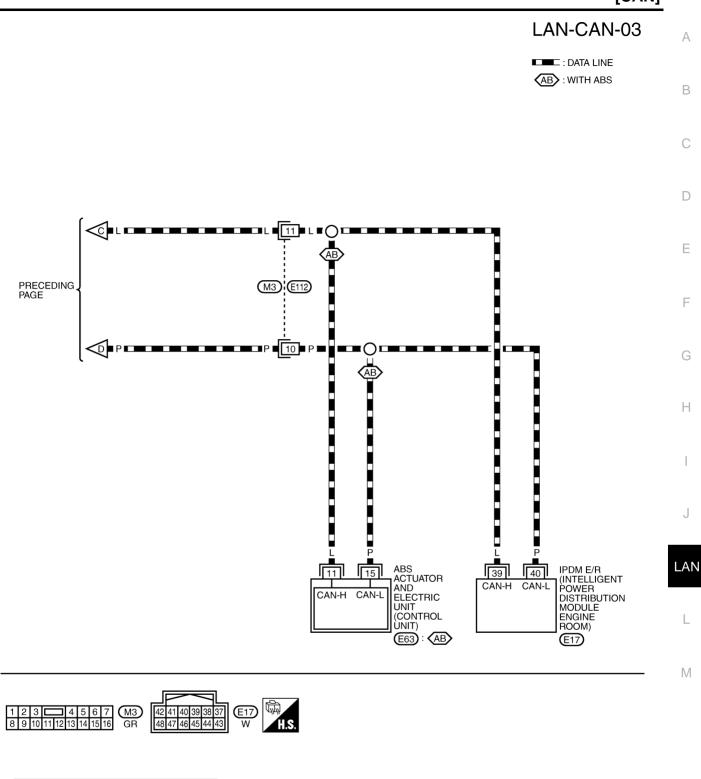
[CAN]

LAN-CAN-02



MKWA4152E

[CAN]



<u> </u>			
32	33 34 35 36 37 38 39 40 41 42 43 44 45 46	47	
1	17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 2 3 4 5 6 7 8 9 10 11 12 13 14 15	16	<u>E63</u> B
			,

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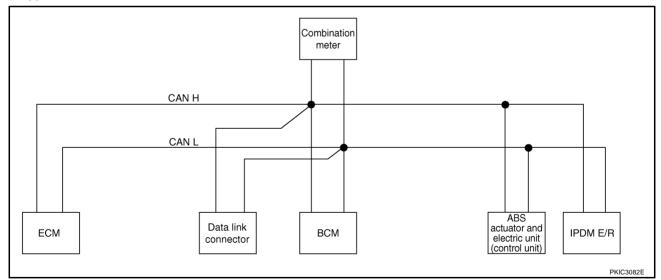
CAN Communication Unit

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

Body type		Truck										
Axle		21	VD					4۷	VD			
Engine	VQ2	10DE	YD2	5DDTi		VQ2	10DE			YD2	5DDTi	
Transmission	M/T	A/T	M/T	A/T	N	1/T	A	/T	N	I/T	A	/T
Brake control		А	BS	I		ABS		ABS		ABS		ABS
CAN system type	1	2	3	4	5	6	7	8	9	10	11	12
CAN system trouble diagnosis	<u>LAN-</u> <u>40</u>	<u>LAN-</u> <u>51</u>	<u>LAN-</u> <u>64</u>	<u>LAN-</u> <u>75</u>	<u>LAN-</u> <u>88</u>	<u>LAN-</u> <u>97</u>	<u>LAN-</u> <u>109</u>	<u>LAN-</u> <u>121</u>	<u>LAN-</u> <u>135</u>	<u>LAN-</u> <u>144</u>	<u>LAN-</u> <u>156</u>	<u>LAN-</u> <u>168</u>
	Ľ	Ľ	Ľ	CAN	communi	ication un	it	Ľ				
ECM	×	×	×	×	×	×	×	×	×	×	×	×
ТСМ		×		×			×	×			×	×
Data link connector	×	×	×	×	×	×	×	×	×	×	×	×
Combination meter	×	×	×	×	×	×	×	×	×	×	×	×
Transfer control unit					×	×	×	×	×	×	×	×
ABS actuator and electric unit (control unit)	×	×	×	×		×		×		×		×
IPDM E/R	×	×	×	×	×	×	×	×	×	×	×	×

TYPE 1 System diagram

• Type 1



Input/output signal chart

T:	Transmit	R: Receive
----	----------	------------

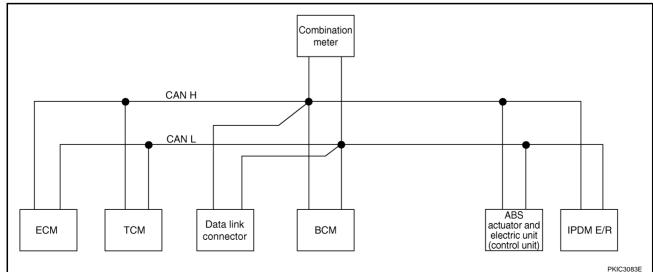
Signals	ECM	BCM	Combination meter	ABS actuator and electric unit (control unit)	IPDM E/R
A/C compressor request signal	Т				R
ASCD CRUISE lamp signal	Т		R		
ASCD SET lamp signal	Т		R		
Cooling fan speed request signal	Т				R
Engine coolant temperature signal	Т		R		

GKS0008L

ABS actuator Combination А ECM BCM IPDM E/R Signals and electric unit meter (control unit) Т R Engine speed signal В Т R Engine status signal Malfunction indicator lamp signal Т R A/C switch signal R т Blower fan motor switch signal R Т Buzzer output signal Т R Т R D Door switch signal R Т R Front fog light request signal R Т R Front wiper request signal F Т R High beam request signal R Horn chirp signal т R Low beam request signal т R F Position light request signal Т R R Т Rear window defogger switch signal R т R Sleep wake up signal R Т R Theft warning horn request signal Т R Turn indicator signal Н R т Vehicle speed signal R R Т ABS warning lamp signal R Т R Т Front wiper stop position signal Т High beam status signal R Hood switch signal R Т R Т Low beam status signal LAN R т Oil pressure switch signal т Rear window defogger control signal R

TYPE 2 System diagram





M

[CAN]

Input/output signal chart

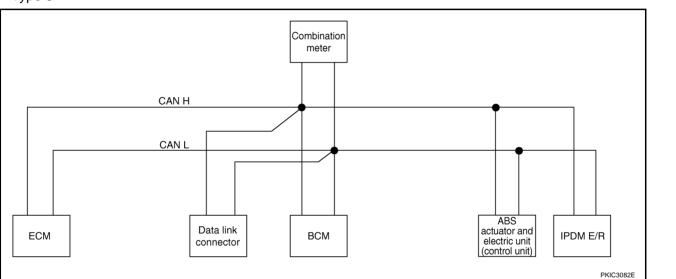
Signals	ECM	ТСМ	ВСМ	Combina- tion meter	ABS actua- tor and elec- tric unit (control unit)	IPDM E/R
A/C compressor request signal	Т					R
Accelerator pedal position signal	Т	R				
ASCD CRUISE lamp signal	Т			R		
ASCD OD cancel request	Т	R				
ASCD operation signal	Т	R				
ASCD SET lamp signal	Т			R		
Battery voltage signal	Т	R				
Closed throttle position signal	Т	R				
Cooling fan speed request signal	Т					R
Engine coolant temperature signal	Т			R		
Engine speed signal	Т	R		R		
Engine status signal	Т		R			
Malfunction indicator lamp signal	Т			R		
Wide open throttle position signal	Т	R				
A/T fluid temperature sensor signal		Т		R		
A/T position indicator lamp signal		Т		R		
OD OFF indicator lamp signal		Т		R		
Output shaft revolution signal	R	Т				
Turbine revolution signal	R	Т				
A/C switch signal	R		Т			
Blower fan motor switch signal	R		Т			
Buzzer output signal			Т	R		
Door switch signal			Т	R		R
Front fog light request signal			Т	R		R
Front wiper request signal			Т			R
High beam request signal			Т	R		R
Horn chirp signal			Т			R
Low beam request signal			Т			R
Position light request signal			Т	R		R
Rear window defogger switch signal			Т			R
Sleep wake up signal			Т	R		R
Theft warning horn request signal			Т			R
Turn indicator signal			Т	R		
1st position switch signal		R		Т		
Overdrive control switch signal		R		Т		
Stop lamp switch signal		R		Т		
				R	Т	
Vehicle speed signal	R	R	R	Т		
A/T shift schedule change demand signal		R			Т	
ABS operation signal		R			Т	
ABS warning lamp signal				R	Т	

T: Transmit R: Receive

Signals	ECM	ТСМ	BCM	Combina- tion meter	ABS actua- tor and elec- tric unit (control unit)	IPDM E/R	A
Front wiper stop position signal			R			Т	В
High beam status signal	R					Т	-
Hood switch signal			R			Т	-
Low beam status signal	R					Т	С
Oil pressure switch signal				R		Т	-
Rear window defogger control signal	R					Т	D

TYPE 3 System diagram

Туре 3 -



Input/output signal chart

Signals	ECM	BCM	Combination meter	ABS actuator and electric unit (control unit)	IPDM E/R
A/C compressor request signal	Т				R
ASCD CRUISE lamp signal	Т		R		
ASCD SET lamp signal	Т		R		
Cooling fan speed request signal	т				R
Engine coolant temperature signal	Т		R		
Engine speed signal	Т		R		
Engine status signal	Т	R			
Glow indicator signal	Т		R		
Malfunction indicator lamp signal	Т		R		
A/C switch signal	R	Т			
Buzzer output signal		Т	R		
Door switch signal		Т	R		R
Front fog light request signal		Т	R		R
Front wiper request signal		Т			R
High beam request signal		Т	R		R
Horn chirp signal		Т			R

T: Transmit R: Receive

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Е

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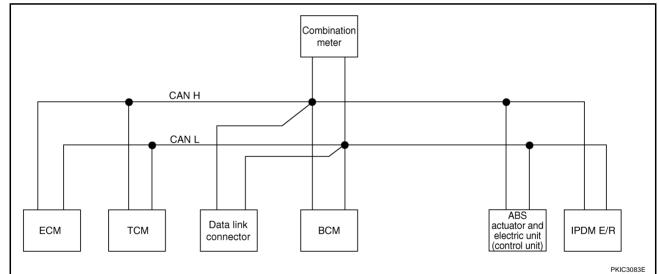
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Signals	ECM	BCM	Combination meter	ABS actuator and electric unit (control unit)	IPDM E/R
Low beam request signal		Т			R
Position light request signal		Т	R		R
Rear window defogger switch signal		Т			R
Sleep wake up signal		Т	R		R
Theft warning horn request signal		Т			R
Turn indicator signal		Т	R		
Vehicle append signal			R	Т	
Vehicle speed signal	R	R	Т		
ABS warning lamp signal			R	Т	
Front wiper stop position signal		R			Т
Hood switch signal		R			Т
Oil pressure switch signal			R		Т
Rear window defogger control signal		R			Т

TYPE 4 System diagram

• Type 4



Input/output signal chart

Signals	ECM	ТСМ	BCM	Combina- tion meter	ABS actua- tor and elec- tric unit (control unit)	IPDM E/R
A/C compressor request signal	Т					R
Accelerator pedal position signal	Т	R				
ASCD CRUISE lamp signal	Т			R		
ASCD OD cancel request	Т	R				
ASCD operation signal	Т	R				
ASCD SET lamp signal	Т			R		
Battery voltage signal	Т	R				
Closed throttle position signal	Т	R				
Cooling fan speed request signal	Т					R

T: Transmit R: Receive



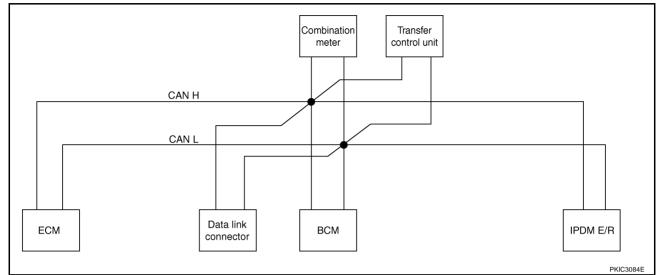


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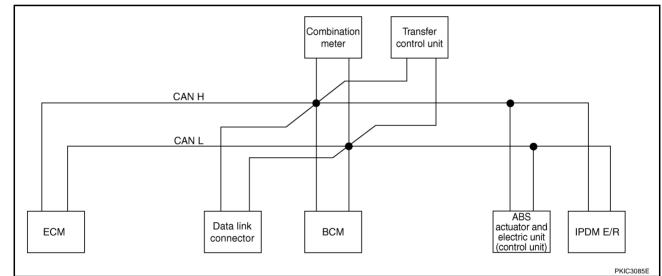
Signals	ECM	ТСМ	BCM	Combina- tion meter	ABS actua- tor and elec- tric unit (control unit)	IPDM E/R
Engine coolant temperature signal	Т			R		
Engine speed signal	Т	R		R		
Engine status signal	Т		R			
Glow indicator signal	Т			R		
Malfunction indicator lamp signal	Т			R		
Wide open throttle position signal	Т	R				
A/T fluid temperature sensor signal		Т		R		
A/T position indicator lamp signal		Т		R		
OD OFF indicator lamp signal		Т		R		
Output shaft revolution signal	R	Т				
Turbine revolution signal	R	Т				
A/C switch signal	R		Т			
Buzzer output signal			Т	R		
Door switch signal			Т	R		R
Front fog light request signal			Т	R		R
Front wiper request signal			Т			R
High beam request signal			Т	R		R
Horn chirp signal			Т			R
Low beam request signal			Т			R
Position light request signal			Т	R		R
Rear window defogger switch signal			Т			R
Sleep wake up signal			Т	R		R
Theft warning horn request signal			Т			R
Turn indicator signal			Т	R		
1st position switch signal		R		Т		
Overdrive control switch signal		R		Т		
Stop lamp switch signal		R		Т		
Vehicle speed signal				R	Т	
Vehicle speed signal	R	R	R	Т		
A/T shift schedule change demand signal		R			Т	
ABS operation signal		R			Т	
ABS warning lamp signal				R	Т	
Front wiper stop position signal			R			Т
Hood switch signal			R			Т
Oil pressure switch signal				R		Т
Rear window defogger control signal			R			Т

TYPE 5/ TYPE 6 System diagram

• Type 5



• Type 6



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	ВСМ	Combination meter	Transfer con- trol unit	ABS actua- tor and elec- tric unit (control unit) ^{*1}	IPDM E/R
A/C compressor request signal	Т					R
ASCD CRUISE lamp signal	Т		R			
ASCD SET lamp signal	Т		R			
Cooling fan speed request signal	Т					R
Engine coolant temperature signal	Т		R			
Engine speed signal	Т		R	R		
Engine status signal	Т	R				
Malfunction indicator lamp signal	Т		R			
A/C switch signal	R	Т				

Signals	ECM	BCM	Combination meter	Transfer con- trol unit	ABS actua- tor and elec- tric unit (control unit) ^{*1}	IPDM E/R
Blower fan motor switch signal	R	Т				
Buzzer output signal		Т	R			
Door switch signal		Т	R			R
Front fog light request signal		Т	R			R
Front wiper request signal		Т				R
High beam request signal		Т	R			R
Horn chirp signal		Т				R
Low beam request signal		Т				R
Position light request signal		Т	R			R
Rear window defogger switch signal		Т				R
Sleep wake up signal		Т	R			R
Theft warning horn request signal		Т				R
Turn indicator signal		Т	R			
			R*1	R ^{*1}	Т	
Vehicle speed signal	R	R	Т	R ^{*2}		
ABS warning lamp signal			R*1		Т	
Stop lamp switch signal				R*1	Т	
Front wiper stop position signal		R				Т
High beam status signal	R					Т
Hood switch signal		R				Т
Low beam status signal	R					Т
Oil pressure switch signal			R			Т
Rear window defogger control signal	R					Т

NOTE:

• *1: ABS model only

• *2: Except for ABS model

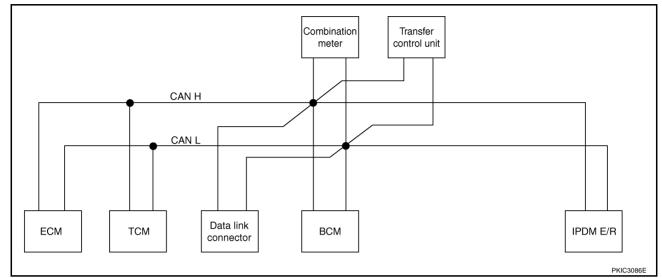
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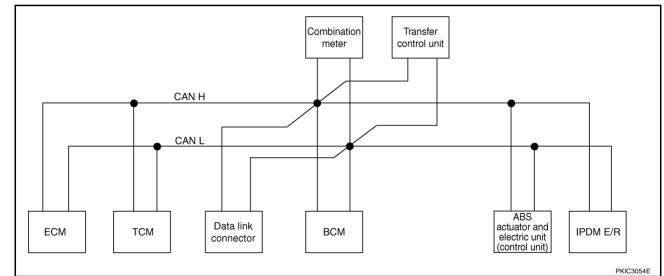
[CAN]

TYPE 7/ TYPE 8 System diagram

• Type 7



• Type 8



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	ТСМ	BCM	Combina- tion meter	Transfer control unit	ABS actu- ator and electric unit (con- trol unit) ^{*1}	IPDM E/R
A/C compressor request signal	Т						R
Accelerator pedal position signal	Т	R					
ASCD CRUISE lamp signal	Т			R			
ASCD OD cancel request	Т	R					
ASCD operation signal	Т	R					
ASCD SET lamp signal	Т			R			
Battery voltage signal	Т	R					
Closed throttle position signal	Т	R					
Cooling fan speed request signal	Т						R

Signals	ECM	ТСМ	BCM	Combina- tion meter	Transfer control unit	ABS actu- ator and electric unit (con- trol unit) ^{*1}	IPDM E/R	Æ
Engine coolant temperature signal	Т			R				
Engine speed signal	Т	R		R	R			
Engine status signal	Т		R					(
Malfunction indicator lamp signal	Т			R				
Wide open throttle position signal	Т	R						г
A/T fluid temperature sensor signal		Т		R				
A/T position indicator lamp signal		Т		R	R			
OD OFF indicator lamp signal		Т		R				E
Output shaft revolution signal	R	Т			R			
Turbine revolution signal	R	Т						
A/C switch signal	R		Т					F
Blower fan motor switch signal	R		Т					
Buzzer output signal			Т	R				(
Door switch signal			Т	R			R	
Front fog light request signal			Т	R			R	
Front wiper request signal			Т				R	ŀ
High beam request signal			Т	R			R	
Horn chirp signal			Т				R	
Low beam request signal			Т				R	
Position light request signal			Т	R			R	
Rear window defogger switch signal			Т				R	,
Sleep wake up signal			Т	R			R	
Theft warning horn request signal			Т				R	LA
Turn indicator signal			Т	R				
1st position switch signal		R		Т				
Overdrive control switch signal		R		Т				
Stop lamp switch signal		R		Т				
				R*1	R ^{*1}	Т		R
Vehicle speed signal	R	R	R	Т	R*2			Ν
A/T shift schedule change demand signal		R*1				Т		
ABS operation signal		R*1				Т		
ABS warning lamp signal				R*1		Т		
Stop lamp switch signal					R ^{*1}	Т		
Front wiper stop position signal			R				Т	
High beam status signal	R						Т	
Hood switch signal			R				Т	
Low beam status signal	R						Т	
Oil pressure switch signal				R			Т	
Rear window defogger control signal	R						Т	

NOTE:

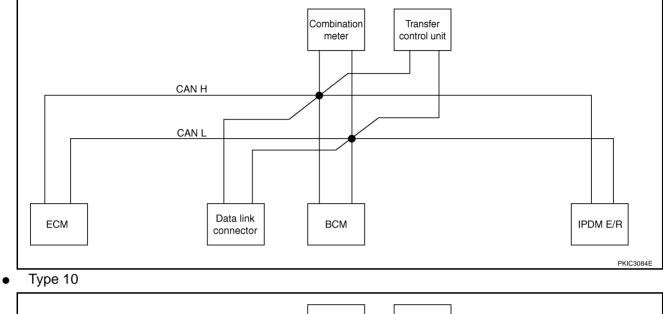
• *1: ABS model only

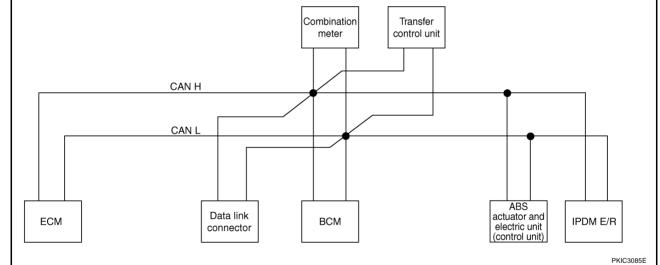
[CAN]

• *2: Except for ABS model

TYPE 9/ TYPE 10 System diagram

• Type 9





Input/output signal chart

T: Transmit R: Receive

Signals	ECM	BCM	Combination meter	Transfer con- trol unit	ABS actua- tor and elec- tric unit (control unit) ^{*1}	IPDM E/R
A/C compressor request signal	Т					R
ASCD CRUISE lamp signal	Т		R			
ASCD SET lamp signal	Т		R			
Cooling fan speed request signal	Т					R
Engine coolant temperature signal	Т		R			
Engine speed signal	Т		R	R		
Engine status signal	Т	R				
Glow indicator signal	Т		R			

CAN COMMUNICATION

Signals	ECM	BCM	Combination meter	Transfer con- trol unit	ABS actua- tor and elec- tric unit (control unit) ^{*1}	IPDM E/R
Malfunction indicator lamp signal	Т		R			
A/C switch signal	R	Т				
Buzzer output signal		Т	R			
Door switch signal		Т	R			R
Front fog light request signal		Т	R			R
Front wiper request signal		Т				R
High beam request signal		Т	R			R
Horn chirp signal		Т				R
Low beam request signal		Т				R
Position light request signal		Т	R			R
Rear window defogger switch signal		Т				R
Sleep wake up signal		Т	R			R
Theft warning horn request signal		Т				R
Turn indicator signal		Т	R			
			R ^{*1}	R ^{*1}	т	
Vehicle speed signal	R	R	Т	R*2		
ABS warning lamp signal			R ^{*1}		Т	
Stop lamp switch signal				R ^{*1}	Т	
Front wiper stop position signal		R				Т
Hood switch signal		R				Т
Oil pressure switch signal			R			Т
Rear window defogger control signal		R				Т

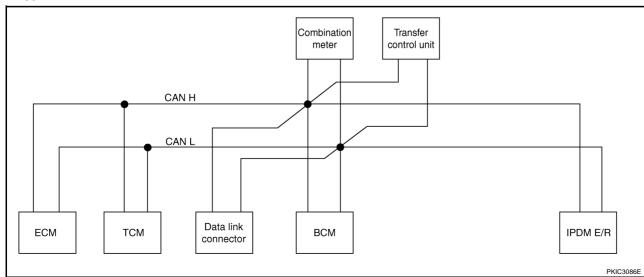
• *1: ABS model only

• *2: Except for ABS model

TYPE 11/ TYPE 12

System diagram

Type 11



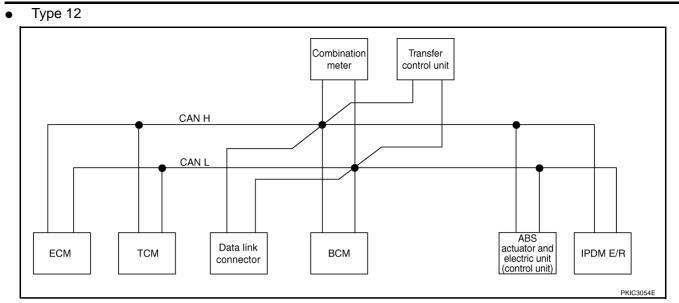
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LAN-37

CAN COMMUNICATION



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	ТСМ	BCM	Combina- tion meter	Transfer control unit	ator and electric unit (con- trol unit) ^{*1}	IPDM E/R
A/C compressor request signal	Т						R
Accelerator pedal position signal	Т	R					
ASCD CRUISE lamp signal	Т			R			
ASCD OD cancel request	Т	R					
ASCD operation signal	Т	R					
ASCD SET lamp signal	Т			R			
Battery voltage signal	Т	R					
Closed throttle position signal	Т	R					
Cooling fan speed request signal	Т						R
Engine coolant temperature signal	Т			R			
Engine speed signal	Т	R		R	R		
Engine status signal	Т		R				
Glow indicator signal	Т			R			
Malfunction indicator lamp signal	Т			R			
Wide open throttle position signal	Т	R					
A/T fluid temperature sensor signal		Т		R			
A/T position indicator lamp signal		Т		R	R		
OD OFF indicator lamp signal		Т		R			
Output shaft revolution signal	R	Т			R		
Turbine revolution signal	R	Т					
A/C switch signal	R		Т				
Buzzer output signal			Т	R			
Door switch signal			Т	R			R
Front fog light request signal			Т	R			R
Front wiper request signal			Т				R

CAN COMMUNICATION

Signals	ECM	ТСМ	ВСМ	Combina- tion meter	Transfer control unit	ABS actu- ator and electric unit (con- trol unit) ^{*1}	IPDM E/R
High beam request signal			Т	R			R
Horn chirp signal			Т				R
Low beam request signal			Т				R
Position light request signal			Т	R			R
Rear window defogger switch signal			Т				R
Sleep wake up signal			Т	R			R
Theft warning horn request signal			Т				R
Turn indicator signal			Т	R			
1st position switch signal		R		Т			
Overdrive control switch signal		R		Т			
Stop lamp switch signal		R		Т			
				R*1	R ^{*1}	Т	
Vehicle speed signal	R	R	R	Т	R*2		
A/T shift schedule change demand signal		R*1				Т	
ABS operation signal		R ^{*1}				Т	
ABS warning lamp signal				R ^{*1}		Т	
Stop lamp switch signal					R*1	Т	
Front wiper stop position signal			R				Т
Hood switch signal			R				Т
Oil pressure switch signal				R			Т
Rear window defogger control signal			R				Т

NOTE:

• *1: ABS model only

• *2: Except for ABS model

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[CAN]

	[CAN]
CAN SYSTEM (TYPE 1)	PFP:23710
Component Parts and Harness Connector Location	GKS000DJ
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GKS000DK
Refer to LAN-22, "Schematic".	
Wiring Diagram — CAN —	GKS000DL
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

[CAN]

GKS000DM

А

В

С

D

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LAN

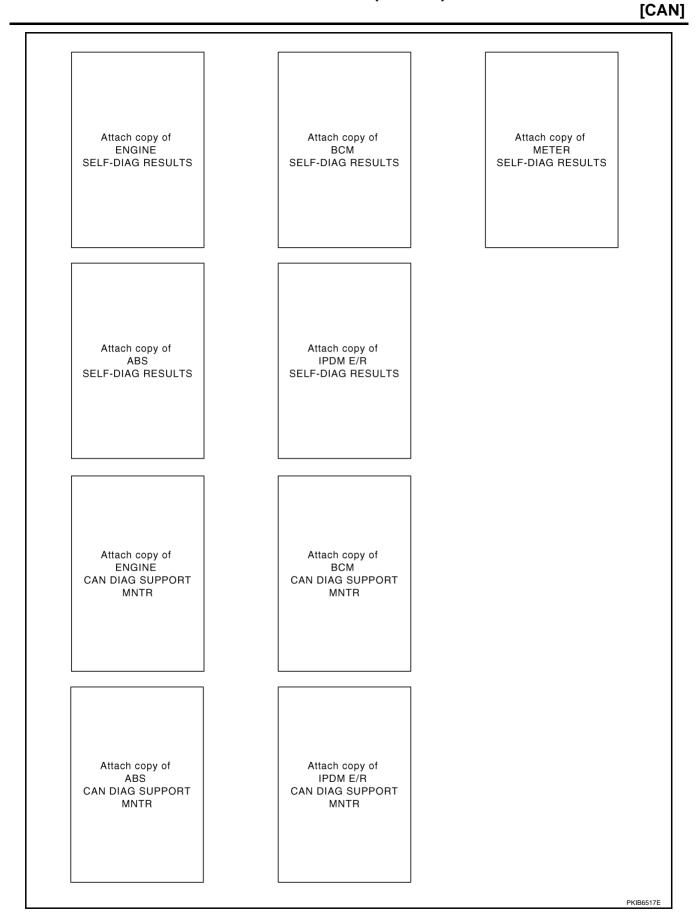
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NOTE:

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

			(CAN DIAG SL	IPPORT MNT	7			
SELECT SYST	EM screen	Initial	Transmit		Receive	diagnosis		SELF-DIAG	RESULTS
		diagnosis	diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		
NGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	(U1000)	CAN COMM CIRCUIT (U1001)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	
IETER	No indication	_	-	_	-	_	_	CAN COMM CIRCUIT (U1000)	
BS	_	NG	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_
ymptoms :									
		Att SELI	Attach copy of SELECT SYSTEM			At SEL	tach copy o ECT SYST	of EM	



LAN-42

CHECK SHEET RESULTS (EXAMPLE)

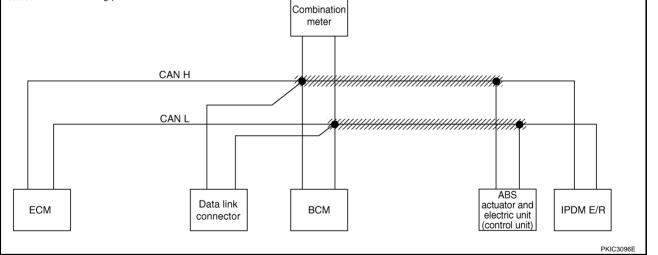
NOTE:

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

Case 1

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> 183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

			(CAN DIAG SU	PPORT MNT	7			
SELECT SYSTE	Miscreen		–	Receive diagnosis SELF-DIAG RESULTS			BESULTS		
011107 01011		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
ВСМ	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	-	-	-	—	CAN COMMCIRCUIT (UN00)	_
ABS	-	NG	UNKWN	UNKWN	-	_	_	CAN COMM CIRCUIT (UN00)	_
PDM E/R	No inditation	_	UNKWN	UNKWN	UNKWN	-	_	CAN COMMICIRCUIT	
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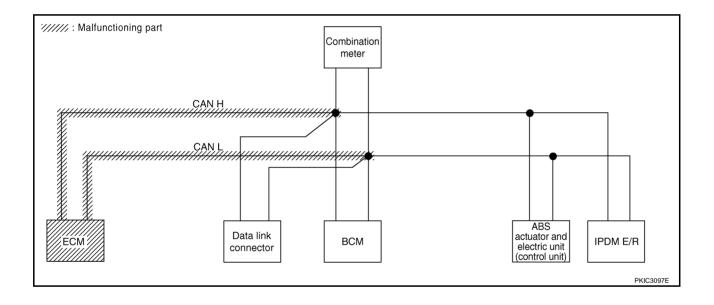
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Case 2

Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

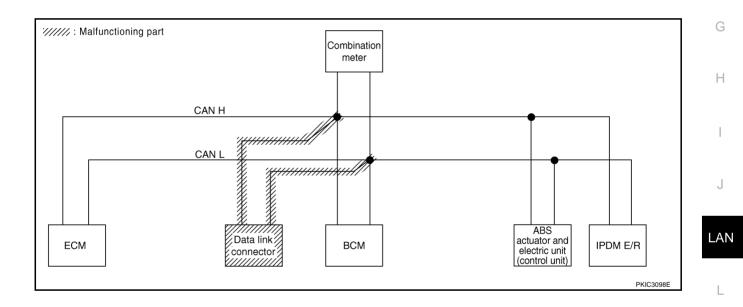
			(CAN DIAG SU	PPORT MNT	F				
SELECT SYSTEM	l scroon				Receive	diagnosis		SELF-DIAG RESULTS		
	sorcen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R			
ENGINE	-	NG	UNKWN	_	UNKWN	UNIWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)	
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-	
METER	No indication	-	_	-	_	-	_	CAN COMMCIRCUIT (UN00)	_	
ABS	-	NG	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (UN00)	_	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	-	—	CAN COMM CIRCUIT (UN00)	-	



Case 3

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

			(CAN DIAG SU	PPORT MNT	7			
SELECT SYSTEM	A screen		_		Receive	diagnosis	SELF-DIAG	BESULTS	
	a sorcen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	OLLI DIAC	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
BCM	N inclusion	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	N ind ation	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No inclusion	-	UNKWN	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_



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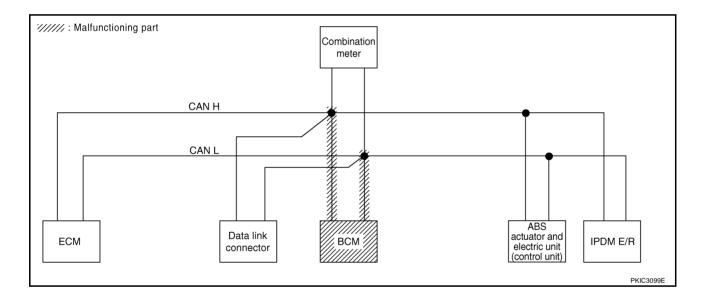
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Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

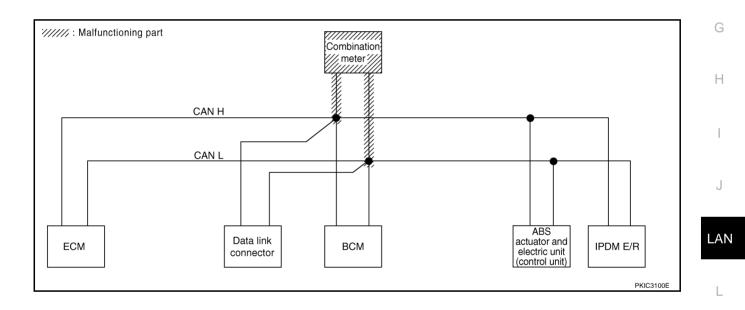
					PPORT MNTI	diagnosis		-	
SELECT SYSTE	M screen	Initial diagnosis	Transmit diagnosis		BCM	METER	IPDM	SELF-DIAG	RESULTS
		ulagilosis	ulagi10313	ECM	/SEC	/M&A	E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
BCM	No inditation	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	—	-	-	—	—	—	CAN COMMCIRCUIT (U100)	-
ABS	-	NG	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	UNKWN	_	_	CAN COMMCIRCUIT (U1000)	_
	Indication				▼				



Case 5

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

			(CAN DIAG SU	PPORT MNT	F			
SELECT SYSTEM	A screen				Receive	diagnosis		SELF-DIAG	BESUITS
	a solecit	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		TILOOLIO
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indivation	_	—	—	_	-	—	CAN COMM/CIRCUIT (UN00)	_
ABS	-	NG	UNKWN	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)	-
PDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	—	CAN COMM CIRCUIT (U1000)	-



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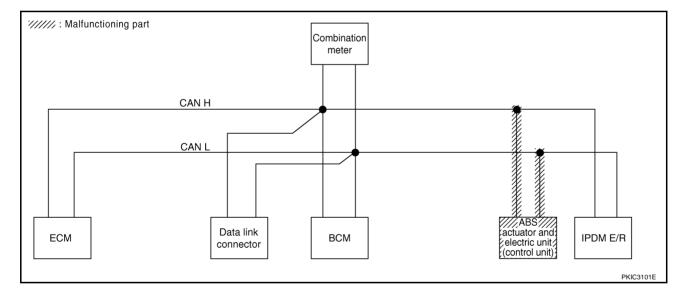
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Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

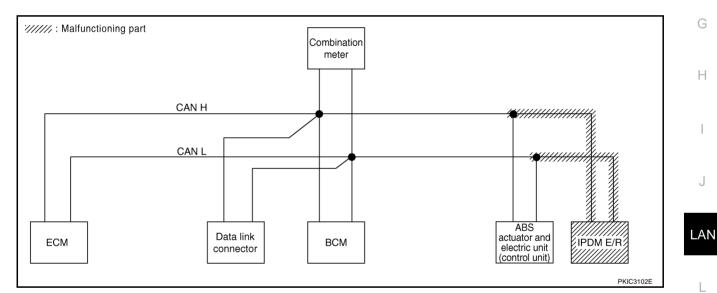
			(CAN DIAG SU	PPORT MNTI	R			
SELECT SYSTEM	1 screen				Receive	diagnosis		SELF-DIAG	BESUITS
	a screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		THEODERS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	-	_	_	-	CAN COMM/CIRCUIT (UN00)	_
ABS	-	×	UNKWN	UNKWN	_	-	-	CAN COMM/CIRCUIT (UN00)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_





Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

			(CAN DIAG SU	PPORT MNT	٦			
SELECT SYSTEM	1 scroon				Receive	diagnosis		SELF-DIAG	
SELECT STOLEN	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		RESULIS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	-	_	-	_	CAN COMMCIRCUIT (UN00)	_
ABS	—	NG	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No individualion	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (UN00)	_



Case 8

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

SELECT SYSTEM					Receive	diagnosis			RESULTS
SELECT STSTEN	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	- SELF-DIAC	I NESULIS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (U1001)
BCM	No indivation	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indivation	_	_	_	-	_	-	CAN COMMCIRCUIT (UN00)	_
ABS	-	*	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (UN00)	-
IPDM E/R	No indivation	_	UNKWN	UNKWN	UNKWN	_	-	CAN COMMCIRCUIT (UN00)	_

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PKIB7260E

Case 9

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

			(CAN DIAG SU	PPORT MNT	3				
SELECT SYSTEM	screen	Initial			Receive	diagnosis		SELF-DIAG	BESHITS	
	INE –		Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R			
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-	
METER	No indication	_	_	-	-	-	_	CAN COMM CIRCUIT (U100)	-	
ABS	-	NG	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_	

Case 10

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAN DIAG SU	PPORT MNT	1			
SELECT SYSTEM	1 screen				Receive	diagnosis			RESULTS
	a sorcen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	_	-	-	-	-	—	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_

	[CAN]	
CAN SYSTEM (TYPE 2)	PFP:23710	
Component Parts and Harness Connector Location	GKS000DN	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000DO	В
Refer to LAN-22, "Schematic"		
Wiring Diagram — CAN —	GKS000DP	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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Check Sheet

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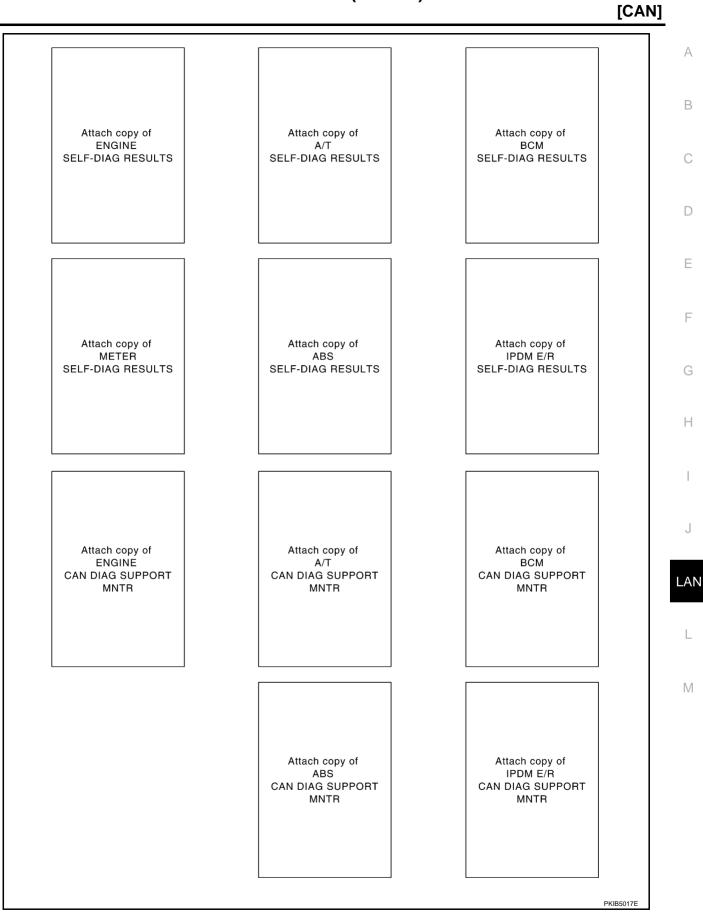
NOTE:

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

				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTEM	Iscreen				Re	ceive diagno	osis		SELF-DIAG	BESUITS
OLLEON ON OTHER	13010011	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	IPDM E/R	SEE -DIAC	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	-	-	_	_	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	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



CHECK SHEET RESULTS (EXAMPLE)

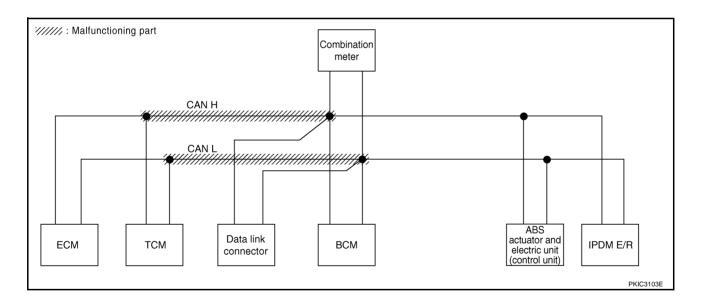
NOTE:

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-182, "Inspection Between TCM and Data</u> <u>Link Connector Circuit"</u>.

				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTEM	l screen				Re	ceive diagno	osis			RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	OLEI DIVIC	
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
A/T	_	NG	UNKWN	UNKWN	-	-	UNKWN	_	CAN COMMCIRCUIT (U N00)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	-	-	-	-	_	_	_	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U NO0)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	Ι	UNKWN	_	_	CAN COMM CIRCUIT (UN00)	-



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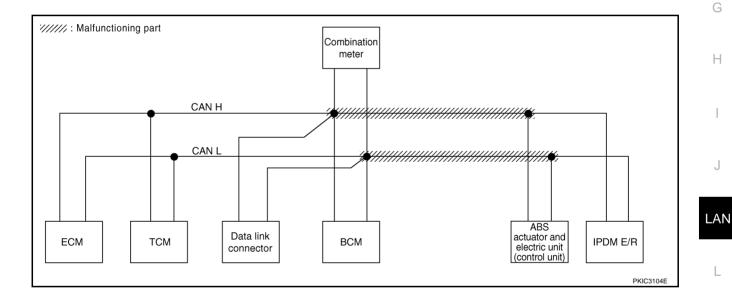
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Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

				CAN DI	AG SUPPOF	RT MNTR					
SELECT SYSTE	Macroon				Re	ceive diagno	osis			RESULTS	
SELECT STOLE	W SCIECH	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R			
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN		CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1 01)	
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	-	
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	UNKIN	CAN COMM CIRCUIT (U1000)	_	
METER	No indication	-	-	-	_	_	-	_	CAN COMM CIRCUIT (U100)	_	
ABS	-	NG	UNKWN	UNKIN	_	_	_	_	CAN COMM CIRCUIT (U100)	—	
IPDM E/R	No inditation	_	UNKWN	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U100)	_	



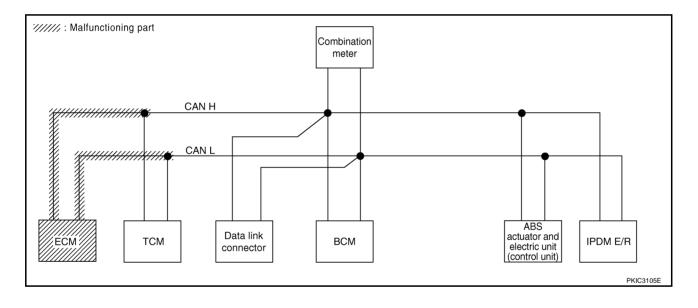
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Case 3

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTE	M screen				Re	ceive diagno	osis		SELF-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	_	NG	UNKIN	-	UNKWN	UNIWN	UNKWN	UNKWN	CAN COMMCIRCUIT (U100)	CAN COMMCIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U 1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (UN00)	—
ABS	-	NG	UNKWN	UNKWN	-	_	-	_	CAN COMM CIRCUIT (U NO0)	—
IPDM E/R	No indication	-	UNKWN	UNKWN	1	UNKWN	-	-	CAN COMMCIRCUIT (U1000)	_



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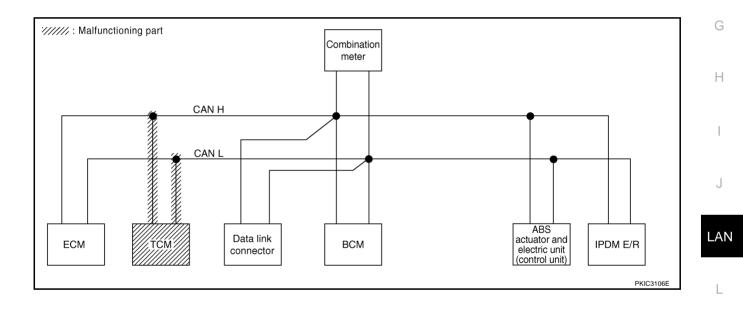
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Case 4

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

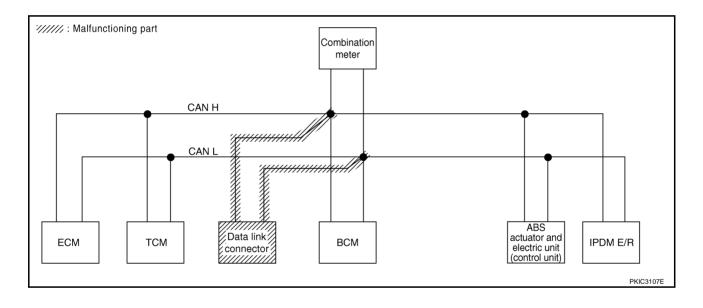
				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTEM	1 screen				Re	ceive diagno	osis			RESULTS
	a soleen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMMCIRCUIT (U100)	CAN COMMCIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	I	-	UNKIN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	Ι	-	-	—	CAN COMM CIRCUIT (U100)	—
ABS	-	NG	UNKWN	UNKWN	_	_	-	—	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	—



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Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTEM	/ screen	1.111.1	- · · ·		Re	ceive diagno	osis		SELF-DIAG	BESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	-	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
BCM	No inditation	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indivation	-	-	-	-	-	-	_	CAN COMM CIRCUIT (U1000)	-
ABS	-	NG	UNKWN	UNKWN	Ι	_	_	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No ind ation	-	UNKWN	UNKWN		UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indition	_	UNKWN	UNKWN	-	UNKWN	_	_		_



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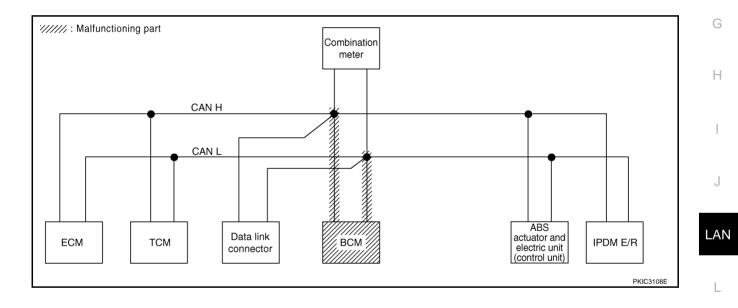
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Case 6

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

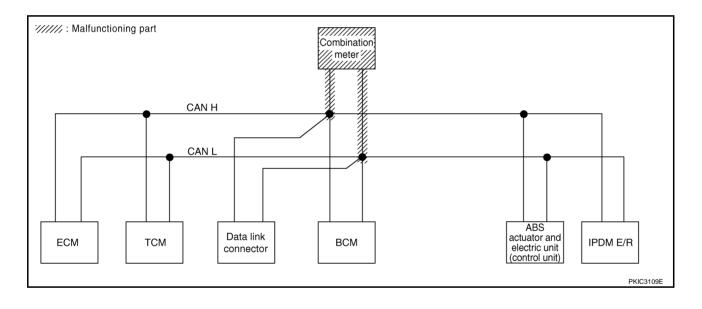
				CAN DI	AG SUPPOR	RT MNTR				
SELECT SYSTE	Macroon				Re	ceive diagno	osis			RESULTS
SELECT STOLE	WI SCIECII	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		THEODERS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	-	NG	UNKWN	UNKWN	_	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
BCM	inditation	NG	UNKWN	UNKWN	_	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U100)	-
ABS	-	NG	UNKWN	UNKWN	_	-	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U100)	-



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Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

				CAN DI	AG SUPPOF	RT MNTR				
SELECT SYSTEM	Iscreen				Re	ceive diagno	osis		SELF-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	OLLI DINC	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	_	NG	UNKWN	UNKWN	-	-	UNUWN	-	CAN COMM CIRCUIT (U100)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	-	_	_	-	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	-	UNKWN	UNKWN	I	UNKWN	_	1	CAN COMM CIRCUIT (U1000)	Ι



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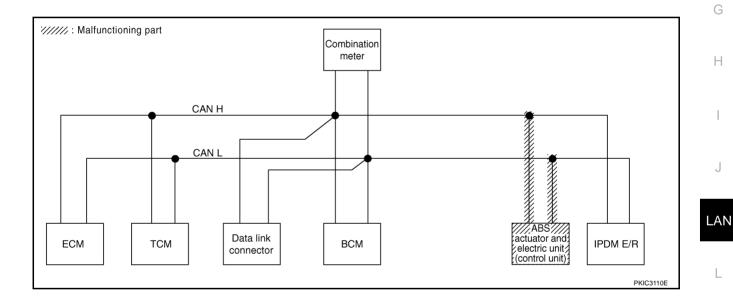
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Case 8

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) Circuit Inspection".

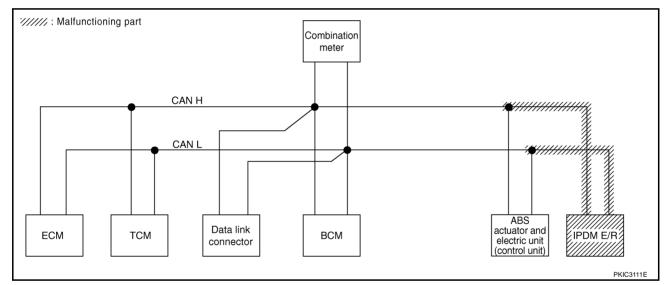
				CAN DI	AG SUPPOR	RT MNTR					
SELECT SYSTEM	1 screen	screen			Re	ceive diagno	osis			RESULTS	
	a scieen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R			
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_	
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_	
METER	No indication	-	-	-	-	-	-	_	CAN COMM CIRCUIT (U100)	_	
ABS	-	N	UNKIN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U100)	—	
IPDM E/R	No indication	-	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	_	



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Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

				CAN DI	AG SUPPOF	RT MNTR					
SELECT SYSTEM	A screen				Re	ceive diagno	osis		SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	OLLI DIVIC		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (U101)	
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_	
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	_	
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U100)	_	
ABS	-	NG	UNKWN	UNKWN	-	_	_	_	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indivation	-	UNKWN	UNKWN		UNKWN	-	—	CAN COMM CIRCUIT (U100)	_	



Case 10

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

				CAN DI	AG SUPPOF					
SELECT SYSTEM	screen	1	Trenewsit		Re	ceive diagno	osis	-	SELF-DIAG	BESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	UNKIN	UNKWN	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMMCIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	I	-	UNKWN	_	CAN COMM CIRCUIT (U100)	-
BCM	No indivation	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	-	-	-	I	_	_	_	CAN COMM CIRCUIT (U100)	_
ABS	-		UNKWN	UNKWN	Ι	Ι	—	—	CAN COMM CIRCUIT (U100)	_
IPDM E/R	No inditation		UNKWN	UNKWN	١	UNKWN	-	_	CAN COMM CIRCUIT (U100)	_

[CAN]

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAN DI	AG SUPPOR	RT MNTR				
SELECT SYSTEM	A screen				Re	ceive diagno	osis			B RESULTS
	a solecin	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1 00)	CAN COMMCIRCUIT (UN01)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	_	-	_	_	_	_	-	CAN COMM CIRCUIT (U100)	_
ABS	-	NG	UNKWN	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	-

Case 12

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAN DI	AG SUPPOF								
SELECT SYSTE	/ screen					Re	ceive diagno	sis		SELE-DIAG	ELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R					
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)			
A/T	-	NG	UNKWN	_	-	-	-	_	CAN COMM CIRCUIT (U100)	-			
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	-			
METER	No indication	-	-	_	-	-	-	_	CAN COMM CIRCUIT (U1000)	-			
ABS	-	NG	UNKWN	_	-	-	_	_	CAN COMM CIRCUIT (U100)	_			
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	—			

LAN-63

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	[CAN]
CAN SYSTEM (TYPE 3)	PFP:23710
Component Parts and Harness Connector Location	GKS000DR
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GKS000DS
Refer to LAN-22, "Schematic".	
Wiring Diagram — CAN —	GKS000DT
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

[CAN]

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NOTE:

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

			CA	N DIAG SU	PPORT MN	TR		
					Receive	diagnosis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	-	_	-	-	CAN COMM CIRCUIT (U1000)
ABS	_	NG	UNKWN	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	-	CAN COMM CIRCUI (U1000)

LAN-65

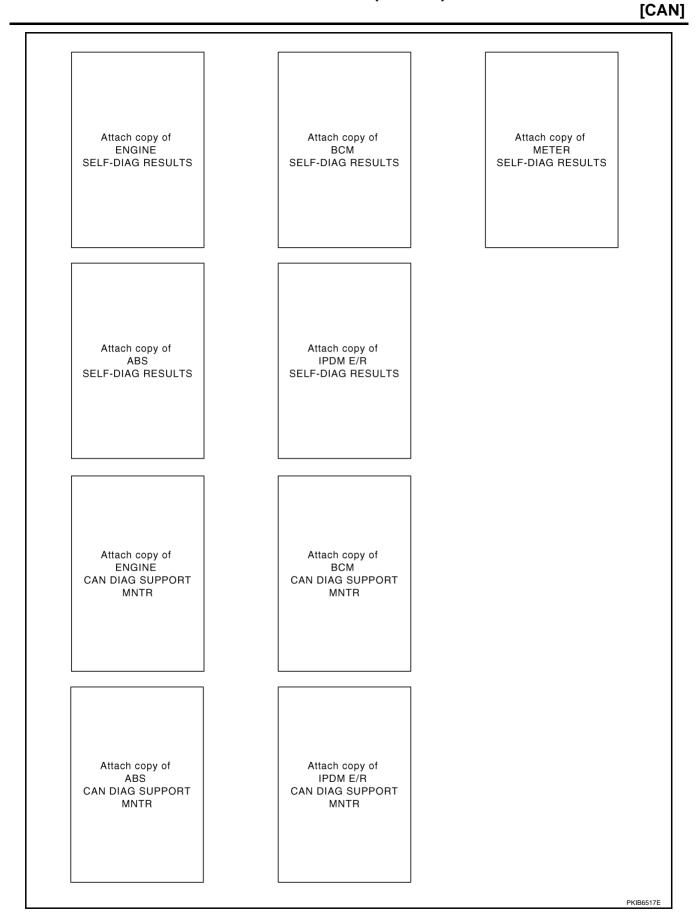
Symptoms :

Attach copy of SELECT SYSTEM Attach copy of SELECT SYSTEM

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LAN-66

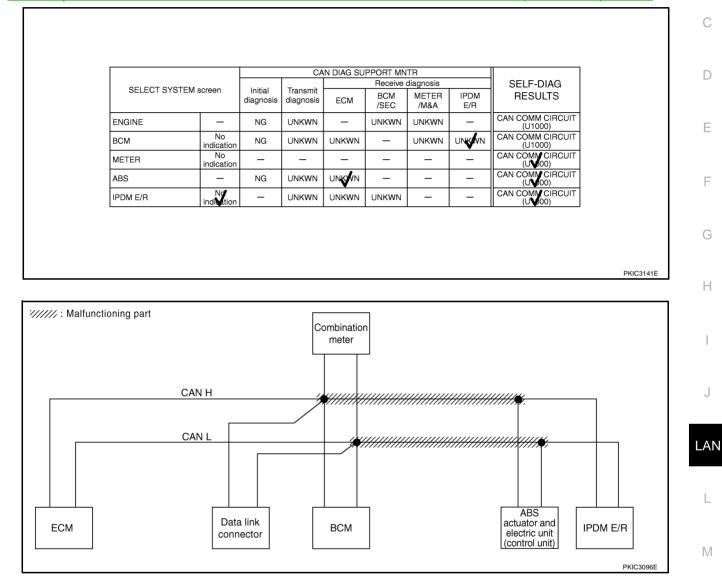
CHECK SHEET RESULTS (EXAMPLE)

NOTE:

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

Case 1

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> 183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".



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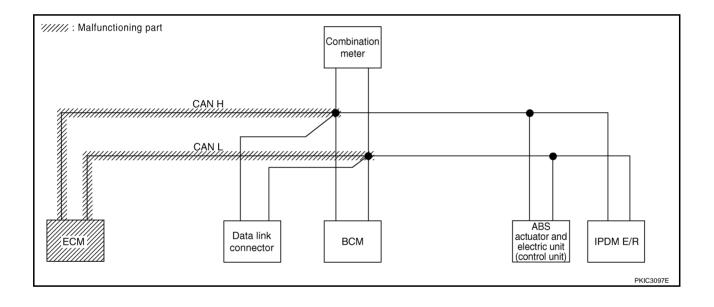
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Case 2

Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

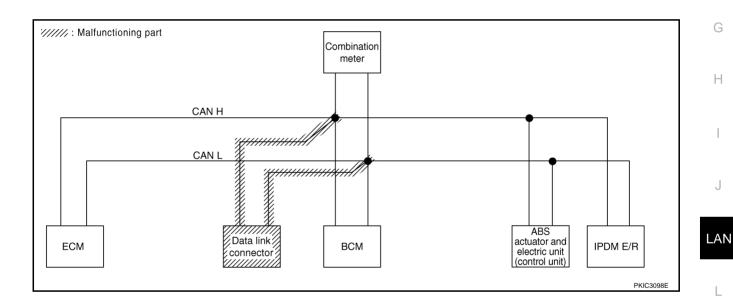
			CA	N DIAG SU		TR diagnosis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKIN	_	UNKVN	UNKWN	_	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKVN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	—	-	—	_	-	_	CAN COMM CIRCUIT (U 000)
ABS	—	NG	UNKWN	UNKVN	-	-	_	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U 000)



Case 3

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
			-		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM 6	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
ВСМ	No indivation	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No inditiation	-	—	—	-	-	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	UNKWN	-	1	1	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indivation	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)



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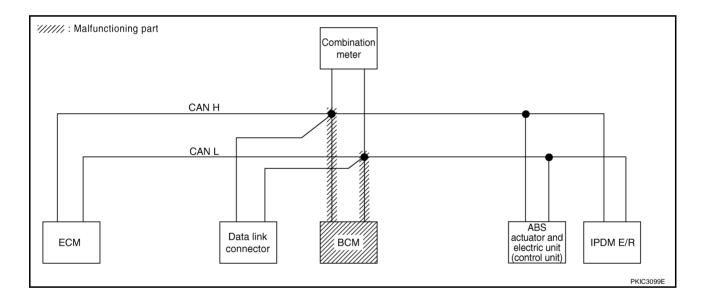
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PKIC3143E

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

SELECT SYSTEM screen Initial diagnosis Transmit diagnosis BCM BCM METER //SEC IPDM ENGINE — NG UNKWN — UNKWN — CAN COMM CIRC (UV000)	
ENGINE - NG UNKWN - UNKWN UNKWN - CAN COMM CIRC	
	TIU
3CM Nation NG UNKWN UNKWN – UNKWN UNKWN CAN COMM CIR((U1000)	
METER No CAN COMM CIR((UV000)	TIU
ABS - NG UNKWN UNKWN CAN COMM CIRC (U1000)	
IPDM E/R No — UNKWN UNKWN UNKWN — — CAN COMM CIRC (UV000)	TIU



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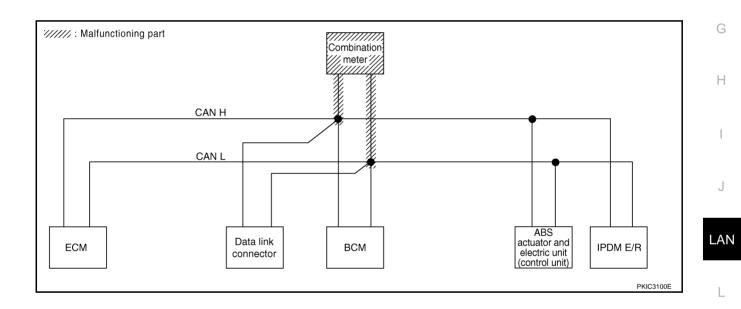
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Case 5

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
			-		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	—	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 000)
ВСМ	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N: inditiation	—	—	—	—	-	-	CAN COMM CIRCUIT (U 000)
ABS	-	NG	UNKWN	UNKWN	—	1	1	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)

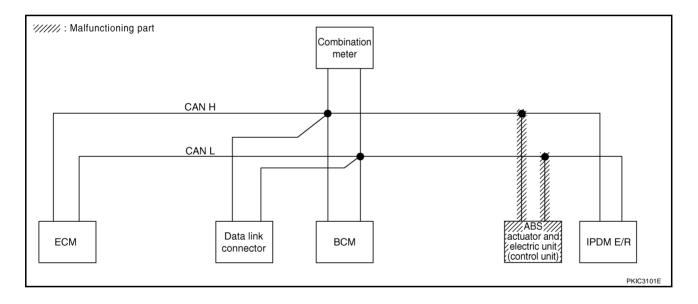


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Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

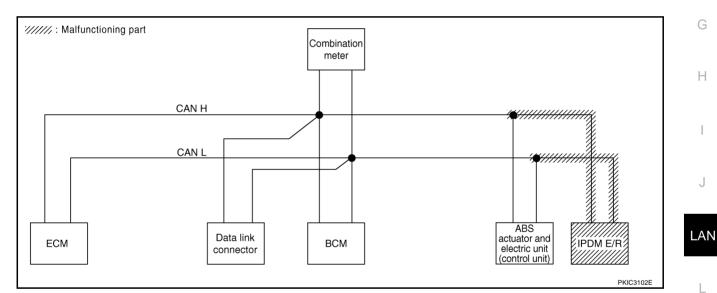
			CA	N DIAG SU	PPORT MN	TR			
			-		SELF-DIAG				
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS	
ENGINE	—	NG	UNKWN	_	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	
METER	No indication	_	-	-	-	_	-	CAN COMM CIRCUIT (U 000)	
ABS	_	N	UNKIN	UNKVN	-	-	-	CAN COMM CIRCUIT (U 000)	
IPDM E/R	No indication	—	UNKWN	UNKWN	UNKWN	_	Ι	CAN COMM CIRCUIT (U1000)	

PKIC3146E



Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
			- ··		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKVN	CAN COMM CIRCUI (U1000)
METER	No indication	_	—	_	_	-	-	CAN COMM CIRCUI (U 000)
ABS	-	NG	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUI (U1000)
IPDM E/R	No inditation	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUI (UN000)



Case 8

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
					Receive	diagnosis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT
BCM	No indivition	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUI (U1000)
METER	No indivision	-	—	—	-	-	-	CAN COMM CIRCUIT (UN000)
ABS	-	V	UNKWN	UNKWN	—	-	-	CAN COMM CIRCUI (UN000)
IPDM E/R	No indivition	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUI (UN000)

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LAN-73

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

			-		Receive of	SELF-DIAG		
SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	-	Ι	-	_	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
PDM E/R	No indication	—	UNKWN	UNKWN	UNKWN	—	-	CAN COMM CIRCUIT (U1000)

PKIC3149E

Case 10

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

			CA	N DIAG SU	PPORT MN	TR		
SELECT SYSTEM			-		Receive	SELF-DIAG		
		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	-	-	-	-	
IPDM E/R	No indication	-	UNKWN	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)

PKIC3150E

	[CAN]	
CAN SYSTEM (TYPE 4)	PFP:23710	
Component Parts and Harness Connector Location	GKS000DV	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000DW	В
Refer to LAN-22, "Schematic".		
Wiring Diagram — CAN —	GKS000DX	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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Check Sheet

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NOTE:

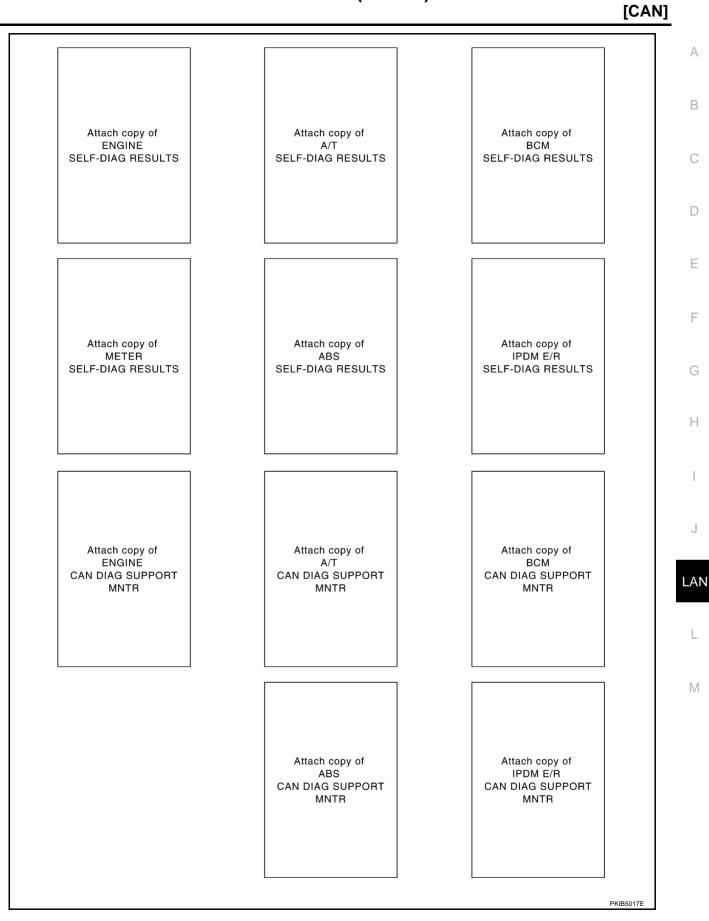
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM (screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	—	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	—	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	—	-	—	-	-		CAN COMM CIRCUIT (U1000)
ABS	-	NG	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



CHECK SHEET RESULTS (EXAMPLE)

NOTE:

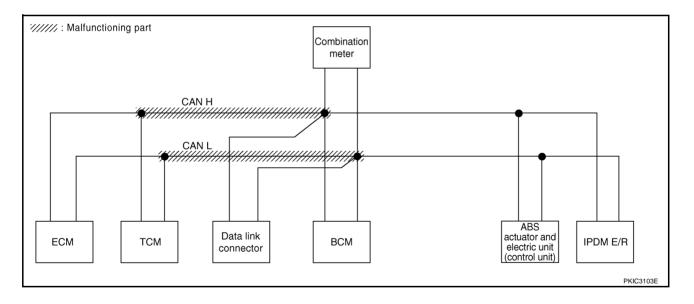
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to <u>LAN-182, "Inspection Between TCM and Data</u> <u>Link Connector Circuit"</u>.

SELECT SYSTEM	coroon	Initial	Transmit		Re	SELF-DIAG			
		diagnosis	diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	—	UNKWN	—	CAN COMM CIRCUIT (UN00)
BCM	No indication	NG	UNKWN	UNKIN	Ι	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	1	_	-	—	CAN COMM CIRCUIT (UV00)
ABS	-	NG	UNKWN	UNKVN	Ι	—	-	—	CAN COMM CIRCUIT (UV00)
IPDM E/R	No indication	-	UNKWN	UNKVN	Ι	UNKWN	-	—	CAN COMM CIRCUIT (UN00)

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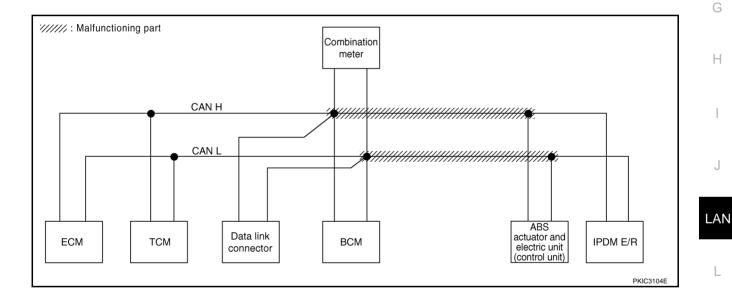
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Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUI (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUI (U1000)
METER	No indication	Ι	-	—	_	-	Ι	-	CAN COMM CIRCUIT (UN00)
ABS	-	NG	UNKWN	UNKVN	_	-	_	_	CAN COMM CIRCUI (UN00)
IPDM E/R	No inditation	_	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMY CIRCUI (U 000)



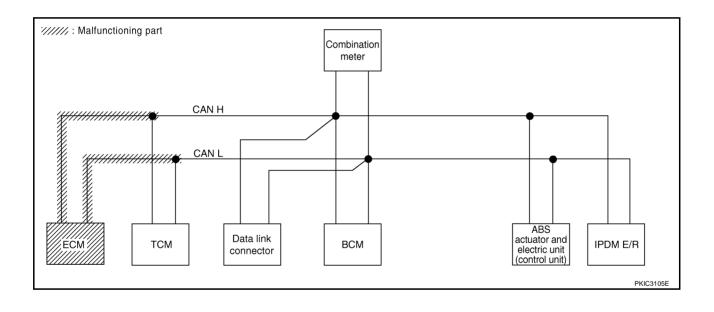
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Case 3

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

				CAN DIA	G SUPPOF	RT MNTR			
SELECT SYSTEM		1	Transmit		Re	SELF-DIAG			
SELECT STSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKIN	_	UNKWN	UNKIN	UNKIN	-	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKVN	-	-	UNKWN	-	CAN COMM CIRCUIT (U 000)
ВСМ	No indication	NG	UNKWN	UNKVN	-	_	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	_	-	-	-	CAN COMM CIRCUIT (U 1000)
ABS	-	NG	UNKWN	UNKVN	-		-	1	CAN COMM CIRCUIT (U 100)
IPDM E/R	No indication	-	UNKWN	UNKVN	—	UNKWN	-		CAN COMM CIRCUIT (U 000)



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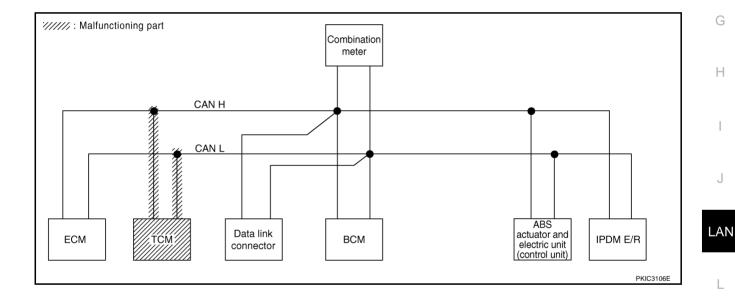
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Case 4

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

				CAN DIA	G SUPPOF	T MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	_	CAN COMM CIRCUIT
A/T	-	NG	UNKWN	UNKVN	-	-	UNKWN	-	CAN COMIN CIRCUIT
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	_	-	-	-	-	-	CAN COMM CIRCUIT (UV00)
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)



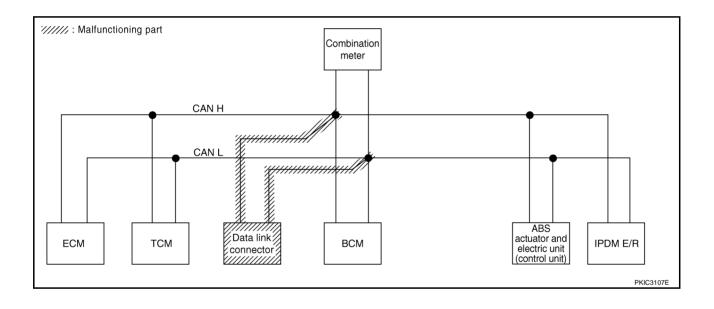
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Case 5

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No individual	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N/ individual	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No individual	_	UNKWN	UNKWN	_	UNKWN	-	_	CAN COMM CIRCUIT (U1000)



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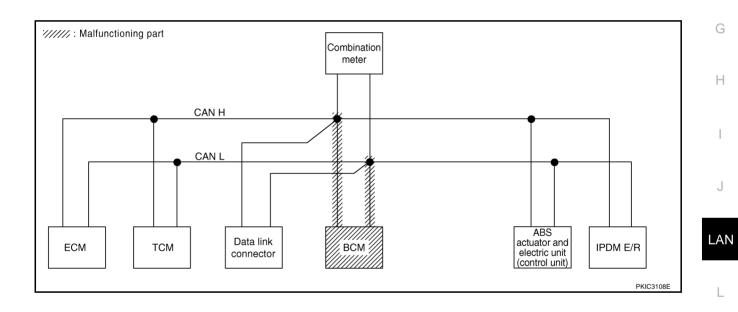
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Case 6

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

				CAN DIA	AG SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKVN	UNKWN	—	CAN COMM CIRCUIT
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
ВСМ	No individual	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	_	-	-	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	-	UNKVN	-	_	CAN COMM CIRCUIT



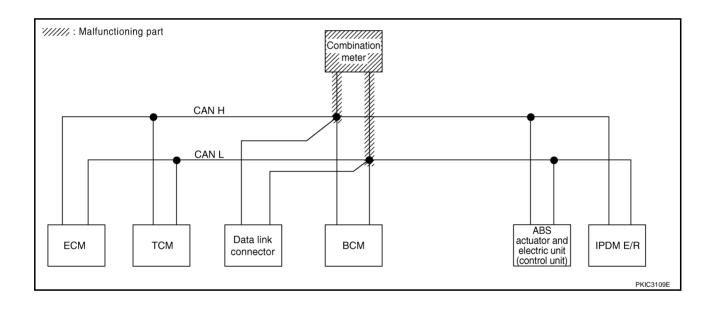
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Case 7

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N inditation	_	-	-	-	-	-	-	CAN COMM CIRCUIT (U0000)
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMM CIRCUIT (U1000)



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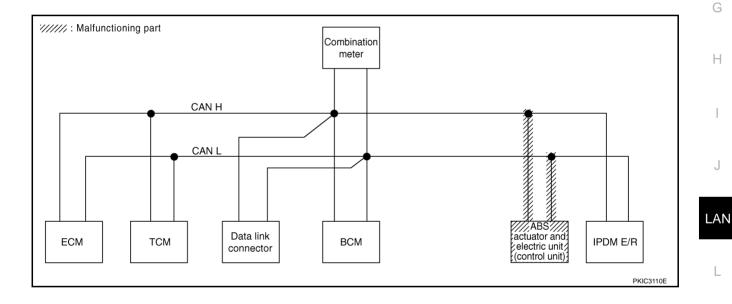
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PKIC3158E

Case 8

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) Circuit Inspection".

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	—	CAN COMM CIRCUI (U1000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUI (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUI (U1000)
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUI (U 000)
ABS	-	N	UNKVN	UNKIN	-	-	-	-	CAN COMM CIRCUI (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUI (U1000)



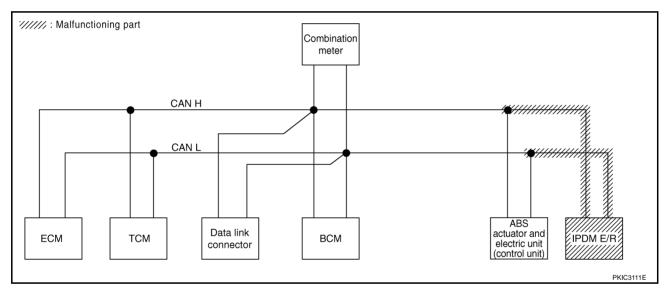
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Case 9

Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

				CAN DIA	AG SUPPOF				
SELECT SYSTEM		1 111 - 1	T		Re	ceive diagno	osis		SELF-DIAG
SELECT STSTEM	SCIERI	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	UNKVN	CAN COMM CIRCUIT (U1000)
METER	No indication	Ι	-	1	-		—	-	CAN COMM CIRCUIT (U 000)
ABS	-	NG	UNKWN	UNKWN	—	-	—	_	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	-	-	



Case 10

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

					G SUPPOF	ceive diagno	sis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U 000)
BCM	indivation	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	indivation	-	_	_	_	-	-	_	CAN COMM CIRCUIT
ABS	-	V	UNKWN	UNKWN	_	-	-	-	CAN COMM CIRCUIT (U 000)
IPDM E/R	No inditation	-	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMM CIRCUIT (U 000)

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Case 11

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	_	CAN COMM CIRCUIT
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	—	_		-	-	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKWN	—	-	-		CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)

Case 12

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	-	-	-	-	-	CAN COMM CIRCUIT (UN000)
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	-	_	-	-	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	-	_	-	-	-	CAN COMM CIRCUIT (UN000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT (U1000)

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PKIC3162E

	[CAN]
CAN SYSTEM (TYPE 5)	PFP:23710
Component Parts and Harness Connector Location	GKS000DZ
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GK\$000E0
Refer to LAN-22, "Schematic".	
Wiring Diagram — CAN —	GK\$000E1
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

[CAN]

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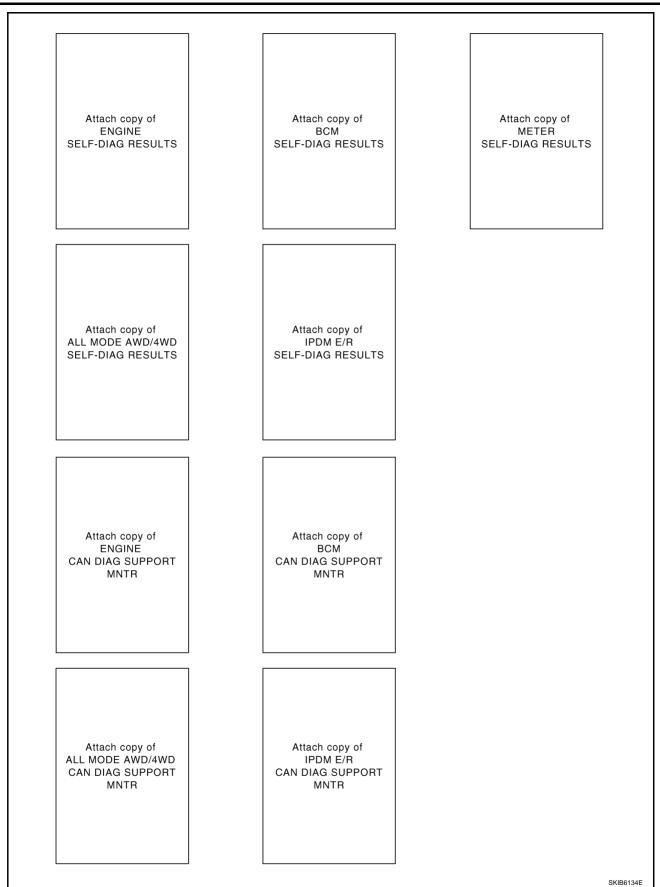
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NOTE:

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

No indication NG UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000)		_			CAN DIA	AG SUPPOF]
Image: diagnosis Termson diagnosis ECM BCM METER AWD/AWD IPOM INGINE - NG UNKWN - UNKWN UNKWN <th>SELECT SYSTEM</th> <th>screen</th> <th>Initial</th> <th>Transmit</th> <th></th> <th>Re</th> <th></th> <th></th> <th></th> <th>SELF-DIAC</th> <th>RESULTS</th>	SELECT SYSTEM	screen	Initial	Transmit		Re				SELF-DIAC	RESULTS
INGRE ING UNWIN UNWIN UNWIN UNWIN UNWIN UNIXWN				diagnosis	ECM	BCM /SEC		AWD/4WD /e4WD			
No - - - - - - AETER No - - - - - - CAN COMM CIRCUIT ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - - ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - - PDM E/R No - UNKWN UNKWN UNKWN - - - CAN COMM CIRCUIT PDM E/R No - UNKWN UNKWN UNKWN - - - CAN COMM CIRCUIT Symptoms : - - UNKWN UNKWN UNKWN - - - CAN COMM CIRCUIT	ENGINE		NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	(U1000)	(U1001)
AETER No - - - - - - CAN COMM CIRCUIT (U1000) - ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - CAN COMM CIRCUIT (U1000) - PDM E/R No - UNKWN UNKWN UNKWN - - CAN COMM CIRCUIT (U1000) - PDM E/R Indication - UNKWN UNKWN UNKWN - - - CAN COMM CIRCUIT (U1000) - Symptoms : - - - - CAN COMM CIRCUIT (U1000) -<	BCM		NG	UNKWN	UNKWN	_	UNKWN	-	UNKWN	(U1000)	
ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN CAN COMM CIRCUIT (U1000) - PDM E/R No indication - UNKWN UNKWN UNKWN CAN COMM CIRCUIT - CAN CAN CIRCUIT - CAN CAN CIRCUIT - CAN CAN CIRCUIT - CAN CIRCUIT - C	IETER	No	_	_	_	_	_	_	—	CAN COMM CIRCUIT	_
PDM E/R No - UNKWN UNKWN UNKWN CAN COMM CIRCUIT -	ALL MODE AWD/4WD		NG	UNKWN	UNKWN	_	UNKWN	_	_	CAN COMM CIRCUIT	_
Symptoms :	PDM E/R		_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT	_
Attach copy of SELECT SYSTEM	Symptoms :										
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CHECK SHEET RESULTS (EXAMPLE)

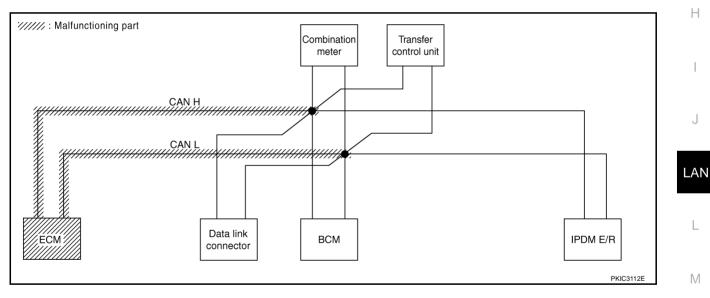
NOTE:

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

Case 1

Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

				CAN DIA	AG SUPPOF	RT MNTR				
SELECT SYSTEM	screen				Re	ceive diagno	osis			RESULTS
	5010011	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U 1001)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	-	_	_	_	_	CAN COMMCIRCUIT (U1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMMCIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMMCIRCUIT	_



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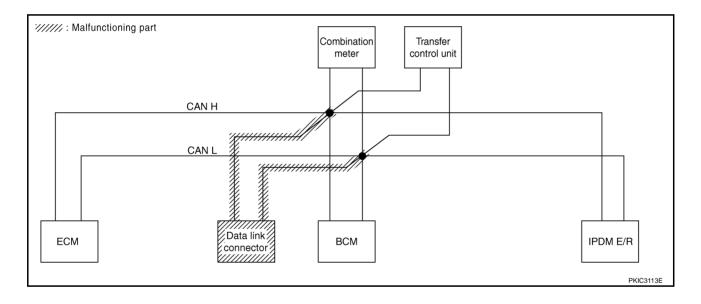
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Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

				OAN DIA	AG SUPPOF	ceive diagno				
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
BCM	No inditation	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	-
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	Ι	UNKWN	-	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No inditation	-	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)	_



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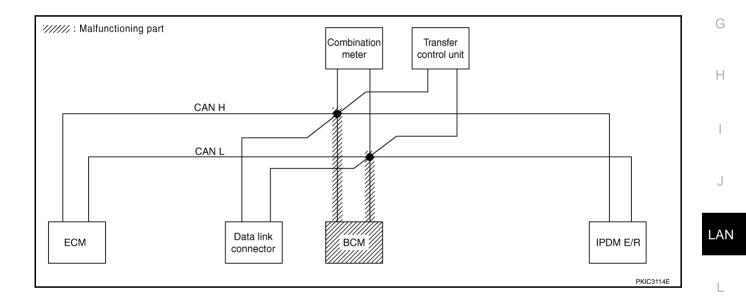
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Case 3

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

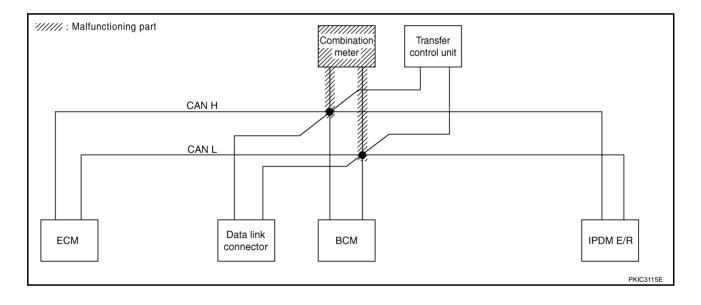
				CAN DIA	AG SUPPOF	RT MNTR				
SELECT SYSTEM	screen				Re	ceive diagno	osis			RESULTS
SELECT STOLEN	3016611	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		TILOULIO
ENGINE	_	NG	UNKWN	-	UNWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
ВСМ	No inditation	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	—	-	-	-	_	-	_	CAN COMMCIRCUIT (UN00)	-
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	-	UNKWN	UNKWN	UNUWN	-	-	-	CAN COMM CIRCUIT (UN00)	_



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Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

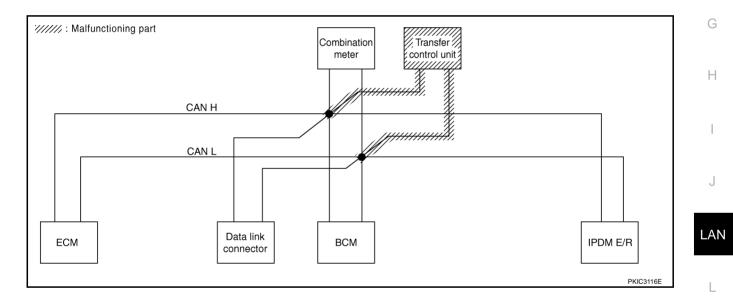
				CAN DIA	AG SUPPOF					
SELECT SYSTEM	screen	Initial	Transmit		Re	ceive diagno	DSIS		SELF-DIAG	G RESULTS
		diagnosis	diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	_	NG	UNKWN	-	UNKWN	UNIWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
BCM	No indication	NG	UNKWN	UNKWN	Ι	UNYWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication		-	I	I		-	Ι	CAN COMM/CIRCUIT (UN00)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	Ι	UNIWN	-	1	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	-	UNKWN	UNKWN	UNKWN	-	_	1	CAN COMM CIRCUIT (U1000)	_



Case 5

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

				CAN DIA	AG SUPPOF	T MNTR					
SELECT SYSTEM	screen		_		Re	ceive diagno	osis			RESULTS	
	3010011	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R			
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNIWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)	
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	—	
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	_	CAN COMM CIRCUIT (UN00)	—	
IPDM E/R	No indication	-	UNKWN	UNKWN	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)	—	



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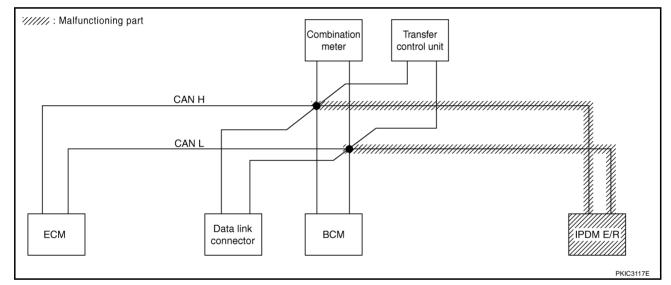
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Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

					AG SUPPOF	ceive diagno	neie		-		
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	SELF-DIAG RESULTS		
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U 001)	
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_	
METER	No indication	_	_	-	_	_	_	_	CAN COMM CIRCUIT (UN00)	-	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMM CIRCUIT (U1000)	_	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (UN00)	_	



Case 7

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

				CAN DIA	AG SUPPOR	TMNTR				
SELECT SYSTEM	screen	Initial	Tranamit		Re	ceive diagno	osis		SELF-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	_	NG	UNIWN	-	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
BCM	No inditation	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	—
METER	No indication	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U 100)	_
ALL MODE AWD/4WD	-	NG	UNIWN	UNIWN	-	UNKWN	-	-	CAN COMM CIRCUIT (U N00)	_
IPDM E/R	No indication	Ι	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMMCIRCUIT (UN00)	_

	[CAN]	
CAN SYSTEM (TYPE 6)	PFP:23710	
Component Parts and Harness Connector Location	GKS000E3	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000E4	В
Refer to LAN-22, "Schematic".		
Wiring Diagram — CAN —	GK\$000E5	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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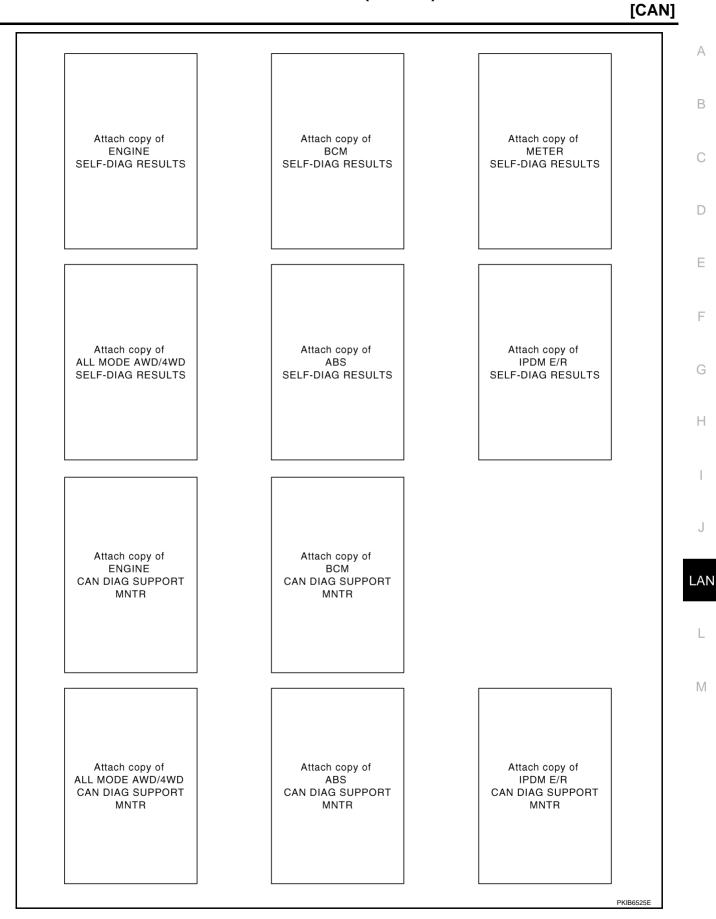
Check Sheet

[CAN]

NOTE:

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

	e			CA	N DIAG SU	PPORT MN	TB				
				0,			diagnosis			-	
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	- SELF-DIAG	RESULTS
NGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCU (U1001)
CM	No indication	NG	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
ETER	No indication	_	_	_	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
LL MODE AWD/4WD		NG	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BS	_	NG	UNKWN	UNKWN	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
ymptoms :											
			Attach SELECT	COPY OF	Λ		SI	Attach col ELECT SY	py of 'STEM		



CHECK SHEET RESULTS (EXAMPLE)

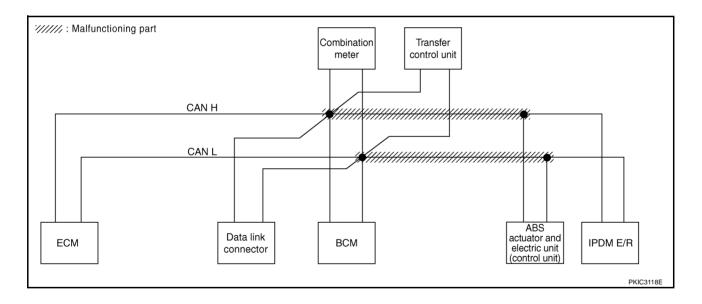
NOTE:

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

Case 1

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

				CA	AN DIAG SU	PPORT MN	TR				
SELECT SYSTEM	screen					Receive	diagnosis			SELF-DIAG	BESUITS
	0010011	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIVIC	
ENGINE	Ι	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUI (U1001)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	_	_	_	_	_	_	_	_	CAN COMMCIRCUIT (U1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	_	UNKWN	-	CAN COMMCIRCUIT (UN00)	_
ABS	_	NG	UNKWN	UNKWN	_	_	_	-	_	CAN COMM CIRCUIT (U N00)	-
IPDM E/R	No inditation	_	UNKWN	UNKWN	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U 1000)	-
											PKIB7309E

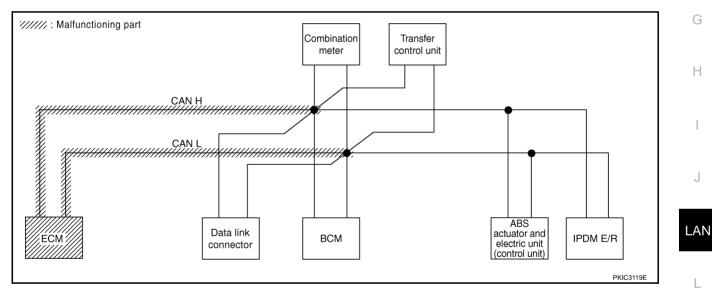


Case 2

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Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

No indication NG UNKWN UNKWN — UNKWN — — UNKWN — — — CAN COMM CIRCUIT (U1000) — … <th…< th=""> … …</th…<>
Initial diagnosis ITentsinit diagnosis ITENTSINIT Itentsinitentsinit Itentsinitentsinit Iten
Engine — NG UNWN — UNWN — UNWN — UNWN (U1000) (U1000) (U1000) (U1001) BCM No indication NG UNKWN UNWN — UNKWN — — UNKWN CAN COMM CIRCUIT (U1000) — — METER No indication — — — — — — — CAN COMM CIRCUIT (U1000) —
BCM Indication NG UNKWN UNXWN — — — UNXWN (U1000) — METER No _
METER indication
ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - UNKWN - CAN COMM/CIRCUIT -
ABS - NG UNKWN UNKWN CAN COMMCIRCUIT -
IPDM E/R No _ UNKWN UNKWN UNKWN CAN COMMCIRCUIT



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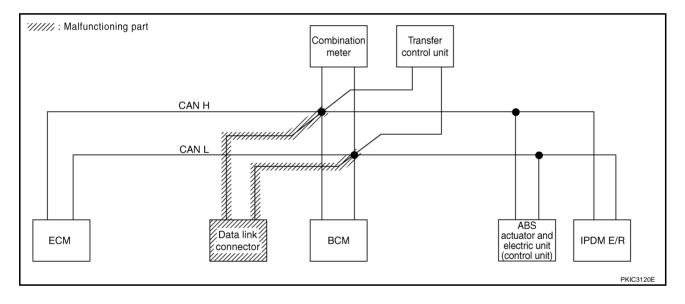
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Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

				CA	AN DIAG SU	PPORT MN	TR				
SELECT SYSTEM	screen		+			Receive	diagnosis			SELE-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIVIC	
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCU (U1001)
BCM	No inditation	NG	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD		NG	UNKWN	UNKWN	_	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No inditation	_	UNKWN	UNKWN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_



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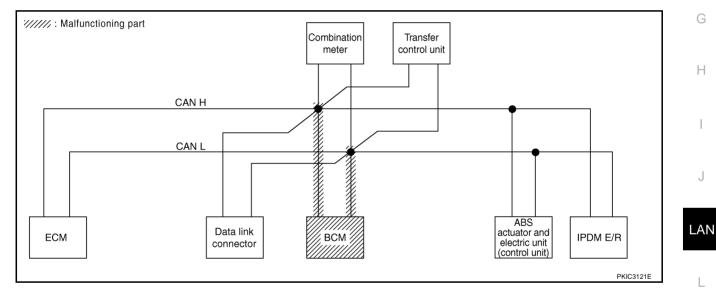
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Case 4

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Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

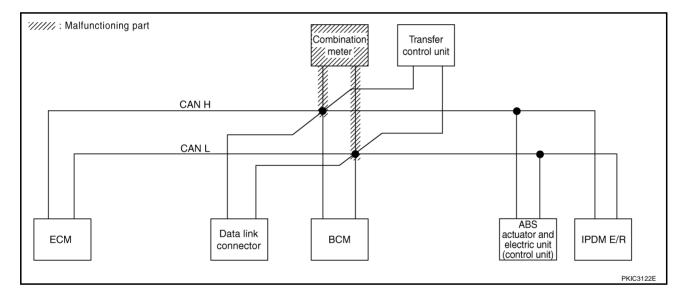
				CA	AN DIAG SU	PPORT MN	TR				
SELECT SYSTEM	screen		_			Receive of	diagnosis			SELF-DIAG	
SELLOT STOTEM	3016611	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		THEODERS
ENGINE	-	NG	UNKWN	-	UNIWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
всм	No inditation	NG	UNKWN	UNKWN	_	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U 100)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	_	_	-	-	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	UNIWN	_	_	-	_	CAN COMM CIRCUIT (UN00)	—



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Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

				CA	AN DIAG SU	PPORT MN	TR				
SELECT SYSTEM	screen	1-11-1	T		-	Receive	diagnosis			SELE-DIAG	RESULTS
022201 010121	0010011	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIVIC	TILOULIO
ENGINE	-	NG	UNKWN	-	UNKWN	UNYWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCU (U 1001)
BCM	No indication	NG	UNKWN	UNKWN	_	UNYWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	-	-	-	-	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	_	NG	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)	-

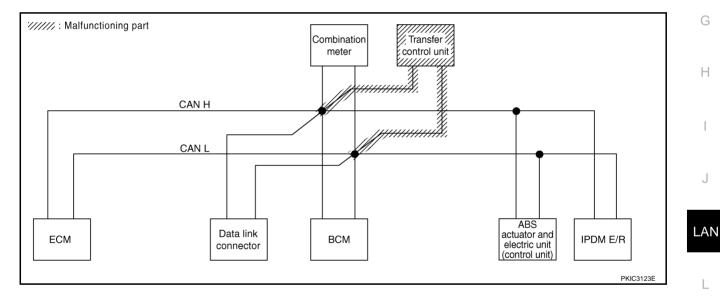


Case 6

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Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

SELECT SYSTEW Initial diagnosis Transmit diagnosis ECM BCM /SEC METER AWD/4WD /64WD VDC/TCS /ABS IPDM /E/A SELF-DIAG RESULTS ENGINE - NG UNKWN - UNKWN UNKWN UNKWN UNKWN IPDM //ABS IPDM //ABS CAN COMM CIRCUIT //U1000 CAN COMM CIRCUIT //U1000 <th></th>	
Initial diagnosis Harismit diagnosis ECM BCM /SEC METER /M&A AWD/4WD /64WD VDC/TCS /IPDM /ABS ENGINE - NG UNKWN - UNKWN UNKWN UNKWN CAN COMM CIRCUIT CAN COMMON (U1000) BCM No indication NG UNKWN UNKWN - UNKWN - CAN COMM CIRCUIT (U1000) - METER No - - - - - - CAN COMM CIRCUIT (U1000) -	:
ENGINE - NG UNKWN - UNKWN UNKWN - UNKWN (U1000) - - - UNKWN -	
BCM Indication NG UNKWN UNKWN UNKWN - - UNKWN (U1000) - METER No _	
ALL MODE AWD/4WD - NG UNXWN UNXWN - UNXWN - UNXWN - CAN COMM/CIRCUIT (UN00) -	
ABS - NG UNKWN UNKWN CAN COMM CIRCUIT -	
IPDM E/R No _ UNKWN UNKWN UNKWN CAN COMM CIRCUIT _ (U1000)	



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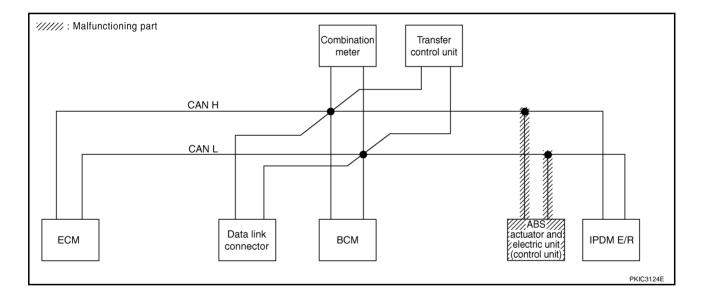
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Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

				CA	AN DIAG SU	PPORT MN	TR				
SELECT SYSTEM	Iscreen					Receive	diagnosis			SELF-DIAG	
	- Succerr	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIAC	I LOOLIO
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCL (U1001)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	_	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	-	_	-	-	-	-	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	_	UNKWN	-	UNIWN	-	CAN COMMCIRCUIT (UN00)	_
ABS	-	N	UNKIN	UNKWN	-	-	-	-	-	CAN COMM CIRCUIT (UN00)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_

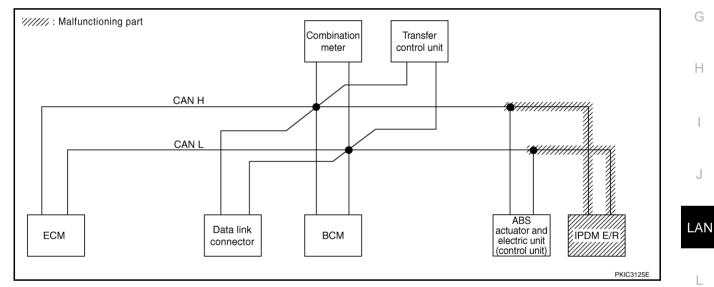


Case 8

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Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

				CA							
SELECT SYSTEM screen						Receive of	SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMICIRCUIT (U 101)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	_	-	_	-	-	-	-	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	UNKWN	_	_	-	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No inditation	I	UNKWN	UNKWN	UNKWN	_	_	-	1	CAN COMM CIRCUIT (U 1000)	_



Case 9



			CA								
SELECT SYSTEM screen		Initial diagnosis				Receive	SELF-DIAG RESULTS				
			Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNUWN	_	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMN CIRCUIT (UN01)
ВСМ	No inditation	NG	UNKWN	UNKWN	-	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	-	-	-	_	-	-	CAN COMMCIRCUIT (U N00)	_
ALL MODE AWD/4WD	—	NG	UNIWN	UNYWN	1	UNKWN	_	UNHWN	_	CAN COMMCIRCUIT (UN00)	_
ABS	-	V	UNUWN	UNYWN	١	-	-	-	-	CAN COMMCIRCUIT (UN00)	_
IPDM E/R	No inditation	Ι	UNKWN	UNKWN	UNKWN	—	_	_		CAN COMM CIRCUIT (UN00)	_
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r

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

SELECT SYSTEM screen				CA							
		n Initial diagnosis				Receive	SELF-DIAG RESULTS				
			Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	SELI-DIAG RESULIS	
ENGINE	—	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUI (U1001)
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	_	-	-	-	-	CAN COMM CIRCUIT (UN00)	_
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	-	UNKWN	-	UNIWN	-	CAN COMM CIRCUIT (UN00)	-
ABS	-	NG	UNKWN	UNKWN	_	-	-	-	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	—	_	_	Ι	CAN COMM CIRCUIT (U1000)	-

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

[PPORT MN	тр					
SELECT SYSTEM screen				Receive diagnosis								
		Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS		
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	—	
METER	No indication	-	-	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	-	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	_	
ABS	-	NG	UNKWN	-	_	_	-	_	_	CAN COMM/CIRCUIT (UN00)	_	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	-	
											PKIB7319E	

	[CAN]	
CAN SYSTEM (TYPE 7)	PFP:23710	
Component Parts and Harness Connector Location	GKS000E7	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000E8	В
Refer to LAN-22, "Schematic".		
Wiring Diagram — CAN —	GK\$000E9	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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LAN-109

Check Sheet

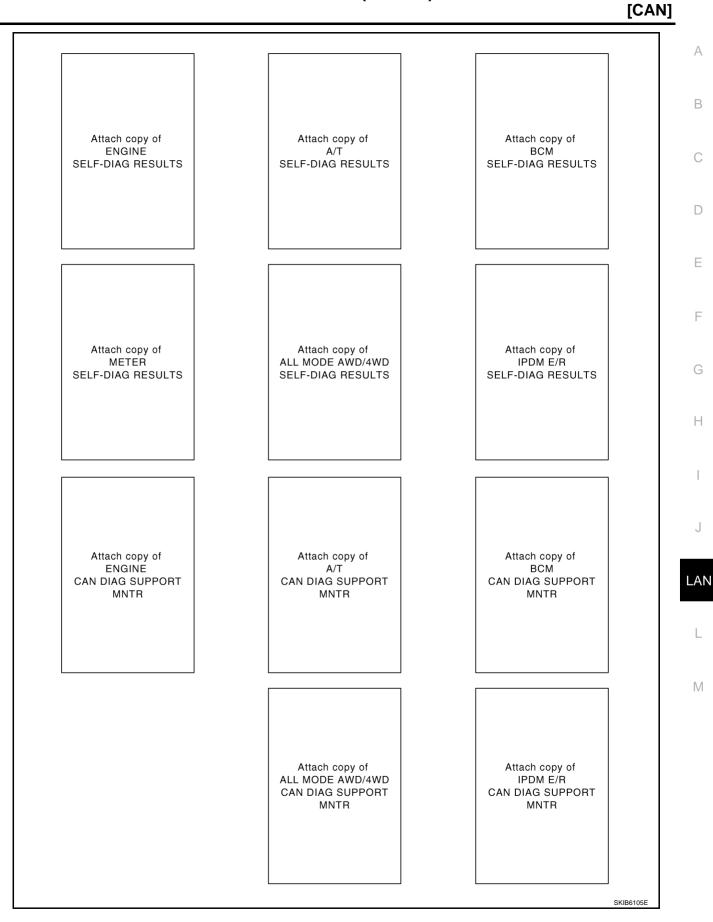
NOTE:

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

				CAI	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen					Receive	diagnosis			SELF-DIAG	BESUITS
OLLEON ON OTHER	boreen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLEI DINC	
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)	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	-	—	-	-	-	CAN COMM CIRCUIT (U1000)	-
ALL MODE AWD/4WD	-	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



CHECK SHEET RESULTS (EXAMPLE)

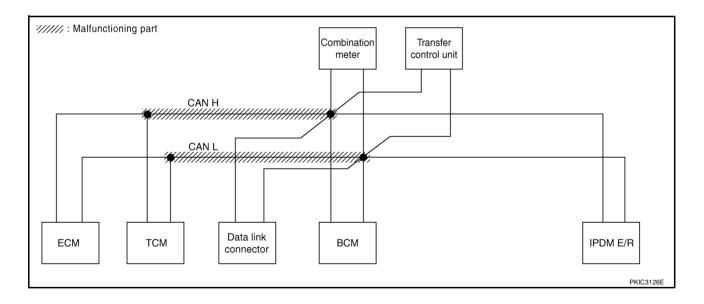
NOTE:

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-182, "Inspection Between TCM and Data</u> <u>Link Connector Circuit"</u>.

				CAN	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen					Receive of	diagnosis			SELF-DIAG	BESUITS
	ooroon	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLLI DIVIC	
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKIN	UNKWN	UNKIN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKIN	UNKWN	_	CAN COMMCIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKIN	-	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	-	_	_	—	-	_		_
ALL MODE AWD/4WD	-	NG	UNKWN			_	UNKWN	-	_	CAN COMMCIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN		-	UNKWN	_	_	_	CAN COMMCIRCUIT (U1000)	_



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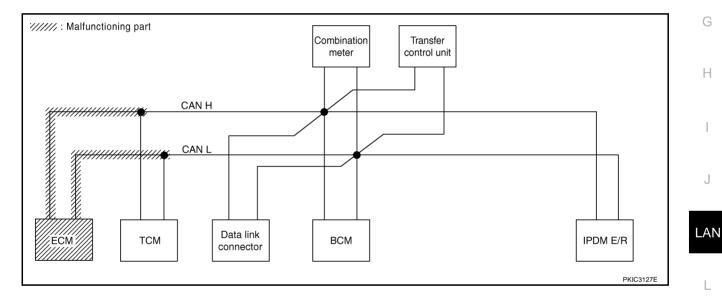
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Case 2

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

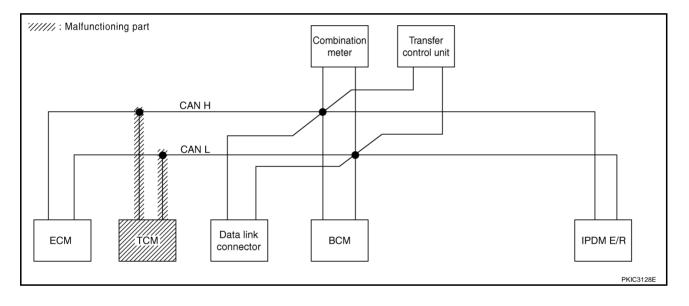
				CA	N DIAG SU	PPORT MI	NTR				
SELECT SYSTEM	scroon					Receive	diagnosis				
SELECT STOLEN	Screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	E/D		
ENGINE	_	NG	UNKWN	_	UNKWN		UNKWN	UNKWN	UNKIN	CAN COMMCIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN		CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	_	_	_	_	_	_	CAN COMM CIRCUIT (U 1000)	_
ALL MODE AWD/4WD	—	NG	UNKWN	UNKIN	UNKWN	—	UNKWN	-	-	CAN COMM CIRCUIT (U 1000)	_
IPDM E/R	No indication	—	UNKWN	UNKIN	-	UNKWN	_	Ι		CAN COMMCIRCUIT (U1000)	—



Μ

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

				CAI	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen	Initial	Trenewit			Receive	diagnosis			SELE-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMMCIRCUIT (UN00)	CAN COMMCIRCUI (U 1 01)
A/T	_	NG	UNKWN	UNKIN	-	-	UNKWN	UNKWN	-	CAN COMMCIRCUIT (UN00)	_
BCM	No indication	NG	UNKWN	UNKWN	_	—	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	-	-	—	-	—	-	-	CAN COMM CIRCUIT (U 1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMMCIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	—		CAN COMM CIRCUIT (U1000)	_



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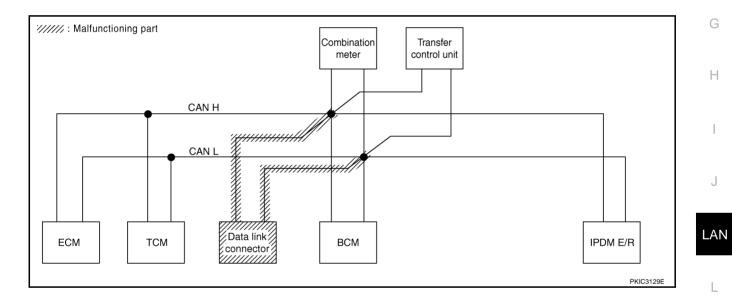
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Case 4

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

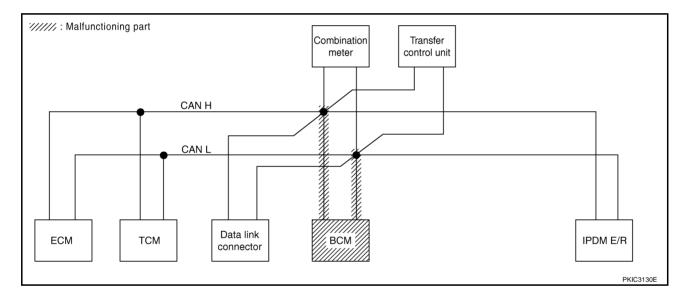
				CAN	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen					Receive	diagnosis			SELF-DIAG	
	0010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLLI DIVIC	
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
BCM	No inditation	NG	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No inditation	_	-	_	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD		NG	UNKWN	UNKWN	UNKWN	-	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No inditation	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	-



Μ

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

				CAI	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen					Receive	diagnosis			SELF-DIAG	BESUITS
	0010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLLI DIVIC	
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indivation	NG	UNKWN	UNKWN	—	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	_	_	_	_	_	_	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	—	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKIN	_	—	-	CAN COMMCIRCUIT (U 1000)	_



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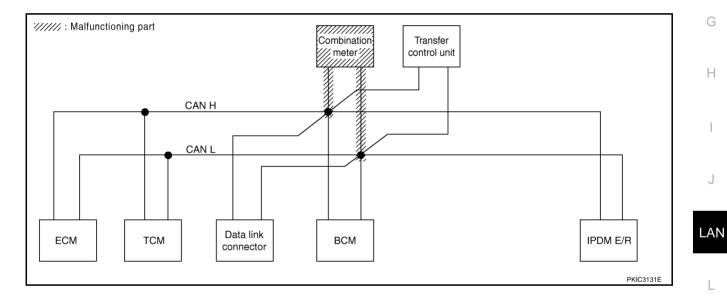
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Case 6

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

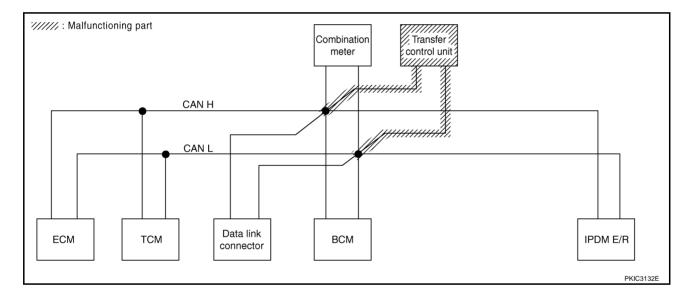
				CAN	N DIAG SU	PPORT MI	NTR				
SELECT SYSTEM	screen		_			Receive	diagnosis				B RESULTS
	Sercen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLLI DIAC	
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	-	NG	UNKWN	UNKWN	-	-		UNKWN	-	CAN COMMCIRCUIT (U100)	-
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKIN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No inditiation	—	—	-	_			—		CAN COMMCIRCUIT (UN00)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	—	-	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	_	UNKWN	_	—	—	CAN COMM CIRCUIT (U1000)	_



Μ

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

				CAI	N DIAG SU		NTR diagnosis				
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	SELF-DIAG	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKIN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	I	NG	UNKWN	UNKWN	_	—	UNKWN	UNKIN	_	CAN COMMCIRCUIT (UN00)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	_	_	_	_	_	_	—	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD		NG		UNKWN	UNKINN	_	UNKWN	_	_	CAN COMMCIRCUIT (UN00)	_
IPDM E/R	No indication		UNKWN	UNKWN	_	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)	_
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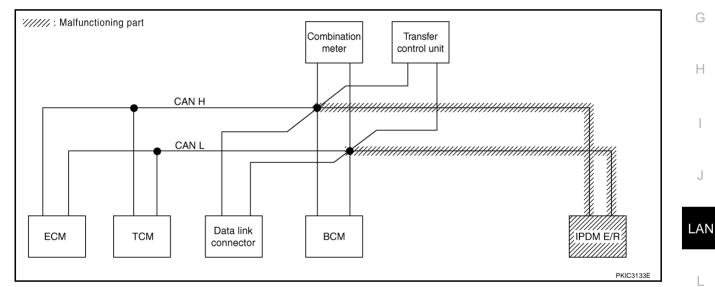
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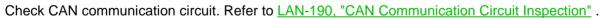
Case 8

Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

				CAN	N DIAG SU	PPORT MI	NTR				
SELECT SYSTEM	screen					Receive	diagnosis				
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	OLLI DIVIC	
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	UNKIN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	UNKIN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	—	Ι	-	_		_	—		CAN COMM CIRCUIT (U 1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN		UNKWN	—	l	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No inditation	—	UNKWN	UNKWN	—	UNKWN	_	—	-	CAN COMMCIRCUIT (U N00)	_



Case 9



				CAI	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen	1	T			Receive	diagnosis			SELE-DIAG	BESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	_	NG		_	UNKWN		UNKWN	UNKWN	UNKIN	CAN COMMCIRCUIT (UN00)	CAN COMM/CIRCUIT (U1001)
A/T	_	NG	UNKWN		_	_		UNKWN	_	CAN COMM CIRCUIT (UN00)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No inditiation	_	-	_	_	_	_	_	_	CAN COMM CIRCUIT (U N00)	_
ALL MODE AWD/4WD		NG	UNKIN	UNKIN	UNKWN	_		-	_	CAN COMMCIRCUIT (UN00)	_
IPDM E/R	No inditation	—	UNKWN	UNKWN	—	UNKWN	_	_	-	CAN COMMCIRCUIT (U N00)	_
					1						

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Case 10

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CA	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen		_			Receive	diagnosis				RESULTS
SELECT STOLEN	3016611	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R	SELI-DIAC	THEODERS
ENGINE	_	NG	UNKWN	-		UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT	CAN COMMCIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	-	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication		_	_	_	_	_	_	—	CAN COMM CIRCUIT (U 1000)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	—	CAN COMMCIRCUIT (UN00)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)	_

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAI	N DIAG SU	PPORT M	NTR				
SELECT SYSTEM	screen	l altra l	Transmit			Receive	diagnosis			SELF-DIAG	BESULTS
011101 01011	00.0011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	IPDM E/R		
ENGINE	_	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	-	NG	UNKWN	-	-	-	Ι	-	-	CAN COMMCIRCUIT (UN00)	_
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	—	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	—	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	—	CAN COMM CIRCUIT (U1000)	_

	[CAN]	
CAN SYSTEM (TYPE 8)	PFP:23710	
Component Parts and Harness Connector Location	GKS000EB	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000EC	В
Refer to LAN-22, "Schematic"		
Wiring Diagram — CAN —	GKS000ED	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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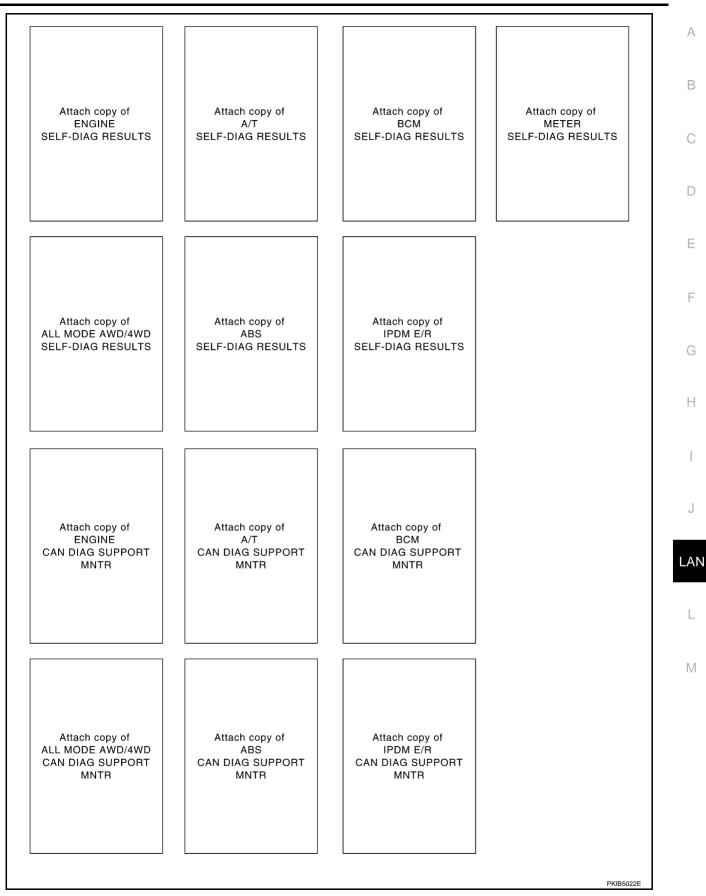
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LAN-121

Check Sheet

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

					CAN DIA	G SUPPOR						
SELECT SYSTEM	screen	Initial	Transmit				eive diagno			12211	SELF-DIAG	B RESULTS
		diagnosis	diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
4/ T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
ЗСМ	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No	_	_	_	_	_	-	_	_	_	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD		NG	UNKWN	UNKWN	UNKWN	_	UNKWN	_	UNKWN	_	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	_	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
PDM E/R	No	_	UNKWN	UNKWN	_	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)	_
	indication										(01000)	
						1						
			Atta SELE	ich copy CT SYS ⁻	of FFM			At SEL	tach cop ECT SYS	y of STEM		
			OLLL	01010				OLL	201 010			



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CHECK SHEET RESULTS (EXAMPLE)

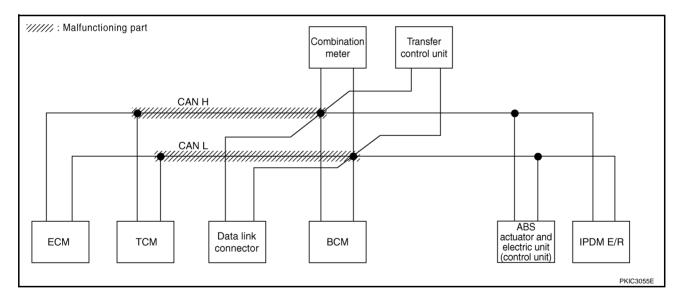
NOTE:

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-182</u>, "Inspection Between TCM and Data <u>Link Connector Circuit</u>".

					CAN DIA	G SUPPOR	RT MNTR					
SELECT SYSTEM	screen					Rece	eive diagno	sis			SELF-DIAG	BESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKIN	UNKWN	—		CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (U1001)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKVN	UNKWN	-	-	CAN COMMCIRCUIT (U 1000)	_
BCM	No indication	NG	UNKWN	UNKIN	_	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	—	—	-	_	_		-	_		CAN COMMCIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKIN	UNKIN	—	UNKWN	_	UNKWN	1	CAN COMMCIRCUIT (U 1000)	—
ABS	-	NG	UNKWN	UNKWN	—	—	-	-	—	-	CAN COMMCIRCUIT (U 1000)	_
IPDM E/R	No indication	-	UNKWN	UNKIN	-	UNKWN	-	-	-	-	CAN COMMCIRCUIT (U 1000)	—

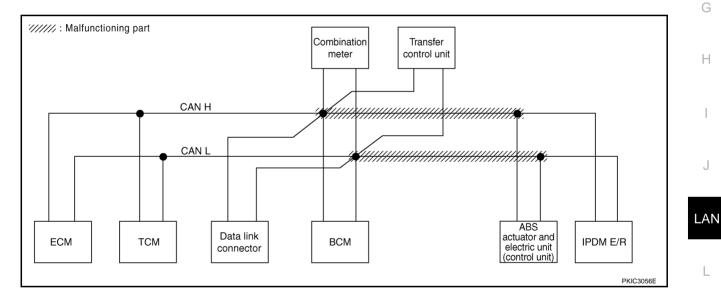


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Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> A <u>183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

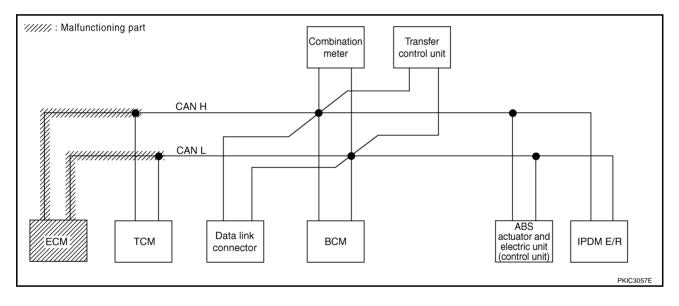
					CAN DIA	G SUPPOI	RT MNTR					
SELECT SYSTEM	screen	1	T			Rece	eive diagno	sis			SELE-DIAG	RESULTS
		Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	_
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	_	-	UNKIN	CAN COMM CIRCUIT (U1000)	—
METER	No indication	—	—	—	_	-	-	—			CAN COMMCIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	—		-	CAN COMMCIRCUIT (U 1000)	—
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	-	-	CAN COMMCIRCUIT (U 1000)	—
IPDM E/R	No inditation	-	UNKWN	UNKWN	_	UNKWN	-	_	-		CAN COMMCIRCUIT (U 1000)	—



M

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen		_			Rece	eive diagno	sis			SELF-DIAG	BESUITS
	3010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		I LOOLIO
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMMCIRCUIT (UN00)	CAN COMMCIRCU (U N01)
A/T	_	NG	UNKWN		_	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U N00)	_
BCM	No indication	NG	UNKWN		_	_	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	_	_	_	_	-	_	-	_	CAN COMM CIRCUIT (U 1000)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKIN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (UN00)	_
ABS	_	NG	UNKWN	UNKWN	_	_	_	_	-	_	CAN COMM CIRCUIT (U N00)	_
IPDM E/R	No indication	_	UNKWN		—	UNKWN		—		—	CAN COMMCIRCUIT (U1000)	



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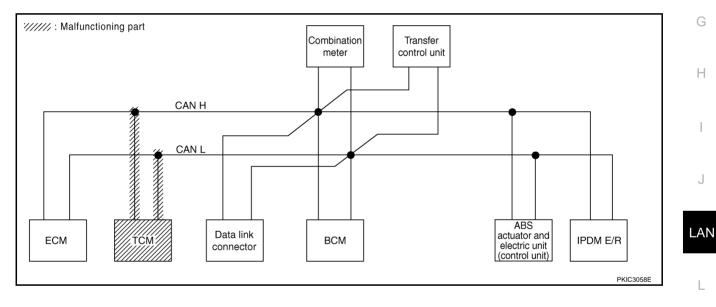
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Case 4

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

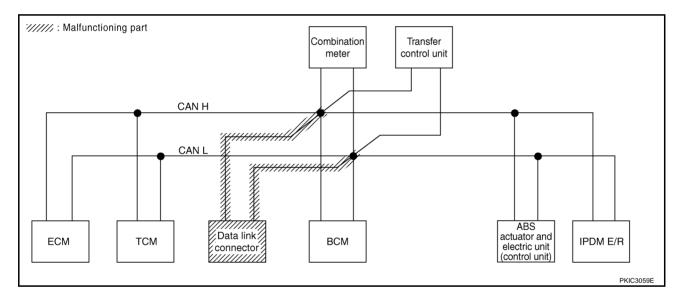
					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen					Rece	eive diagno	sis			SELF-DIAG	RESULTS
	Solcen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIAC	THEODERO
ENGINE	-	NG	UNKWN	_		UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMMCIRCUIT (UN00)	CAN COMM CIRCUIT (U 101)
A/T	-	NG	UNKWN		-	_	UNKWN	UNKWN	_	-	CAN COMMCIRCUIT (U 1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	-	_	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	Ι	-	-	-	-		-	-	CAN COMMCIRCUIT (U1000)	_
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	UNKIN	-	UNKWN	-	UNKWN	_	CAN COMMCIRCUIT (U 1000)	-
ABS	-	NG	UNKWN	UNKWN	-	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)	_



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Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen					Rece	eive diagno	sis			SELF-DIAG	
SELECT STOTEM	3010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		THEODERS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCU (U1001)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	_
BCM	No inditiation	NG	UNKWN	UNKWN	_	_	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No individual	_	_	_	_	_	-	_	-	_	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	_	_	_	_	-	_	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No individualition	_	UNKWN	UNKWN	_	UNKWN	_	_	-	_	CAN COMM CIRCUIT (U1000)	—



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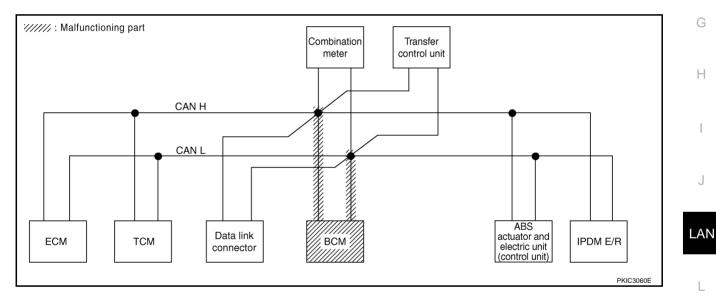
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Case 6

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

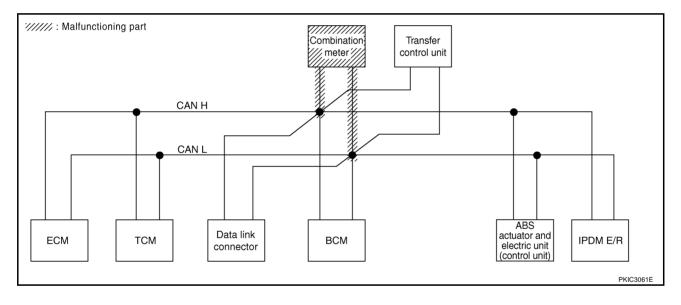
					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen					Rece	eive diagno	sis			SELF-DIAG	
SELECT STOLEN	3016611	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		THEODERS
ENGINE	_	NG	UNKWN	_	UNKWN		UNKWN	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (U 1001)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)	_
BCM	No inditation	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	_	-	-	-	-	_	-	-	-	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	_	NG	UNKWN	UNKWN	-	-	_	-	-	-	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKIN	-	-	_	-	CAN COMMCIRCUIT (UN00)	_



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Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

					CAN DIA	G SUPPOR	RT MNTR					
SELECT SYSTEM	screen		_			Rece	eive diagno	sis			SELF-DIAG	BESUITS
	Sorcen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIAC	
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCL (UN01)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	_	-	CAN COMMCIRCUIT (U 100)	_
BCM	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No inditiation	_	_	_	_	_	_	-	-	_	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD		NG	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)	



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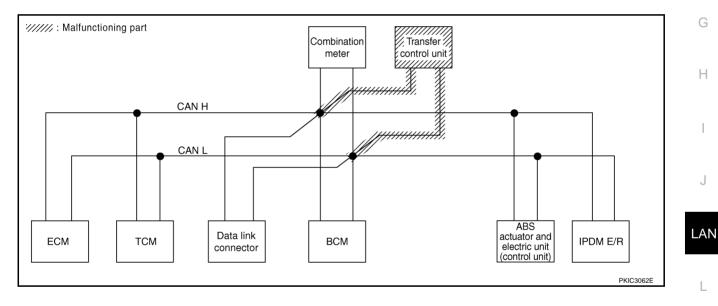
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Case 8

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	scroon					Rece	eive diagno	sis				RESULTS
SELECT STOTEM	3016611	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	E/R		
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKIN	_	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMMCIRCUIT (UN01)
A/T	-	NG	UNKWN	UNKWN	-	_	UNKWN	UNKIN	_	-	CAN COMMCIRCUIT (UN00)	_
BCM	No indication	NG	UNKWN	UNKWN	-	_	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indication	-	_	-	_	_	_	-	_	-	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD	-	NG	UNKWN		UNKWN	-	UNKWN	-	UNKWN	-	CAN COMMCIRCUIT (UN00)	_
ABS	-	NG	UNKWN	UNKWN	Ι	-	-	-	-	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	_	UNKWN	-	-	_	-	CAN COMM CIRCUIT (U1000)	—

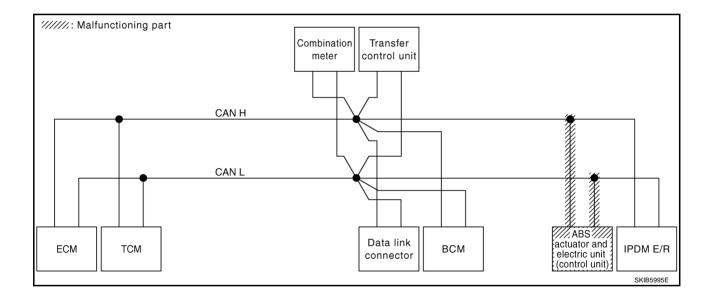


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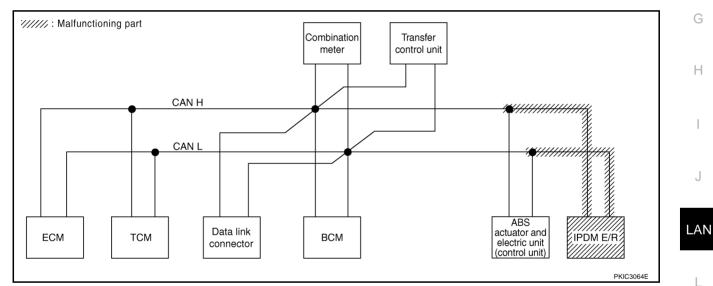
Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (Control Unit) Circuit Inspection".

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen					Rece	eive diagno	sis			SELE-DIAG	RESULTS
OLLEON ON OTHER	Sorcen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIAC	
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUI (U1001)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)	_
ВСМ	No indication	NG	UNKWN	UNKWN	_	_	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	-	-	_	-	-	-	-	-	-	CAN COMMCIRCUIT (UN00)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	_	UNKWN	-	UNKIN	_	CAN COMMCIRCUIT (UN00)	_
ABS	_	V		UNKIN	_	_	_	-	-	-	CAN COMM CIRCUIT (UN00)	_
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	_	-	-	-	CAN COMM CIRCUIT (U1000)	_



Case 10 Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

					CAN DIA	G SUPPOR	RT MNTR					
SELECT SYSTEM	screen					Rece	ive diagno	sis	SELF-DIAG RESULT		BESULTS	
	0010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (UN01)
A/T	_	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	-	_	UNKIN	CAN COMM CIRCUIT (U1000)	-
METER	No indication	—	Ι	Ι	Ι	1			Ι	Ι	CAN COMMCIRCUIT (U 1000)	-
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	_	CAN COMM CIRCUIT (U1000)	-
ABS	-	NG	UNKWN	UNKWN	Ι		-	-	-	-	CAN COMM CIRCUIT (U1000)	_
IPDM E/R	No ind N ation	-	UNKWN	UNKWN	-	UNKWN	Ι	-	-	-	CAN COMMCIRCUIT (U 100)	—



Case 11

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Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM	screen					Rece	ive diagno	sis			SELE-DIAG	RESULTS
	0010011	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R	OLLI DIVIC	
ENGINE	-	NG		_					-	UNKWN	CAN COMM CIRCUIT (UN00)	CAN COMM CIRCUIT (U N01)
A/T	-	NG	UNKWN		-	-		UNKIN	-	-	CAN COMMCIRCUIT (UN00)	_
BCM	No ind ation	NG	UNKWN	UNKWN	_	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No indivation	_	-	_	_	-	_	-	_	-	CAN COMM CIRCUIT (U N00)	_
ALL MODE AWD/4WD	_	NG	UNKIN		UNKWN	-	UNKWN	-	UNKIN	_	CAN COMMCIRCUIT (UN00)	_
ABS	_	V	UNKIN		Ι	-	-	-	-	-	CAN COMM/CIRCUIT (UN00)	_
IPDM E/R	No ind Nation	-	UNKWN	UNKWN	-	UNKWN	_	-	-	-	CAN COMM CIRCUIT (UN00)	—
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Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

A/T - NG UNKWN UNKWN - - UNKWN - - CAN COMM CIRCUIT (U1000) BCM No indication NG UNKWN UNKWN - - UNKWN - - UNKWN CAN COMM CIRCUIT (U1000)	
Initial diagnosis TCM BCM /SEC METER /M&A AWD/4WD /64WD /ABS IPDM /ABS ENGINE - NG UNKWN - UNKWN UNKWN UNKWN UNKWN CAN COMM/CIRCUIT CAN COM (U100) A/T - NG UNKWN UNKWN - - UNKWN CAN COMM/CIRCUIT CAN COM (U100) BCM No Indication NG UNKWN UNKWN - - CAN COMM/CIRCUIT (U1000)	
Engine — Ng UNKWN — UNKWN UNKWN UNKWN — ONKWN — ONKWN — ONKWN — ONKWN — ONKWN — ONKWN UNKWN — ONKWN — ONKWN — — — ONKWN M — — ONKWN M …	MCIRCUI
A/I - NG UNKWN - - UNKWN - - (U1000) BCM No indication NG UNKWN UNKWN - - UNKWN - - (U1000) - - (U1000) - - (U1000) - - (U1000) - - - UNKWN -	
BCM indication NG UNKWN UNKWN UNKWN UNKWN (U1000)	_
	_
METER NO	_
ALL MODE AWD/4WD - NG UNKWN UNKWN UNKWN - UNKWN - UNKWN - UNKWN - CAN COMMCIRCUIT (U NOO)	_
ABS - NG UNKWN UNKWN CAN COMM CIRCUIT (U1000)	_
IPDM E/R No _ UNKWN UNKWN - UNKWN CAN COMM CIRCUIT (U1000)	_

Case 13

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

SELECT SYSTEM scr		Initial										
		Initial				Rece	eive diagno	sis			SELE-DIAG	RESULTS
		diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD /e4WD	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	—	-	-	-	-	Ι	-	CAN COMMCIRCUIT (U 100)	_
BCM in	No ndication	NG	UNKWN	UNKWN	-	-	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)	_
METER	No ndication	-	-	-	_	-	_	-	-	-	CAN COMM CIRCUIT (U1000)	_
ALL MODE AWD/4WD	_	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	_
ABS	-	NG	UNKWN	-	-	-	-	-	-	-	CAN COMMCIRCUIT (U 100)	_
IPDM E/R in	No ndication	-	UNKWN	UNKWN	_	UNKWN	_	_	_	-	CAN COMM CIRCUIT (U1000)	Ι

CAN SYSTEM (TYPE 9)	PFP:23710	
Component Parts and Harness Connector Location	GKS000DF	А
Refer to LAN-21, "Component Parts and Harness Connector Location".		
Schematic	GKS000DG	В
Refer to LAN-22, "Schematic".		
Wiring Diagram — CAN —	GKS000DH	С
Refer to LAN-23, "Wiring Diagram — CAN —".		
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LAN-135

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Check Sheet

GKS000DI

[CAN]

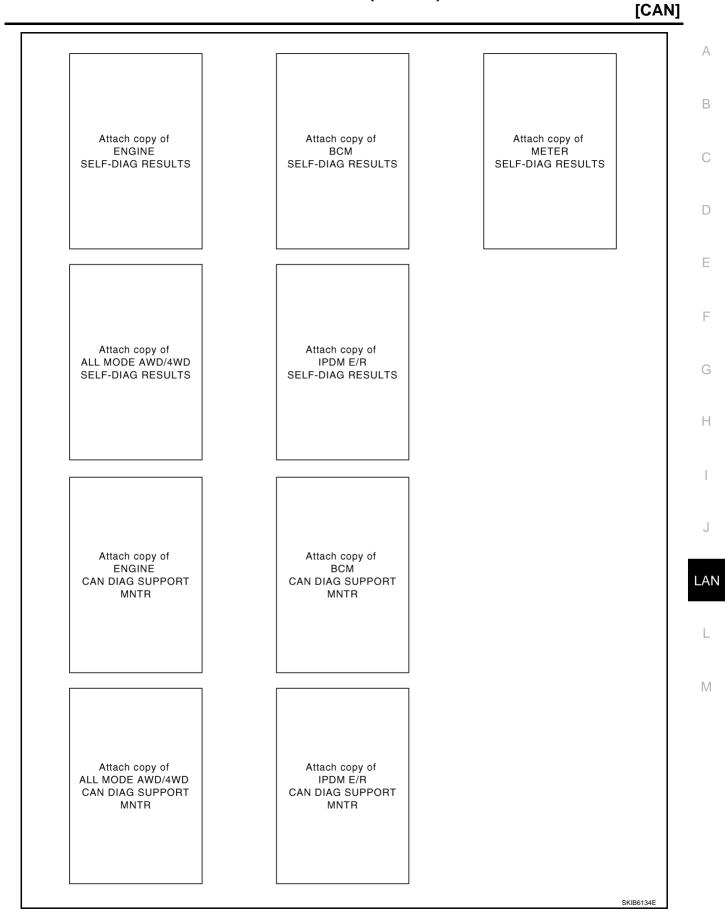
NOTE:

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

Check sheet table								
			CA	N DIAG SU	PPORT MN	TR		
		1	T		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM 6	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)
всм	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication		I	1	1	1	_	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	—	NG	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



CHECK SHEET RESULTS (EXAMPLE)

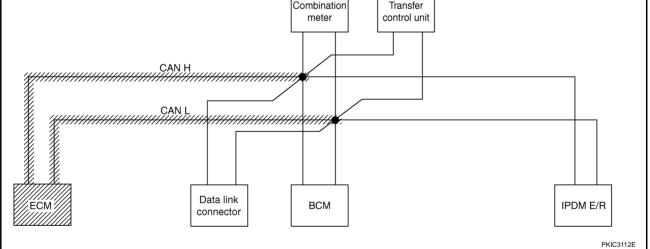
NOTE:

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

Case 1

Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

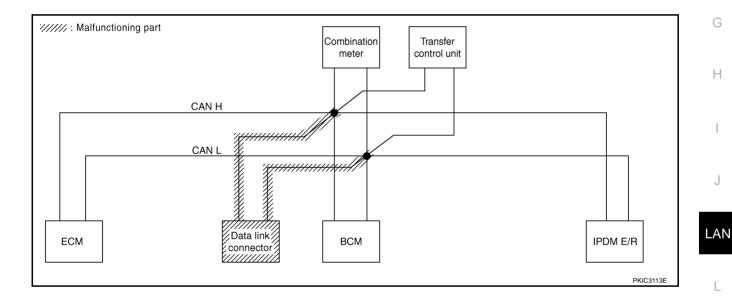
			CA	N DIAG SU	PPORT MN			
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	diagnosis METER /M&A	IPDM E/R	SELF-DIAG RESULTS
ENGINE	-	NG	UNKVN	_	UNKIN	UNKWN	_	
ВСМ	No indication	NG	UNKWN	UNKVN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	_	-	_	_	_	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	_	UNKWN	-	
IPDM E/R	No indication	_	UNKWN	UNKOVN	UNKWN	-	-	



Case 2

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
			-		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	—	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indivation	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No inditiation	—	-	—	-	-	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	—	UNKWN	1	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indivision	_	UNKWN	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)



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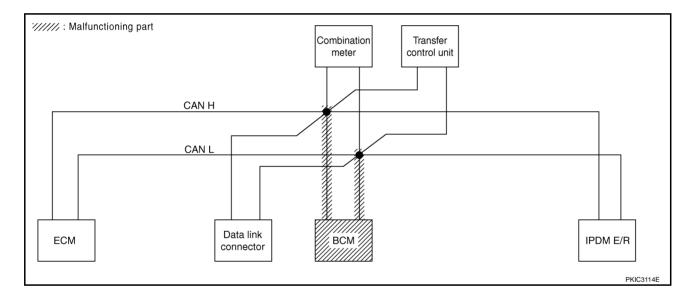
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Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

Image: Second alignment of the second sec	SELECT SYSTEM	screen	Initial	Transmit		PPORT MN Receive			SELF-DIAG
NG NG UNKWN UNKWN UNKWN UNKWN UNKWN UNKWN CAN COMM CIRCUIT (U1000) METER No indication — — — — — CAN COMM CIRCUIT (U1000) ALL MODE AWD/4WD — NG UNKWN UNKWN — UNKWN — CAN COMM CIRCUIT (U1000)	SELECT STOLEM	3010011			ECM				RESULTS
METER No indication — — — — — CAN COMM CIRCUIT (UN00) ALL MODE AWD/4WD — NG UNKWN UNKWN — UNKWN — CAN COMM CIRCUIT (UN00)	ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT
ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - CAN COMM CIRCUIT	BCM	No individualion	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	
ALL MODE AWD/4WD - NG UNKWN UNKWN - UNKWN - (U1000)	METER		-	-	_	-	-	-	CAN COMM CIRCUIT (U 000)
PDM E/R NO - UNKWN UNKWN UNKWN CAN COMM CIRCUIT	ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	_	(U1000)
	IPDM E/R	No indication	Ι	UNKWN	UNKWN	UNKVN	-	-	CAN COMM CIRCUIT (U 000)



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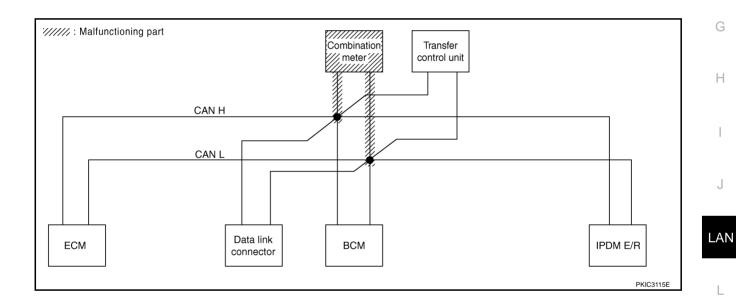
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Case 4

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
					Receive	diagnosis		SELF-DIAG
SELECT SYSTEM 6	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)
METER	indivation	—	-	_	Ι	Ι	-	CAN COMM CIRCUIT (U0000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	—	UNKWN	_	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	—	UNKWN	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)



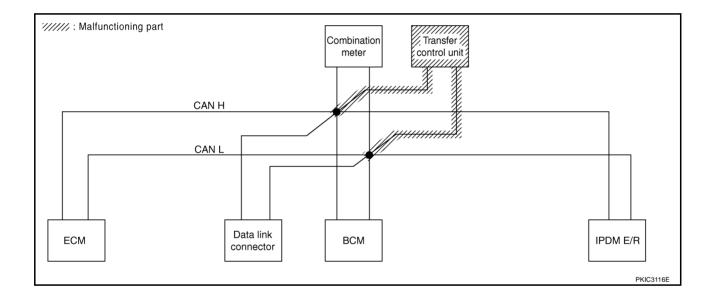
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Case 5

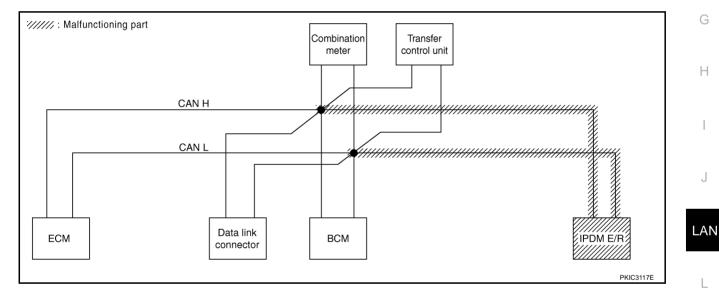
Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

			04	N DIAG SU		diagnosis		SELF-DIAG	
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS	
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)	
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	
METER	No indication	_	_	_	_	_	_	CAN COMM CIRCUIT (U1000)	
ALL MODE AWD/4WD	-	NG	UNKIN	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)	



Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

			CA	N DIAG SU	PPORT MN	TR		
			_		Receive	diagnosis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	_	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	UNKIN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	—	_	_	_	_	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No individual	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT



Case 7

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

		CAN DIAG SUPPORT MNTR						
SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	Receive diagnosis				SELF-DIAG
				ECM	BCM /SEC	METER /M&A	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT
BCM	No indivition	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	CAN COMM CIRCUI (U1000)
METER	No indivision	_	—	_	_	_	-	CAN COMM CIRCUI (UN000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	—	UNKIVN	-	CAN COMM CIRCUI (UN000)
IPDM E/R	No individual	—	UNKWN	UNKWN	UNKWN	_	-	CAN COMM CIRCUI (UN000)

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	[CAN]
CAN SYSTEM (TYPE 10)	PFP:23710
Component Parts and Harness Connector Location	GKS000DB
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GKS000DC
Refer to LAN-22, "Schematic"	
Wiring Diagram — CAN —	GKS000DD
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

[CAN]

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NOTE:

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

				CAN DIA	G SUPPOF	RT MNTR				
					Re	ceive diagno	osis		SELF-DIAG	
SELECT SYSTEM 8	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS	
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)	
BCM	No indication	NG	UNKWN	UNKWN	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)	
METER	No indication	-	-	_	-	-	-	-	CAN COMM CIRCUIT (U1000)	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	Ι	CAN COMM CIRCUIT (U1000)	
ABS	-	NG	UNKWN	UNKWN	_	_	-	-	CAN COMM CIRCUIT (U1000)	
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	-	CAN COMM CIRCUIT (U1000)	

LAN-145

Symptoms :

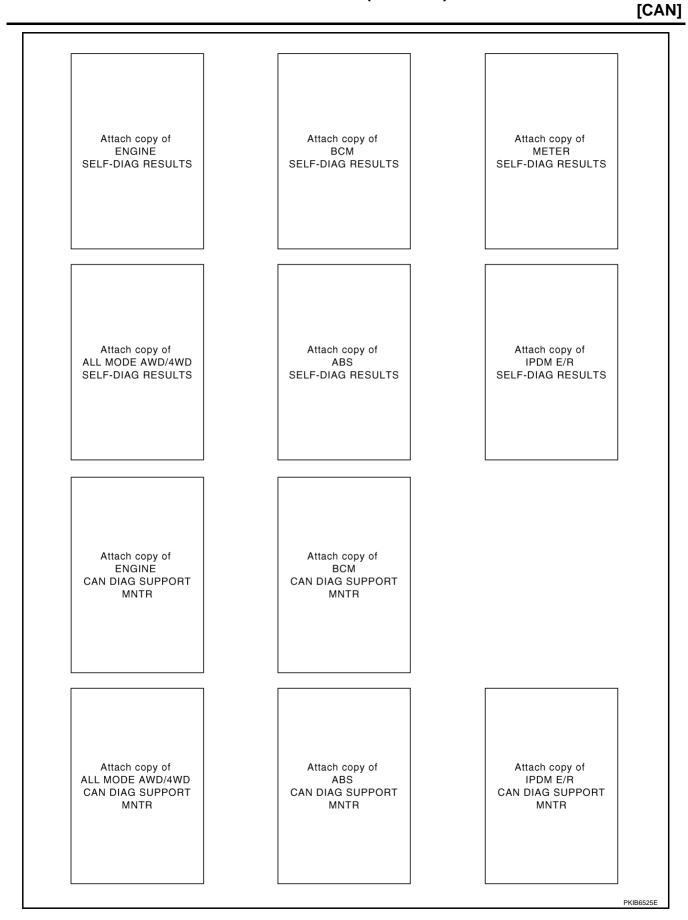
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CHECK SHEET RESULTS (EXAMPLE)

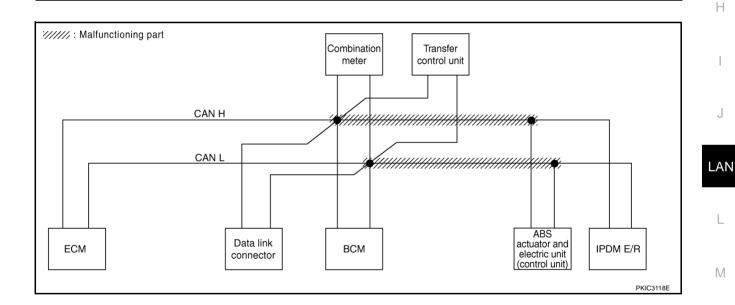
NOTE:

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

Case 1

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> 183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit".

				CAN DIA	AG SUPPOF	RT MNTR			
			_		Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	-	-	CAN COMM CIRCUI (U1000)
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	-	UNKWN	CAN COMM CIRCUI (U1000)
METER	No indication	_	—	_	_	—	_	-	CAN COMM CIRCUI (UN00)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	-	CAN COMM CIRCUI (UN00)
ABS	—	NG	UNKWN	UNKVN	—	—	—	-	CAN COMM CIRCUI (U 000)
IPDM E/R	No inditation	-	UNKWN	UNKWN	UNKWN	_	-	_	CAN COMM CIRCUI (U 000)



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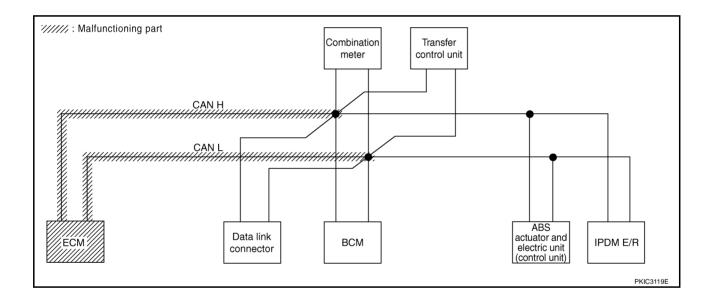
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Case 2

Check ECM circuit. Refer to LAN-184, "ECM Circuit Inspection for M/T Model" .

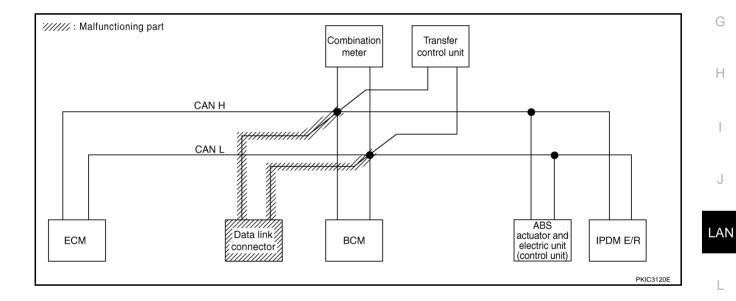
				CAN DIA	G SUPPOF	T MNTR			
SELECT SYSTEM	ooroon	Initial	Transmit		Re	ceive diagno	osis		SELF-DIAG
SELECT STSTEM:	Screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKIN	_	UNKVN	UNKWN	-	-	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKVN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	_	-	Ι	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	Ι	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 000)
ABS	-	NG	UNKWN	UNKVN	1	I	1	-	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	-	UNKWN	UNKVN	UNKWN	-	-	Ι	CAN COMM CIRCUIT (U 000)



Case 3

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

				CAN DIA	G SUPPOF	RT MNTR			
			+ .		Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	—	Ι	CAN COMM CIRCU (U1000)
BCM	No individual	NG	UNKWN	UNKWN	—	UNKWN	_	UNKWN	CAN COMM CIRCU (U1000)
METER	No indication	-	-	-	-	_	-	Ι	CAN COMM CIRCU (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCU (U1000)
ABS	-	NG	UNKWN	UNKWN	_	_	_	-	CAN COMM CIRCU (U1000)
IPDM E/R	No individualition	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCU (U1000)



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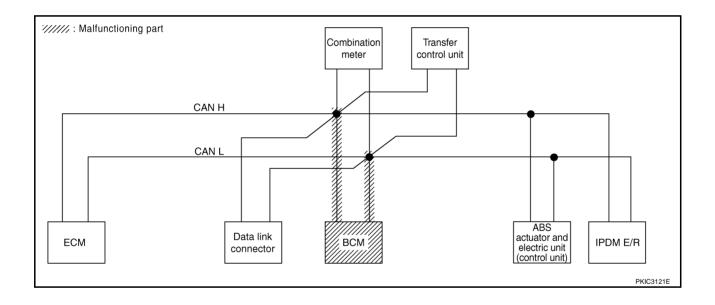
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PKIC3173E

Case 4

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

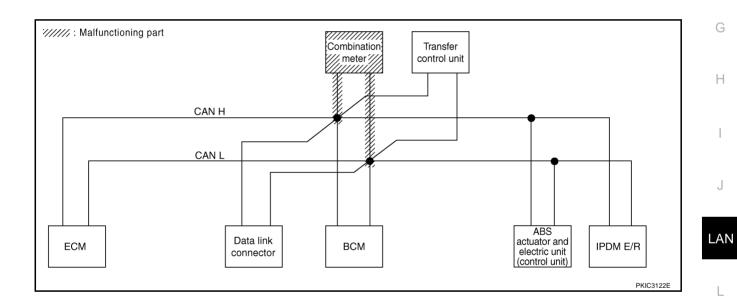
				0/11/0//	G SUPPOF	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKVIN	UNKWN	-	_	CAN COMM CIRCUIT (UV000)
BCM	N/ individualion	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	_	-	-	-	CAN COMM CIRCUIT (U0000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	UNKWN	-	—	-	I	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	-	UNKWN	UNKWN	UNKVIN	-	-	-	CAN COMM CIRCUIT (UV000)



Case 5

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

				CAN DIA	G SUPPOF	RT MNTR			
SELECT SYSTEM					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEMS	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	—	Ι	CAN COMM CIRCUI
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUI (U1000)
METER	indication	-	—	-	-	—	-	I	CAN COMM CIRCU (UN000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	_	UNKWN	UNKWN	-	CAN COMM CIRCU (U1000)
ABS	-	NG	UNKWN	UNKWN	-	—	-	I	CAN COMM CIRCU (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	—	—	_	CAN COMM CIRCU (U1000)



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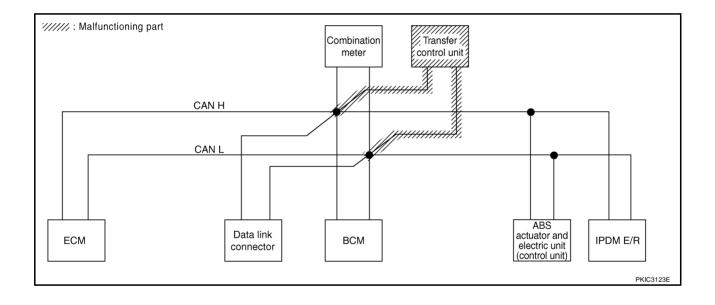
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PKIC3175E

Case 6

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

				0/ 0	AG SUPPOR Ber	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM so	creen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	-	UNKWN	UNKWN	-	—	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication			_	_	-	-	_	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKIN	UNKWN	-	UNKWN	UNKIN	-	CAN COMM CIRCUIT (UN000)
ABS	_	NG	UNKWN	UNKWN	-	_	_		CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication		UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)



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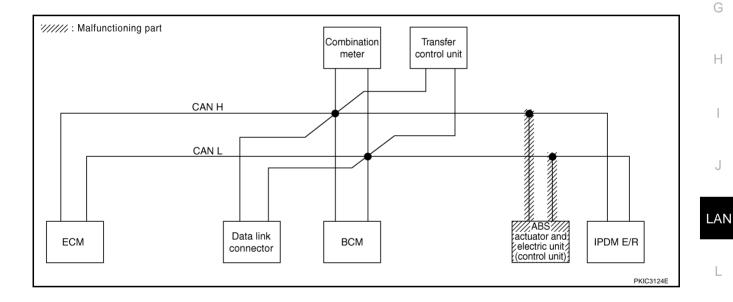
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Case 7

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) Circuit Inspection".

				CAN DIA	G SUPPOF	RT MNTR			
			_		Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	—	—	-		-	—		CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	UNKIN	-	CAN COMM CIRCUIT (UN000)
ABS	-	N	UNKIN	UNKVN		-	—		CAN COMM CIRCUIT (UN000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)



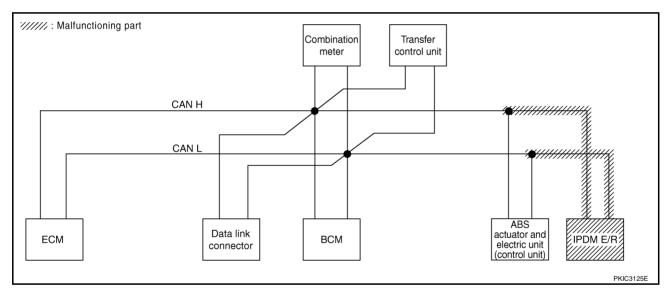
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Case 8

Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

					G SUPPOF		! .		
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	ceive diagno METER /M&A	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS
ENGINE	—	NG	UNKWN	_	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNK	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	_	_	-	Ι	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	Ι	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	UNKWN	-	-	-	I	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indivision	—	UNKWN	UNKWN	UNKWN	-	—	Ι	CAN COMM CIRCUIT (U0000)



Case 9

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

				CAN DIA	AG SUPPOF Re	ceive diagn	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U 000)
BCM	No indivision	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	Notice individual	_	-	-	-	_	-	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKIN	UNKOVN	—	CAN COMM CIRCUIT (U 000)
ABS	-	V	UNKWN	UNKWN	-	_	-	-	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	-	-	CAN COMM CIRCUIT (U 000)

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Case 10

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	—	NG	UNKWN	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	_	-	Ι	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	Ι	UNKWN	UNKIN	-	CAN COMM CIRCUIT (U 000)
ABS	-	NG	UNKWN	UNKWN	_	_	_	_	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CAN DIA	G SUPPOF	RT MNTR			
					Re	ceive diagno	osis		SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	BCM /SEC	METER /M&A	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	—	-	-	-	-	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	-	-	-	-	-	CAN COMM CIRCUIT (UN000)
IPDM E/R	No indication	_	UNKWN	UNKWN	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)

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	[CAN]
CAN SYSTEM (TYPE 11)	PFP:23710
Component Parts and Harness Connector Location	GKS000D7
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GKS000D8
Refer to LAN-22, "Schematic".	
Wiring Diagram — CAN —	GKS000D9
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

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NOTE:

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

				CA	N DIAG SU	PPORT MN	TR			
						Receive	diagnosis			SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	_	—	_	—	Ι	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)

Symptoms :

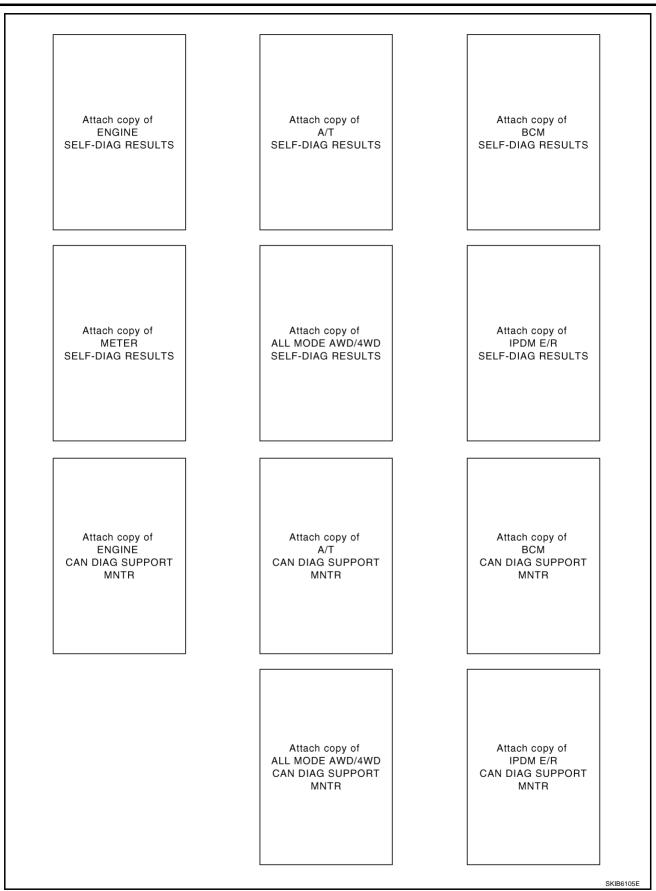
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LAN-158

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CHECK SHEET RESULTS (EXAMPLE)

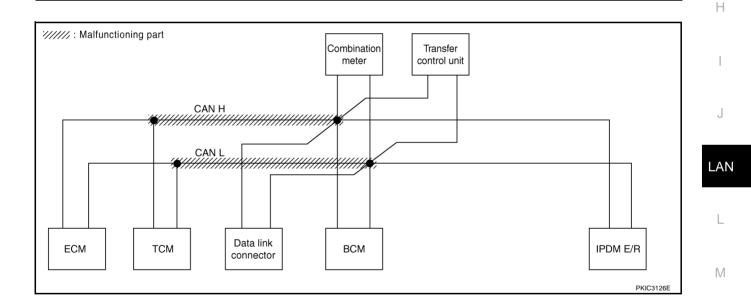
NOTE:

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-182</u>, "Inspection Between TCM and Data <u>Link Connector Circuit</u>".

				U#	IN DIAG SU	PPORT MN Beceive	diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	—	CAN COMIN CIRCUIT (U 100)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN		_	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKVN	-	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	_	_	_	_	-	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	UNKIN	_	UNKWN	-	_	CAN COMIN CIRCUIT (U 000)
IPDM E/R	No indication	-	UNKWN	UNKVN	_	UNKWN	_	-	_	CAN COMM CIRCUIT (U 000)



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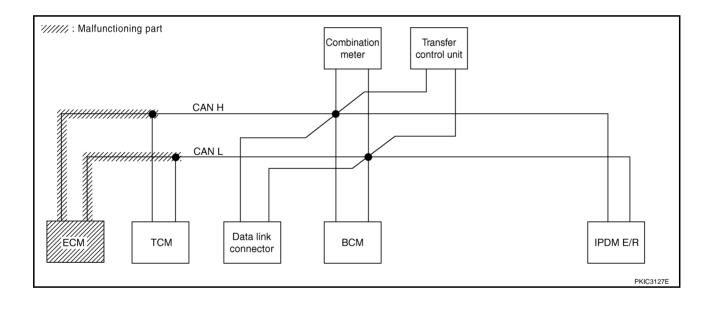
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PKIC3182E

Case 2

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

	1	<u> </u>			IN DIAG SU	PPORT MN	diagnosis			SELF-DIAG
SELECT SYSTEM s	creen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METED	AWD/4WD	IPDM E/R	RESULTS
ENGINE	_	NG	UNKIN	_	UNKWN	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U 00)
A/T	_	NG	UNKWN	UNKVN	-	_	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 00)
BCM	No indication	NG	UNKWN	UNKIN	_	_	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication		-	-	-	-	-	-	_	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	UNKWN	—	UNKWN	-	Ι	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	-	UNKWN	UNKVN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U 00)



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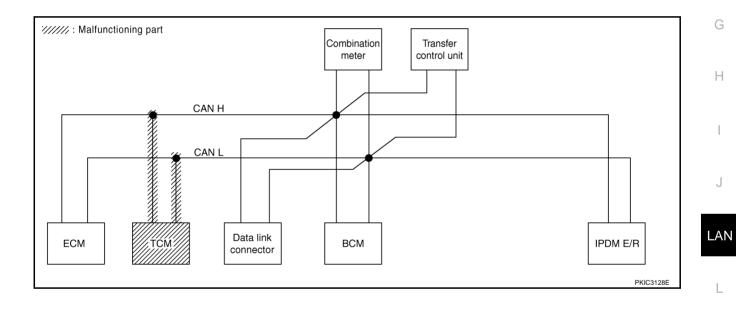
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Case 3

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

				CA	N DIAG SU	PPORT MN	TR			
						Receive	diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKVN	UNKWN	UNKWN	_		CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKVN	-	-	UNKWN	UNKWN	Ι	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	-	-	-	Ι	CAN COMM CIRCUIT (UV00)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKVN	—	UNKWN	-	_	CAN COMM CIRCUIT
IPDM E/R	No indication	-	UNKWN	UNKWN	—	UNKWN	—	-		CAN COMM CIRCUIT (U1000)



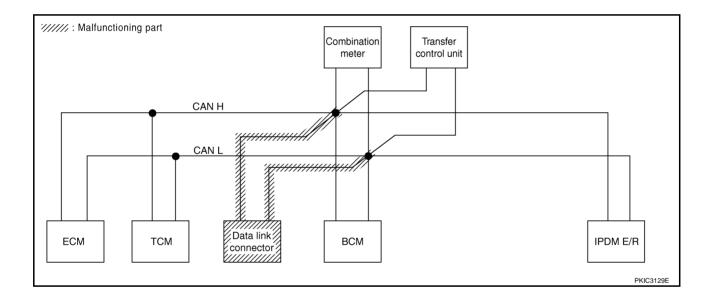
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Case 4

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

	I			0,1	N DIAG SU		diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	_	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No individual	NG	UNKWN	UNKWN	_	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N/ individual	_	_	—	_	_	_	-	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	I	CAN COMM CIRCUIT (U1000)
IPDM E/R	No individual	_	UNKWN	UNKWN	-	UNKWN	_	-	-	CAN COMM CIRCUIT (U1000)



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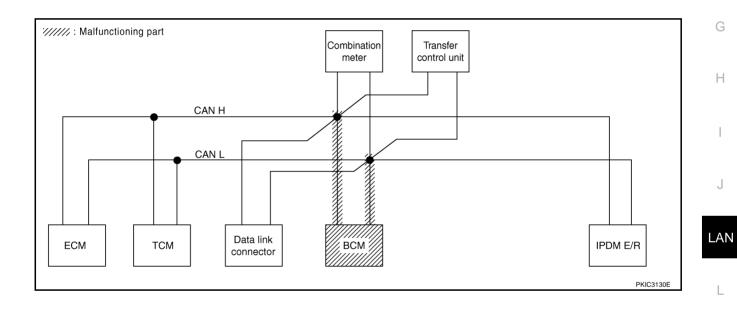
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Case 5

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

				CA	N DIAG SU	PPORT MN	TR			
SELECT SYSTEM						Receive	diagnosis			SELF-DIAG
SELECT SYSTEM:	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKVN	UNKWN	—	-	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
BCM	No individual	NG	UNKWN	UNKWN	-	-	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	—	—	-	—	—	-	—	Ι	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	—	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKVN	—	-	Ι	CAN COMM CIRCUIT (UN000)



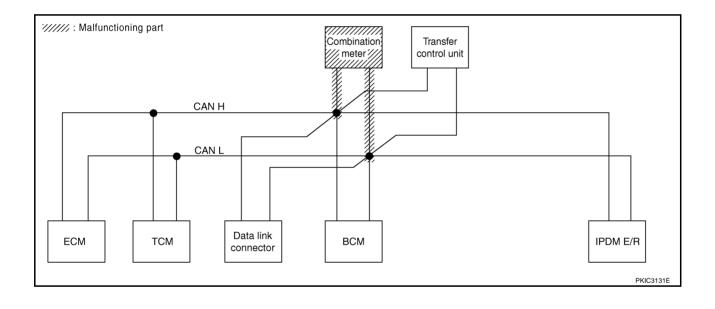
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Case 6

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

			<u>г</u>		N DIAG SU		diagnosis			SELF-DIAG
SELECT SYSTEM (screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U 000)
A/T	_	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKWN	—	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	inditation	_	_	—	_	-	-	-	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	I	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)
	Indication				i					(01000)

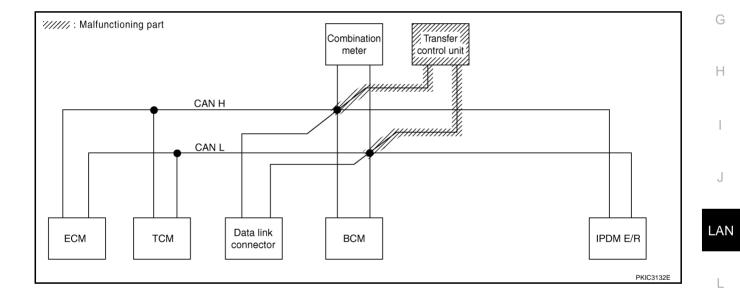


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Case 7

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

				CA	N DIAG SU	PPORT MN	TR			
						Receive	diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	-	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	—	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	_	-	UNKWN	UNKINN	I	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	_	_	-	-	-	-	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKIN	UNKWN	UNKWN	-	UNKWN	-	I	CAN COMM CIRCUIT
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	-	-	_	CAN COMM CIRCUIT (U1000)



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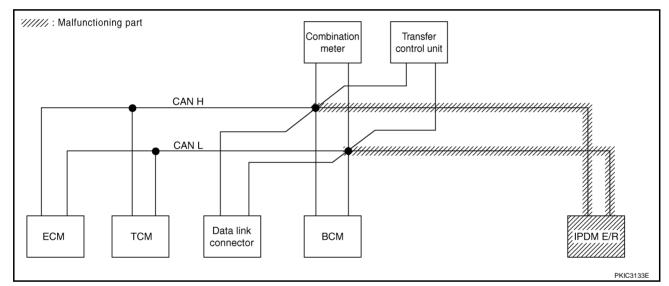
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Case 8

Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

				CP	N DIAG SU		diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
INGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	—	_	CAN COMM CIRCUIT (U1000)
VT	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
зсм	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	—	UNKVN	CAN COMM CIRCUIT (U1000)
IETER	No indication	-	Ι	_	—	-	-	—	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	—	-	CAN COMM CIRCUIT (U1000)
PDM E/R	No indivition	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U000)



Case 9

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

				CA	N DIAG SU					
SELECT SYSTEM	screen	Initial	Transmit			Receive				SELF-DIAG
		diagnosis	diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	—	_	CAN COMM CIRCUIT (U 000)
ŴΤ	-	NG	UNKWN	UNKWN	-	Ι	UNKWN	UNKIN	Ι	CAN COMM CIRCUIT (U 000)
зсм	Notion Notion	NG	UNKWN	UNKWN	-	-	UNKWN	_	UNKWN	CAN COMM CIRCUIT (U1000)
METER	Notion Notion	_	Ι	-	_	-		_	Ι	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	-	UNKWN	_	-	CAN COMM CIRCUIT (U0000)
PDM E/R	No inditation	—	UNKWN	UNKWN	-	UNKWN	1	_	Ι	CAN COMM CIRCUIT (U0000)

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Case 10

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>A</u> <u>Circuit Inspection</u>".

				CA	N DIAG SU	PPORT MN	TR			
						Receive	diagnosis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	CAN COMM CIRCUIT (U1000)
ВСМ	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	—	-	-	—	—	-	Ι	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	-	UNKWN	_	-	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	_	_	_	CAN COMM CIRCUIT (U1000)

Case 11

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

				CA	N DIAG SU	PPORT MN	TR			
			Ŧ .			Receive	diagnosis			SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)
A/T	_	NG	UNKWN	-	-	-	-	-	-	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	_	-	-	-	-	_	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	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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	[CAN]
CAN SYSTEM (TYPE 12)	PFP:23710
Component Parts and Harness Connector Location	GKS000EF
Refer to LAN-21, "Component Parts and Harness Connector Location".	
Schematic	GKS000EG
Refer to LAN-22, "Schematic".	
Wiring Diagram — CAN —	GKS000EH
Refer to LAN-23, "Wiring Diagram — CAN —".	

Check Sheet

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NOTE:

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

					CAN DIA	G SUPPOF	RT MNTR				
						Re	ceive diagno	osis			SELF-DIAG
SELECT SYSTEM :	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	-	—	—	-	-	Ι	—	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	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)

LAN-169

Symptoms :

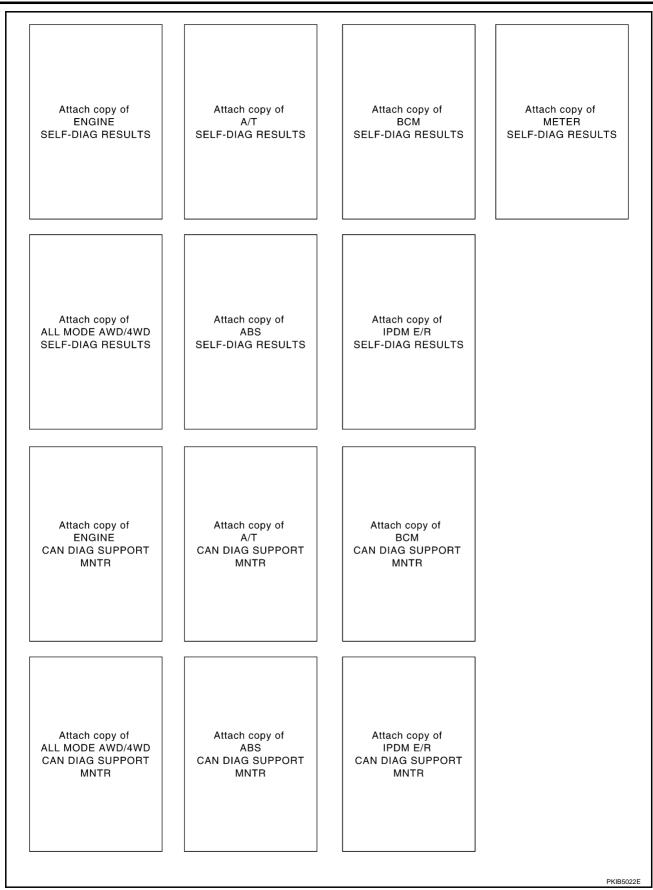
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CHECK SHEET RESULTS (EXAMPLE)

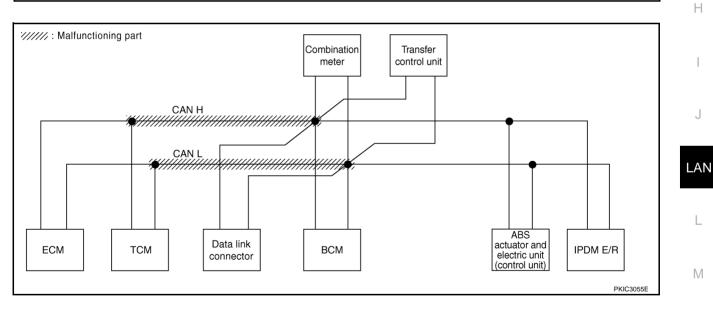
NOTE:

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 LAN-182, "Inspection Between TCM and Data Link Connector Circuit" .

					CAN DIA	G SUPPOF	RT MNTR				
SELECT SYSTEM						Re	ceive diagn	osis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	_	-	CAN COMM CIRCUIT (U 000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	—	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKIN	-	_	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	-	-	-	_	-	-	-	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	UNKVN	—	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKVN	-	-	-	-	-	-	CAN COMM CIRCUIT
IPDM E/R	No indication	_	UNKWN	UNKWN	-	UNKWN	_	-	-	-	CAN COMM CIRCUIT



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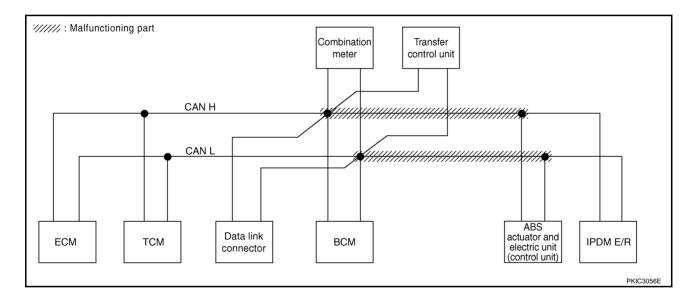
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Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to <u>LAN-</u> <u>183, "Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit"</u>.

					CAN DIA	G SUPPOF	RT MNTR				
						Re	ceive diagno	osis			SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	—	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	—	-	UNKWN	UNKWN	-	—	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	_	-	-	-	-	_	-	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKVN	—	-	-	-	-	—	CAN COMIC CIRCUIT (U 100)
IPDM E/R	No inditation	_	UNKWN	UNKWN	_	UNKWN	—	_	_	—	CAN COMIN CIRCUIT

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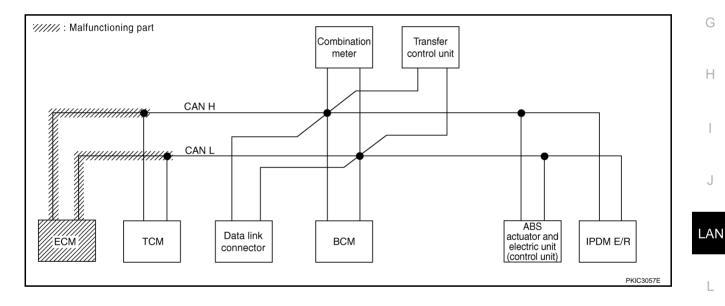
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Case 3

Check ECM circuit. Refer to LAN-185, "ECM Circuit Inspection for A/T Model" .

					CAN DIA	G SUPPOF					
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	ceive diagno METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS
ENGINE	-	NG	UNKIN	_	UNKVN	UNKIN	UNKWN	-	_	_	CAN COMM CIRCUIT
A/T	-	NG	UNKWN	UNKIN	_	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKIN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	_	_	-	_	-	-	-	-	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKVN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKVN	—	—	—	-	Ι	-	CAN COMM CIRCUIT
IPDM E/R	No indication	—	UNKWN	UNKVN	—	UNKWN	-	-	Ι	-	CAN COMM CIRCUIT

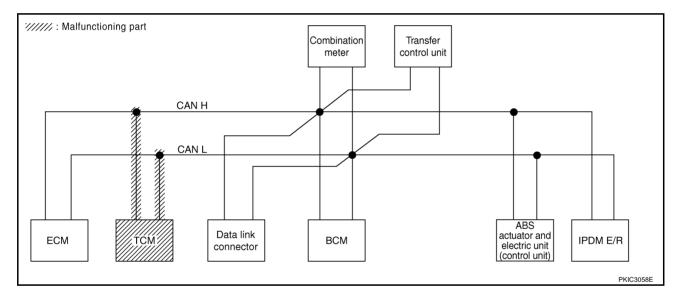


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Case 4

Check TCM circuit. Refer to LAN-187, "TCM Circuit Inspection" .

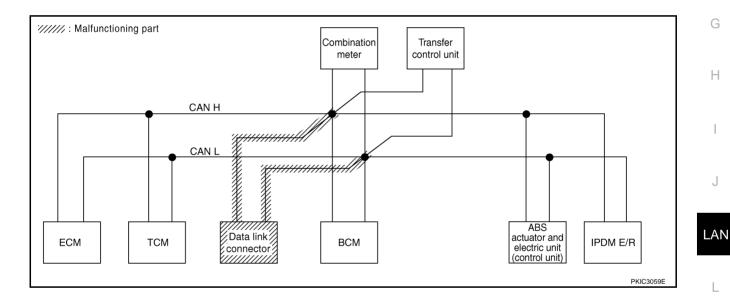
					CAN DIA	G SUPPOF					
SELECT SYSTEM	screen	Initial	Transmit			Re	ceive diagn	osis			SELF-DIAG
	Sorcen	diagnosis	diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKVN	UNKWN	UNKWN	-	1	-	CAN COMM CIRCUIT
A/T	-	NG	UNKWN	UNKVN		—	UNKWN	UNKWN	-	Ι	CAN COMM CIRCUIT (U 200)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	—	—	-	-	—	—	-	Ι	Ι	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	-	UNKWN	-	UNKWN	Ι	CAN COMM CIRCUIT
ABS	-	NG	UNKWN	UNKWN	-	—	—	-	Ι	Ι	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	_	-	-	-	CAN COMM CIRCUIT (U1000)



Case 5

Check data link connector circuit. Refer to LAN-187, "Data Link Connector Circuit Inspection" .

					CAN DIA	G SUPPOF	RT MNTR				
SELECT SYSTEM		1	- ···			Re	ceive diagno	osis			SELF-DIAG
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	_	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)
BCM	Ng ind Nation	NG	UNKWN	UNKWN	-	-	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N ind ation	—	—	-	—	—	Ι	_	-	Ι	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	Ι	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	UNKWN	—	—	Ι	_	-	Ι	CAN COMM CIRCUIT (U1000)
IPDM E/R	No individual	-	UNKWN	UNKWN	—	UNKWN	-	-	Ι	-	CAN COMM CIRCUIT (U1000)



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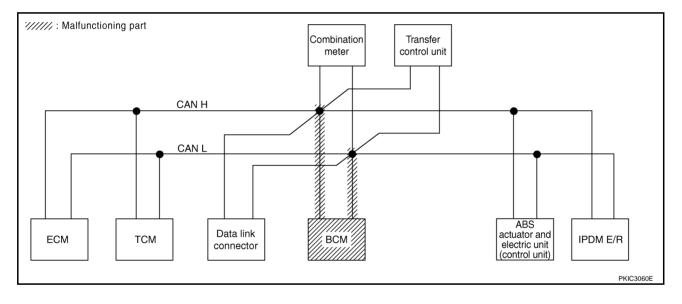
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Case 6

Check BCM circuit. Refer to LAN-188, "BCM Circuit Inspection" .

					CAN DIA	G SUPPOF					
SELECT SYSTEM	oroon	Initial	Transmit			Re	ceive diagno	osis			SELF-DIAG
OLLEOT STOTEMS		diagnosis	diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	_	UNKWN	UNKVN	UNKWN	-	_	-	CAN COMM CIRCUIT (U 000)
A/T	—	NG	UNKWN	UNKWN	-	—	UNKWN	UNKWN	Ι	-	CAN COMM CIRCUIT (U1000)
BCM	No indivation	NG	UNKWN	UNKWN	-	-	UNKWN	_	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication		_	_	_	_	_	_	-	_	CAN COMM CIRCUIT (U0000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	Ι	CAN COMM CIRCUIT (U1000)
ABS	—	NG	UNKWN	UNKWN	—	—	_	_	-	_	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication	Ι	UNKWN	UNKWN	-	UNKVN	-	_	-	Ι	CAN COMM CIRCUIT (UN000)



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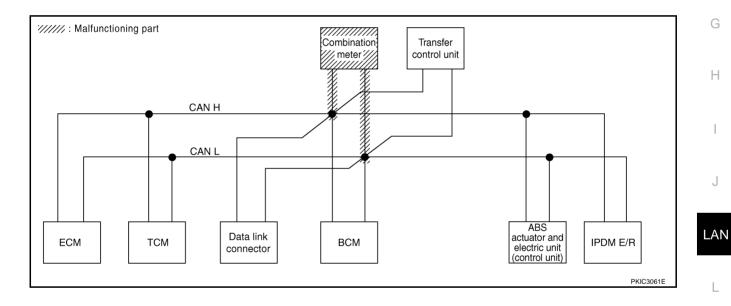
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Case 7

Check combination meter circuit. Refer to LAN-188, "Combination Meter Circuit Inspection" .

					CAN DIA	G SUPPOF					
SELECT SYSTEM	ecroon	Initial	Transmit			Re	ceive diagno	osis			SELF-DIAG
SELECT STSTEM	screen	diagnosis		ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	I	UNKWN	UNKWN	UNKWN	-	-	_	CAN COMM CIRCUIT (U 000)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	_	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	N inditation	_	_	Ι	-	—	-	-	Ι	_	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	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	-	-	Ι	-	CAN COMM CIRCUIT (U1000)

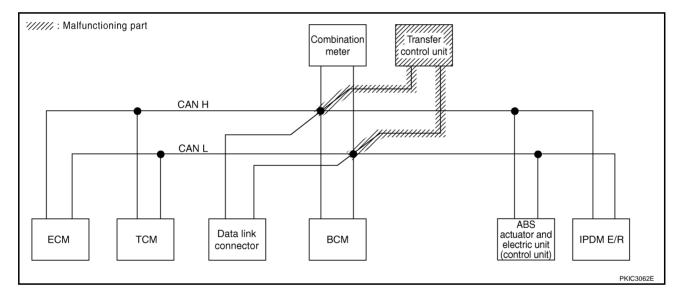


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Case 8

Check transfer control unit circuit. Refer to LAN-189, "Transfer Control Unit Circuit Inspection" .

					CAN DIA	G SUPPOF					
SELECT SYSTEM	screen	Initial diagnosis	Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	_	_	CAN COMM CIRCUIT (U1000)
A/T	_	NG	UNKWN	UNKWN	_	_	UNKWN	UNKIN	_	_	CAN COMM CIRCUIT
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	_	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	_	-	-	-	_	_	-	-	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	-	UNKWN	-	UNKIN	-	CAN COMM CIRCUIT (U 000)
ABS	-	NG	UNKWN	UNKWN	_	_	—	-	-	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No indication		UNKWN	UNKWN	_	UNKWN		-	_	-	CAN COMM CIRCUIT (U1000)



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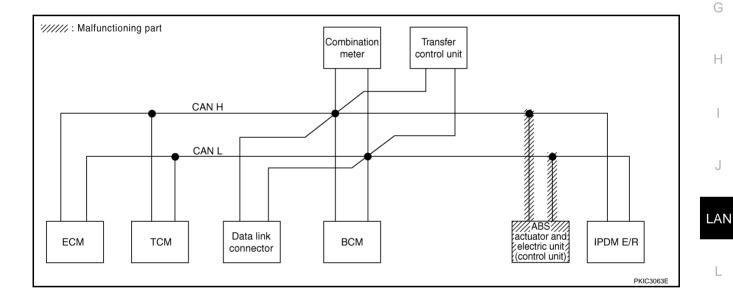
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Case 9

Check ABS actuator and electric unit (control unit) circuit. Refer to <u>LAN-189</u>, "ABS Actuator and Electric Unit (<u>Control Unit</u>) Circuit Inspection".

					CAN DIA	AG SUPPOF	RT MNTR				
						Re	ceive diagno	osis			SELF-DIAG
SELECT SYSTEM &	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	_	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	_	_	-	_	-	-	-	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKIN	-	CAN COMM CIRCUIT (U 000)
ABS	-	V	UNKIN	UNKIN	_	—	-	-	-	_	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	_	UNKWN	—	-	_	_	CAN COMM CIRCUIT (U1000)

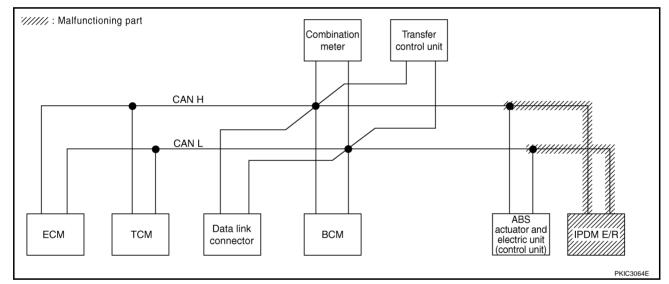


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Case 10

Check IPDM E/R circuit. Refer to LAN-190, "IPDM E/R Circuit Inspection" .

	CAN DIAG SUPPORT MNTR										
SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	Receive diagnosis							SELF-DIAG
				ECM	ТСМ	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	I	UNKWN	UNKWN	UNKWN	-	_	-	CAN COMM CIRCUIT (U1000)
A/T	—	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	_	-	CAN COMM CIRCUIT (U1000)
BCM	No indication	NG	UNKWN	UNKWN	_	-	UNKWN	_	_	UNKIN	CAN COMM CIRCUIT (U1000)
METER	No indication	-	-	Ι	-	—	-	-	—	-	CAN COMM CIRCUIT (U 000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	_	UNKWN	1	CAN COMM CIRCUIT (U1000)
ABS	—	NG	UNKWN	UNKWN	-	—	-	_	_	-	CAN COMM CIRCUIT (U1000)
IPDM E/R	No inditation	-	UNKWN	UNKWN	-	UNKWN	_	-	_	_	CAN COMM CIRCUIT (UN000)



Case 11

Check CAN communication circuit. Refer to LAN-190, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen			Transmit diagnosis		SELF-DIAG						
		Initial diagnosis		ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT
¥Τ	-	NG	UNKWN	UNKWN	-	-	UNKWN	UNKIN	-	-	CAN COMM CIRCUIT
ЗСМ	No indivation	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indivision	-	—	-	-	—	_	-	-	Ι	CAN COMM CIRCUIT
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	-	UNKIN	-	UNKIN	-	CAN COMM CIRCUIT
ABS	-	V	UNKWN	UNKWN	-	—	_	-	-	Ι	CAN COMM CIRCUIT
PDM E/R	No inditation	-	UNKWN	UNKWN	-	UNKWN	_	-	-	-	CAN COMM CIRCUIT

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Case 12

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

					CAN DIA	G SUPPOF	RT MNTR					
SELECT SYSTEM		1 - 111 - 1				Re	ceive diagno	osis			SELF-DIAG	
SELECT SYSTEMS	screen	Initial diagnosis	Transmit diagnosis	ECM	тсм	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT	
A/T	-	NG	UNKWN	UNKWN	_	_	UNKWN	UNKWN	-	_	CAN COMM CIRCUIT (U1000)	
ЗСМ	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)	
METER	No indication	_	—	-	-	—	-	-	Ι	Ι	CAN COMM CIRCUIT (UV000)	
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKIN	—	UNKWN	-	UNKVN	Ι	CAN COMM CIRCUIT (U 000)	
ABS	-	NG	UNKWN	UNKWN	-	—	-	-	Ι	Ι	CAN COMM CIRCUIT (U1000)	
PDM E/R	No indication	-	UNKWN	UNKWN	-	UNKWN	-	-	Ι	Ι	CAN COMM CIRCUIT (U1000)	

Case 13

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to <u>LAN-192</u>, "IPDM E/R Ignition Relay <u>Circuit Inspection</u>".

			CAN DIAG SUPPORT MNTR Receive diagnosis						SELF-DIAG		
SELECT SYSTEM	ELECT SYSTEM screen Initia diagno		Transmit diagnosis	ECM	ТСМ	BCM /SEC	METER /M&A	AWD/4WD	VDC/TCS /ABS	IPDM E/R	RESULTS
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	UNKWN	-	-	-	CAN COMM CIRCUIT (U1000)
A/T	-	NG	UNKWN	_	-	_	—	-	-	-	CAN COMM CIRCUIT (U 000)
BCM	No indication	NG	UNKWN	UNKWN	-	-	UNKWN	-	-	UNKWN	CAN COMM CIRCUIT (U1000)
METER	No indication	—	—	-	_	-	-	-	—	-	CAN COMM CIRCUIT (U1000)
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)
ABS	-	NG	UNKWN	-	_	-	-	-	—	-	CAN COMM CIRCUIT (U 000)
IPDM E/R	No indication	_	UNKWN	UNKWN	-	UNKWN	-	-	-	-	CAN COMM CIRCUIT (U1000)

LAN-181

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TROUBLE DIAGNOSIS FOR SYSTEM

TROUBLE DIAGNOSIS FOR SYSTEM

Inspection Between TCM and Data Link Connector 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 F2
- Harness connector E8
- Harness connector E101
- Harness connector M91

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect A/T assembly connector and harness connector F2.
- Check continuity between A/T assembly harness connector and harness connector.

A/T assembly connector		Harness	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
F36	3	F2	2	Yes	
1 30	8	١Z	3	Yes	

OK or NG

OK >> GO TO 3.

NG >> Repair harness.

3. CHECK HARNESS FOR OPEN CIRCUIT

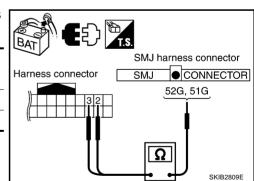
- 1. Disconnect harness connector E101.
- Check continuity between harness connector and SMJ harness connector.

Harness connector		SMJ harnes	SMJ harness connector		
Connector	Terminal	Connector	Terminal	Continuity	
E8	2	E101	52G	Yes	
LO	3	EIUI	51G	Yes	

OK or NG

OK >> GO TO 4.

NG >> Repair harness.



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4. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between SMJ harness connector and data link connector.

-	SMJ harness connector		Data link	Data link connector		
_	Connector	Terminal	Connector	Terminal	Continuity	
_	M91	52G	M45	6	Yes	
	10191	51G	10145	14	Yes	

OK or NG

OK >> Connect all the connectors and diagnose again. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW" .

NG >> Repair harness.

Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit GKS000AL

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 3. harness side).
- Harness connector M3

Harness connector E112

OK or NG

>> GO TO 2. OK

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

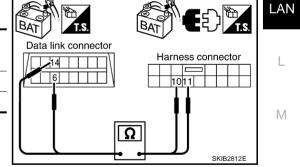
- 1. Disconnect harness connector M3.
- 2. Check continuity between data link connector and harness connector.

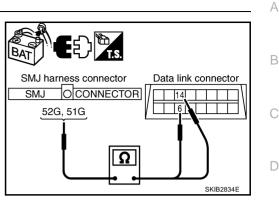
Data link	Data link connector		Harness connector		
Connector	Terminal	Connector	Terminal	Continuity	
M45	6	M3	11	Yes	
NI - 0	14	WI3	10	Yes	

OK or NG

OK >> GO TO 3.

NG >> Repair harness.





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$\overline{\mathbf{3.}}$ check harness for open circuit

- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- Check continuity between harness connector and ABS actuator and electric unit (control unit) harness connector.

Harness connector		ABS actuator a (control uni	Continuity	
Connector	Terminal	Connector	Terminal	
F112	11	E63	11	Yes
LIIZ	10	L03	15	Yes



OK >> Connect all the connectors and diagnose again. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW".

NG >> Repair harness.

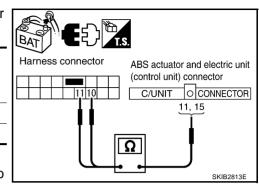
ECM Circuit Inspection for M/T Model

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).
- ECM connector
- Harness connector E101
- Harness connector M91

OK or NG

- OK >> GO TO 2
- NG >> Repair terminal or connector.



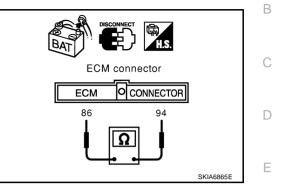
GKS000AM

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

VQ engine

- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector terminals.

ECM connector	Terr	Resistance (Approx.)	
E20	94	86	108 – 132 Ω



YD engine

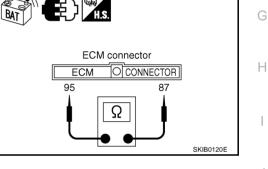
- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector terminals.

ECM connector	Terr	Resistance (Approx.)	
E20	95	87	108 – 132 Ω

OK or NG

OK >> Replace ECM.

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



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1. Turn ignition switch OFF.

1. CHECK CONNECTOR

2. Disconnect the battery cable from the negative terminal.

ECM Circuit Inspection for A/T Model

- 3. Check following terminals and connectors for damage, bend and loose connection (control module side and harness side).
- ECM connector
- Harness connector E9
- Harness connector F4

OK or NG

- OK >> GO TO 2.
- NG >> Repair terminal or connector.

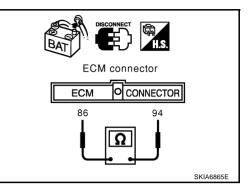
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2. CHECK HARNESS FOR OPEN CIRCUIT

VQ engine

- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector terminals.

ECM connector	Terr	Resistance (Approx.)	
E20	94	86	108 – 132 Ω



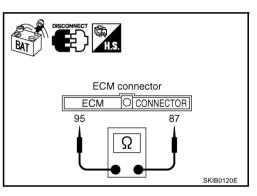
YD engine

- 1. Disconnect ECM connector.
- 2. Check resistance between ECM harness connector terminals.

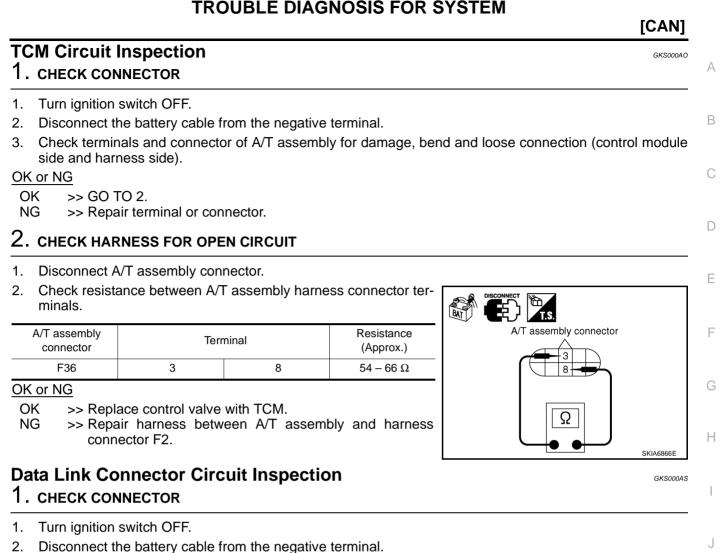
ECM connector	Terr	Resistance (Approx.)	
E20	95	87	108 – 132 Ω

OK or NG

- OK >> Replace ECM.
- NG >> Repair harness between ECM and A/T assembly.



TROUBLE DIAGNOSIS FOR SYSTEM



3. Check the terminals and connector of data link connector for damage, bend and loose connection (connector side and harness side).

OK or NG

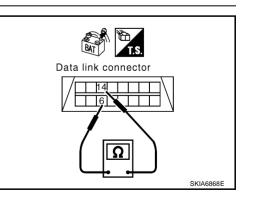
OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector terminals.

	Data link Terminal		Resistance (Approx.)				
	M45	6	14	54 – 66 Ω			
OK or NG							
OK							
NG	>> Repa	air harness betwe	en data link conn	ector and BCM.			



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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

- 1. Disconnect BCM connector.
- 2. Check resistance between BCM harness connector terminals.

BCM connector	Terminal		Resistance (Approx.)
M42	22	21	$54-66 \ \Omega$

OK or NG

- OK >> Replace BCM. Refer to <u>BCS-15, "Removal and Installa-</u> tion of <u>BCM"</u>.
- NG >> Repair harness between BCM and data link connector.



1. CHECK CONNECTOR

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

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

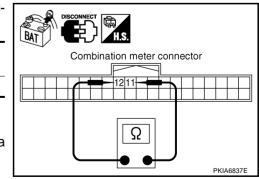
2. CHECK HARNESS FOR OPEN CIRCUIT

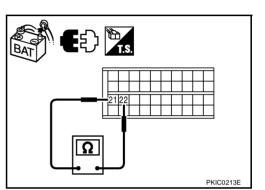
- 1. Disconnect combination meter connector.
- Check resistance between combination meter harness connector terminals.

Combination meter connector	Terminal		Resistance (Approx.)
M23	12	11	54 – 66 Ω

OK or NG

- OK >> Replace combination meter.
- NG >> Repair harness between combination meter and data link connector.





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TROUBLE DIAGNOSIS FOR SYSTEM

Transfer Control Unit Circuit Inspection GKS000AV А 1. CHECK CONNECTOR 1. Turn ignition switch OFF. В 2. Disconnect the battery cable from the negative terminal. Check terminals and connector of transfer control unit for damage, bend and loose connection (control 3. unit side and harness side). OK or NG OK >> GOTO2NG >> Repair terminal or connector. D 2. CHECK HARNESS FOR OPEN CIRCUIT Disconnect transfer control unit connector. 1. 2. Check resistance between transfer control unit harness connector terminals. い啊。 Transfer control Resistance Terminal (Approx.) unit connector M105 2 $54 - 66 \Omega$ 1 OK or NG OK >> Replace transfer control unit. NG >> Repair harness between transfer control unit and data link connector. PKIC1656E ABS Actuator and Electric Unit (Control Unit) Circuit Inspection GKS000AW **1. CHECK CONNECTOR** Turn ignition switch OFF. 1. J Disconnect the battery cable from the negative terminal. 2. 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). LAN OK or NG OK >> GO TO 2. NG >> Repair terminal or connector. 2. CHECK HARNESS FOR OPEN CIRCUIT

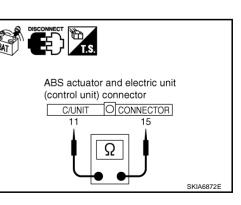
- 1. Disconnect ABS actuator and electric unit (control unit) connector.
- 2. Check resistance between ABS actuator and electric unit (control unit) harness connector terminals.

ABS actuator and electric unit (control unit) connector	Terminal		Resistance (Approx.)
E63	11	15	54 – 66 Ω

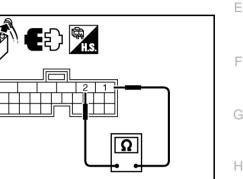
OK or NG

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

NG >> Repair harness between ABS actuator and electric unit (control unit) and IPDM E/R.



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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 connector for damage, bend and loose connection (control module side and harness side).
- IPDM E/R connector
- Harness connector E112 (Without ABS)
- Harness connector M3 (Without ABS)

OK or NG

- OK >> GO TO 2 (With ABS).
 - GO TO 3 (Without ABS).

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 terminals.

IPDM E/R connector	Terminal		Resistance (Approx.)
E17	39	40	108 – 132 Ω

OK or NG

OK >> Replace IPDM E/R.

NG >> Repair harness between IPDM E/R and harness connector E112.

3. CHECK HARNESS FOR OPEN CIRCUIT

- 1. Disconnect IPDM E/R connector.
- Check resistance between IPDM E/R harness connector terminals.

IPDM E/R connector	Terminal		Resistance (Approx.)
E17	39	40	108 – 132 Ω

OK or NG

- OK >> Replace IPDM E/R.
- NG >> Repair harness between IPDM E/R and data link connector.

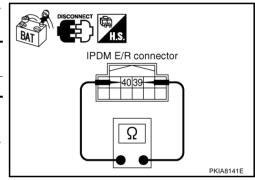
CAN Communication Circuit Inspection

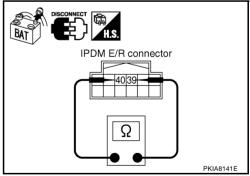
1. CHECK CONNECTOR

- 1. Turn ignition switch OFF.
- 2. Disconnect the battery cable from the negative terminal.
- 3. Disconnect the harness connector for each unit on the CAN network and check terminals for deformation, disconnection, looseness or damage.

OK or NG

- OK >> GO TO 2.
- NG >> Repair terminal or connector as necessary.





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2. CHECK HARNESS FOR SHORT CIRCUIT

With all module and control unit connectors disconnected, check continuity between data link connector terminals.

Data link connector	Terminal		Continuity
M45	6	14	No
OK or NG			

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

> • Replace harness if shielded lines are used for the harness.

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector terminals and ground.

_			
Data link connector	Terminal		Continuity
M45	6	Ground	No
	14		No

OK or NG

OK >> GO TO 4. NG

>> • Repair harness.

• Replace harness if shielded lines are used for the harness.

4. ECM AND IPDM E/R INTERNAL CIRCUIT INSPECTION

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

ECM	Terr	ninal	Resistance (Approx.)
VQ engine	94	86	108 – 132 Ω
YD engine	95	87	108 – 132 Ω

Check resistance between IPDM E/R terminals. 3.

Terminal		Resistance (Approx.)
39	40	108 – 132 Ω

OK or NG

OK >> GO TO 5.

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

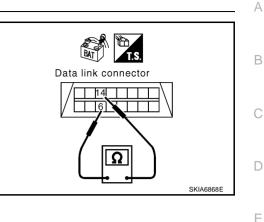
CHECK SYMPTOM

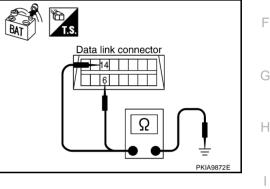
- 1. Fill in described symptoms on the column "Symptom" in the check sheet.
- 2. Connect all connectors, and then make sure that the symptom is reproduced.

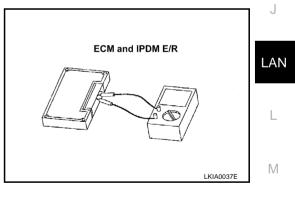
Check results

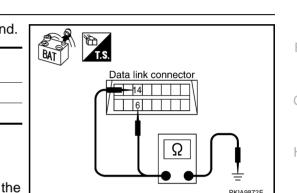
Reproduced>>GO TO 6.

Not reproduced>>Refer to LAN-13, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced".









6. UNIT REPRODUCIBILITY INSPECTION

Perform the following procedure for each unit on the CAN network, 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.

NOTE:

Malfunction (related to a unit that the connector is disconnected) is reproduced. Do not confuse the malfunction with the symptom filled in the column of "Symptom" on the check sheet.

Inspection results

Reproduced>>Connect the disconnected connector. Check other units applying the above procedure. Not reproduced>>Replace the unit that the connector is disconnected.

IPDM E/R Ignition Relay Circuit Inspection

GKS000AZ

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

- IPDM E/R power supply circuit. Refer to PG-24, "Check IPDM E/R Power Supply and Ground Circuit" .
- Ignition power supply circuit. Refer to <u>PG-12</u>, "IGNITION POWER SUPPLY IGNITION SW. IN ON <u>AND/OR START</u>".