SECTION LAN

LAN SYSTEM

CONTENTS

CAN

PRECAUTIONS

PFP:00001

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

NKS0010F

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

WARNING:

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

Precautions When Using CONSULT-II

NKS0010G

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

CAUTION:

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

CHECK POINTS FOR USING CONSULT-II

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

Precautions For Trouble Diagnosis

NKS0010H

CAN SYSTEM

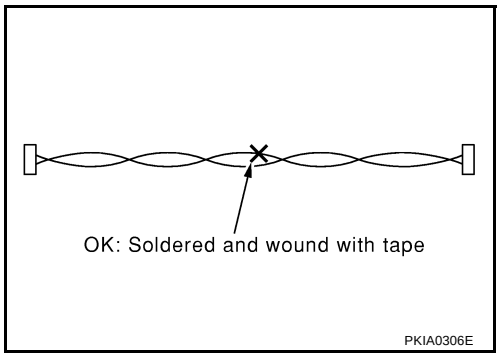
- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

Precautions For Harness Repair

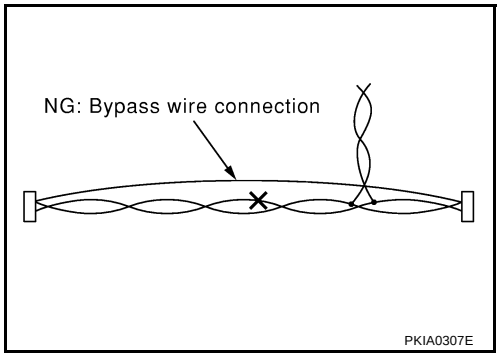
NKS0010I

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.)



TROUBLE DIAGNOSES WORK FLOW

PFP:00004

When Displaying CAN Communication System Errors

NKS0010J

WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM

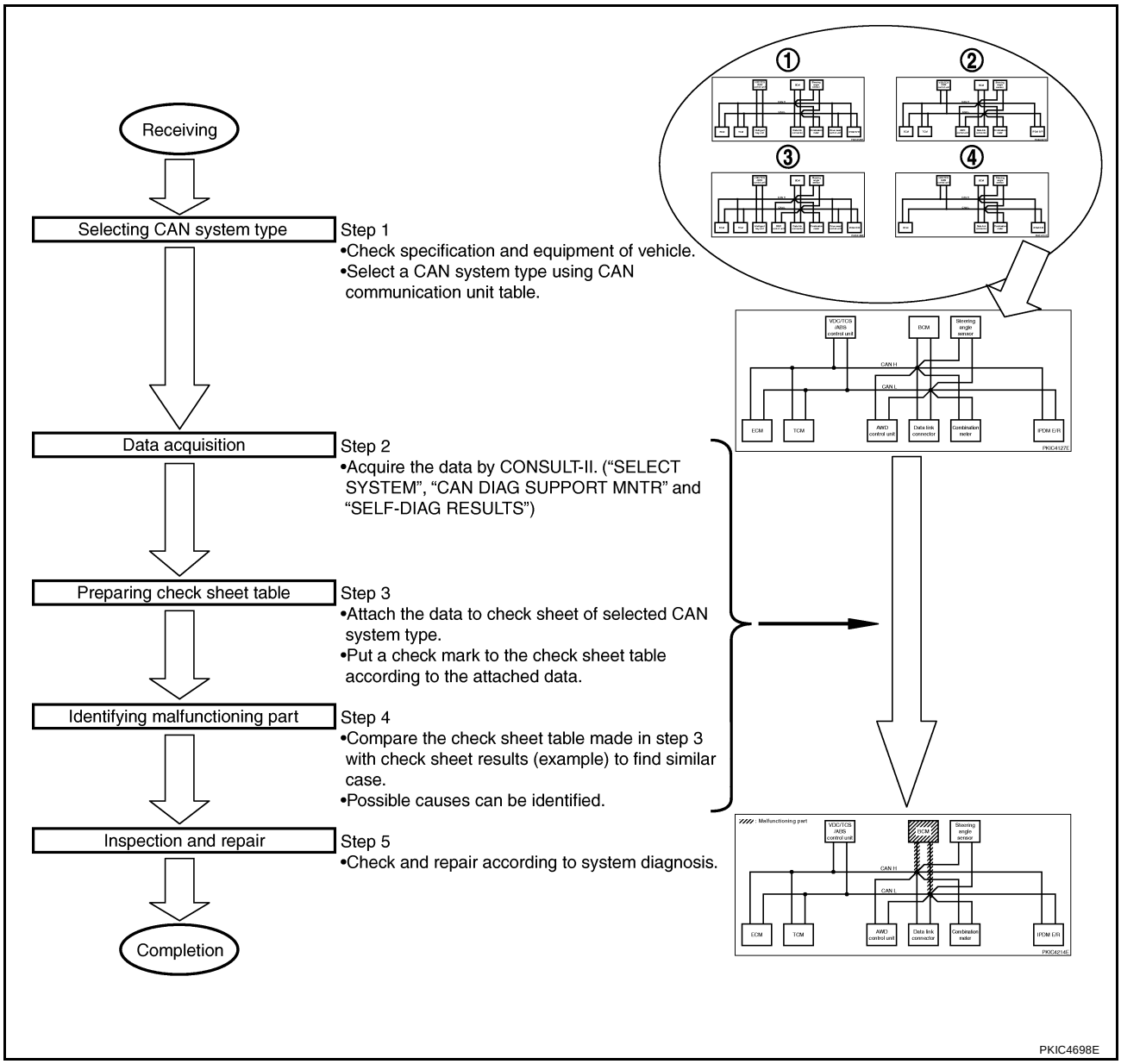
- CAN communication line is open. (CAN H, CAN L, or both)
- CAN communication line is shorted. (Ground, between CAN lines, or other harnesses)
- The areas related to CAN communication of unit is malfunctioning.

WHEN A MALFUNCTION IS DETECTED EXCEPT CAN COMMUNICATION SYSTEM

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

TROUBLE DIAGNOSIS FLOW CHART

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



- Step 1: Refer to LAN-7, "SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)" .
- 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 toLAN-126, "TROUBLE DIAGNOSIS FOR SYSTEM" .

Diagnosis Procedure

NKS0010K

SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)

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

(Example) Sedan/AWD/VQ35DE/AT/VDC/Without Intelligent Key system/Without automatic drive positioner

CAN Communication Unit

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

Body type	Sedan					
Axle	2WD				AWD	
Engine	VQ35DE					
Transmission	M/T		A/T			
Brake control	VDC					
Intelligent Key system				×		×
Automatic drive positioner		×		×		×
CAN system type	1	2	3	4	5	6
CAN system trouble diagnosis	XX-XX	XX-XX	XX-XX	XX-XX	XX-XX	XX-XX

× : Applicable

Check basic specification of the vehicle.

Select "×" if it is model with Intelligent Key system.

Select "×" if it is model with automatic drive positioner system.

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 5.

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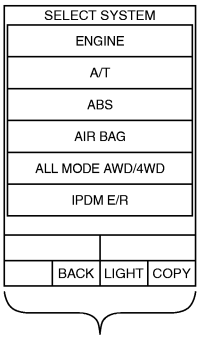
ACQUISITION OF DATA BY CONSULT-II

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

Copy “SELECT SYSTEM” screen of CONSULT-II.



Check sheet table

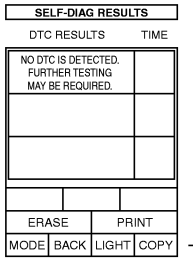
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR: Initial diagnosis	CAN DIAG SUPPORT MNTR: Transmit diagnosis	CAN DIAG SUPPORT MNTR: Receive diagnosis: ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

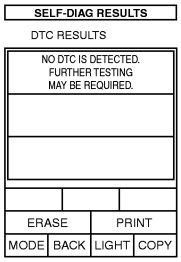
Symptoms :

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

Copy “SELF-DIAG RESULTS” screen of CONSULT-II.





Attach copy of ENGINE SELF-DIAG RESULTS

Attach copy of A/T SELF-DIAG RESULTS

Attach copy of ABS SELF-DIAG RESULTS

Attach copy of ALL MODE AWD/4WD SELF-DIAG RESULTS

Attach copy of BCM SELF-DIAG RESULTS

SELF-DIAG RESULTS

DTC RESULTS TIME

CAN COMM CIRCUIT [U1000]

ERASE PRINT

MODE BACK LIGHT COPY

Copy “CAN DIAG SUPPORT MNTR” screen of CONSULT-II.

CAN DIAG SUPPORT MNTR

ENGINE

	PRSNT	PAST
TRANSMIT DIAG	OK	OK
VDC/TCS/ABS	OK	OK
METER/M&A	OK	OK
BCM/SEC	UNKWN	0
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK

PRINT | Scroll Down

MODE BACK LIGHT COPY

CAN DIAG SUPPORT MNTR

ENGINE

	PRSNT	PAST
METER/M&A	OK	OK
BCM/SEC	UNKWN	0
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK
e4WD	-	-
AWD/4WD	OK	OK

PRINT | Scroll Up

MODE BACK LIGHT COPY

CAN DIAG SUPPORT MNTR

ALL MODE AWD/4WD

	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
VDC/TCS/ABS	OK
ECM	OK
TCM	UNKWN
METER/M&A	OK

PRINT

MODE BACK LIGHT COPY

Attach copy of ENGINE CAN DIAG SUPPORT MNTR

CAN DIAG SUPPORT MNTR

A/T

	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
ECM	OK
VDC/TCS/ABS	OK
METER/M&A	OK
ICC/e4WD	UNKWN
AWD/4WD	OK

PRINT

MODE BACK LIGHT COPY

Attach copy of ABS CAN DIAG SUPPORT MNTR

Attach copy of ALL MODE AWD/4WD CAN DIAG SUPPORT MNTR

Attach copy of BCM CAN DIAG SUPPORT MNTR

Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR

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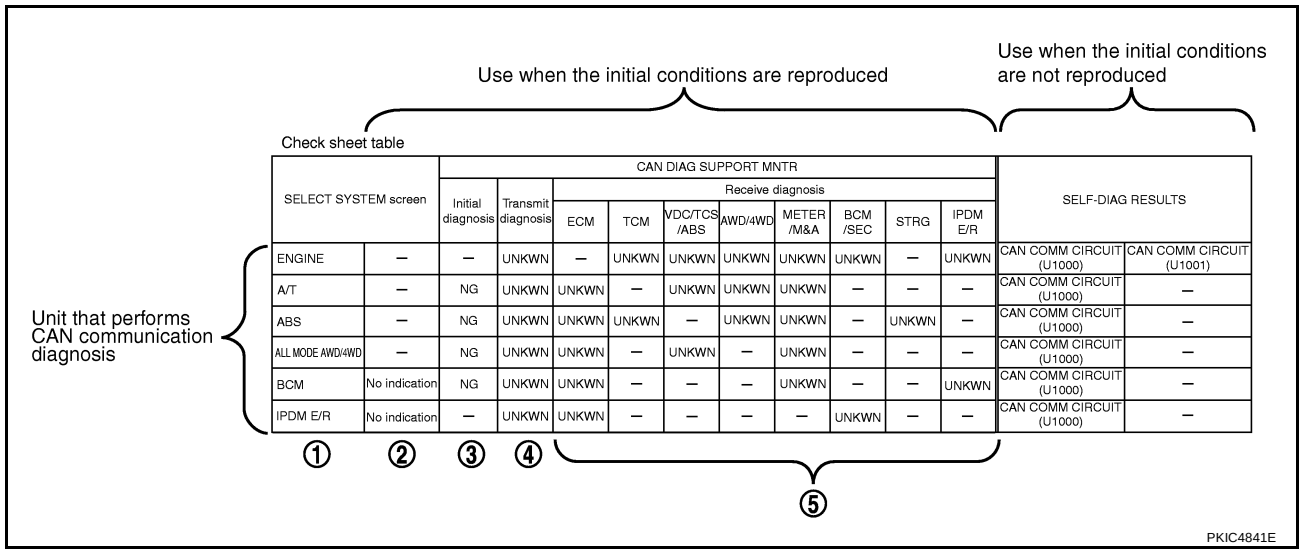
HOW TO USE CHECK SHEET TABLE

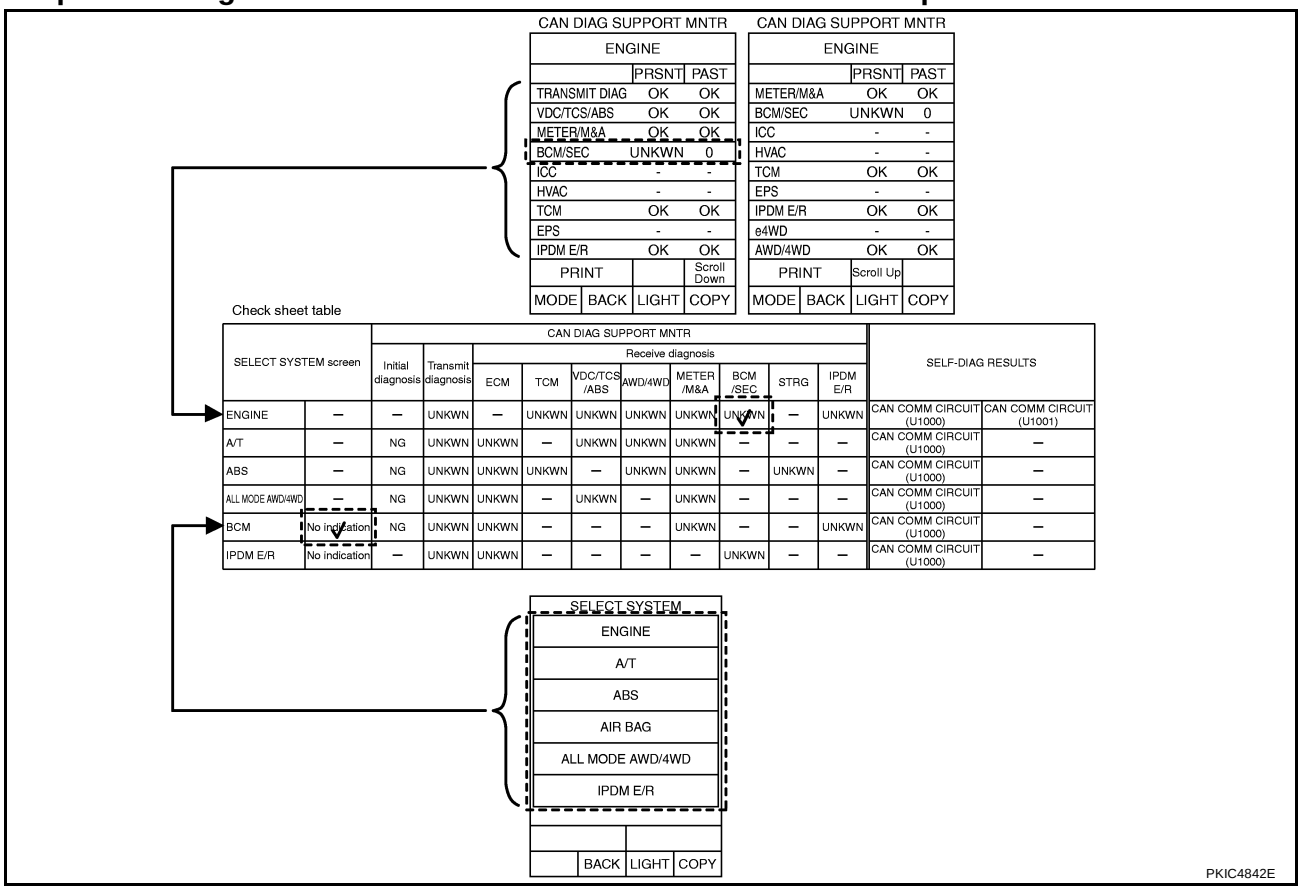


1. Unit names displayed on CONSULT-II
2. “No indication”: Put a check mark to it if the unit name described in step 1 is not displayed on “SELECT SYSTEM” screen of CONSULT-II. (Unit communicating with CONSULT-II via CAN communication line)
   “–”: Column not used (Unit communicating with CONSULT-II excluding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

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

- When the initial conditions are reproduced, refer to LAN-10, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced" .
- When the initial conditions are not reproduced, refer to LAN-13, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced" .

Example of Filling in Check Sheet When Initial Conditions Are Reproduced



CAN DIAG SUPPORT MNTR

ENGINE

	PRSNT	PAST
TRANSMIT DIAG	OK	OK
VDC/TCS/ABS	OK	OK
METER/M&A	OK	OK
BCM/SEC	UNKWN	0
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK

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CAN DIAG SUPPORT MNTR

ENGINE

	PRSNT	PAST
METER/M&A	OK	OK
BCM/SEC	UNKWN	0
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK
e4WD	-	-
AWD/4WD	OK	OK

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Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR: Initial diagnosis	Transmit diagnosis	Receive diagnosis: ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN ✓	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication ✓	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

SELECT SYSTEM

ENGINE

A/T

ABS

AIR BAG

ALL MODE AWD/4WD

IPDM E/R

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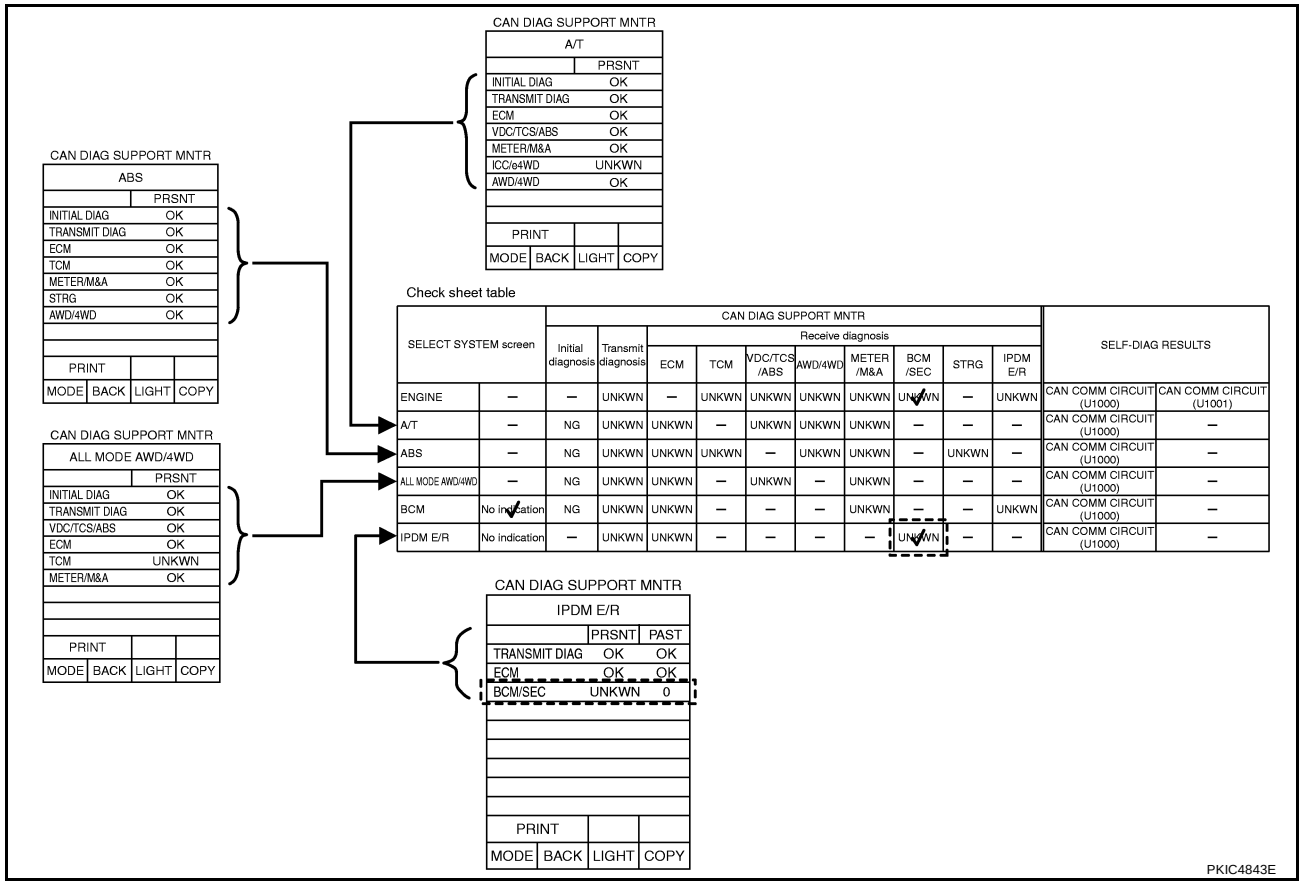
1. Put a check mark to “No indication” if some of unit names listed on the column of diagnosis system selection screen of a check sheet table are not displayed on “SELECT SYSTEM” screen attached to the check sheet.

   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 “BCM/SEC”. Put a check mark to it.



3. Confirm the unit name that “UNKWN” is displayed on the copy of “CAN DIAG SUPPORT MNTR” screen of “A/T”, “ABS”, “ALL MODE AWD/4WD” 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 “ABS”, “UNKWN” is not displayed. Do not put a check to it.
- For “ALL MODE AWD/4WD”, “UNKWN” is displayed on “TCM”. But, do not put a check mark to their columns of reception diagnosis of the check sheet table because “UNKWN” is not listed.
- For “IPDM E/R”, “UNKWN” is displayed on “BCM/SEC”. Put a check mark to it.

The arranged results of CAN diagnosis support monitor

Check sheet table

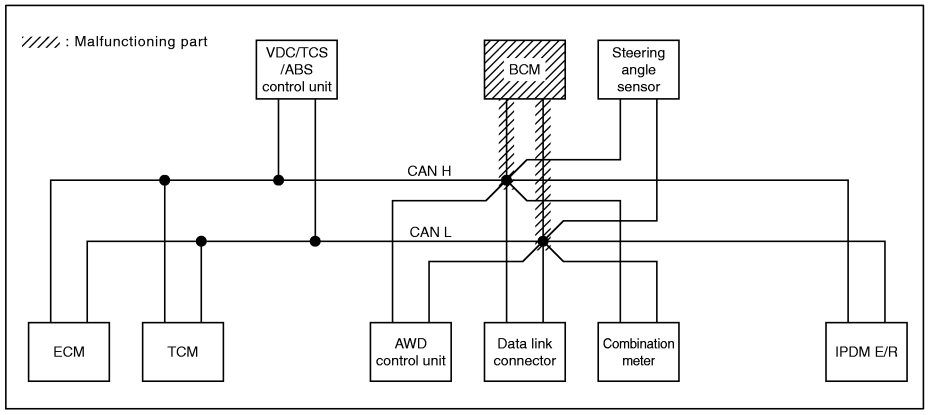
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN ✓	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication ✓	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	–	UNKWN ✓	–	–	CAN COMM CIRCUIT (U1000)	–

Choose similar indications between the results of CAN diagnosis support monitor and the results of the check sheet. Malfunctioning parts are found.

Case 9
Check BCM circuit.

Check sheet results (example)

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN ✓	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication ✓	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	–	UNKWN ✓	–	–	CAN COMM CIRCUIT (U1000)	–



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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 LAN-27, "CAN Communication Unit" .

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

SYSTEM ENGINE
SELF-DIAG RESULTS
DTC RESULTS TIME
CAN COMM CIRCUIT [U1001] 1t

SYSTEM A/T
SELF-DIAG RESULTS
DTC RESULTS
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.

SYSTEM ABS
SELF-DIAG RESULTS
DTC RESULTS TIME
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED

SYSTEM ALL MODE AWD/4WD
SELF-DIAG RESULTS
DTC RESULTS TIME
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.

SYSTEM BCM
SELF-DIAG RESULTS
DTC RESULTS TIME
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.

SYSTEM IPDM E/R
SELF-DIAG RESULTS
DTC RESULTS TIME
CAN COMM CIRCUIT [U1000] PAST

PKIC4845E

1. 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 “ABS”, “NO DTC IS DETECTED” is displayed. Do not 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 “BCM”, “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.

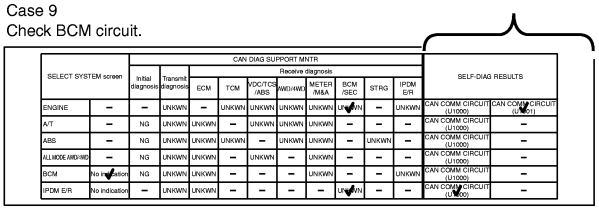
The arranged results of self-diagnosis

Check sheet table

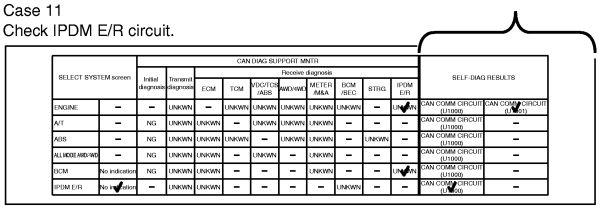
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

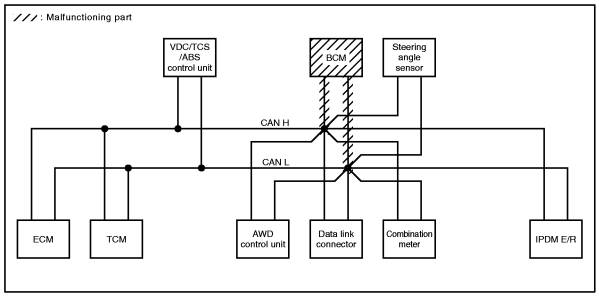
When the arranged results of self-diagnosis and check sheet results (example) are corresponding, possible causes can be selected.

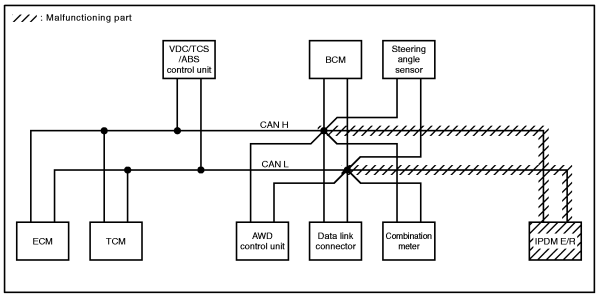
Case 9
Check BCM circuit.



Case 11
Check IPDM E/R circuit.







PKIC4846E

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

NKS0010L

DESCRIPTION OF “CAN DIAG SUPPORT MNTR” SCREEN FOR ECM

(Example)

CAN DIAG SUPPORT MNTR

ENGINE		
	PRSNT	PAST
TRANSMIT DIAG	OK	OK
VDC/TCS/ABS	OK	OK
METER/M&A	OK	OK
BCM/SEC	OK	OK
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK
PRINT		Scroll Down
MODE	BACK	LIGHT	COPY

CAN DIAG SUPPORT MNTR

ENGINE		
	PRSNT	PAST
METER/M&A	OK	OK
BCM/SEC	OK	OK
ICC	-	-
HVAC	-	-
TCM	OK	OK
EPS	-	-
IPDM E/R	OK	OK
e4WD	-	-
AWD/4WD	OK	OK
PRINT	Scroll Up	
MODE	BACK	LIGHT	COPY

PKIC3562E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present	Past
ENGINE	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN/–	OK/0/1 – 39/–
	VDC/TCS/ABS	Make sure of normal reception from VDC/TCS/ ABS control unit.	OK/UNKWN/–	
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN/–	
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/–	
	ICC	ICC is not diagnosed.	–	
	HVAC	HVAC is not diagnosed.	–	
	TCM	Make sure of normal reception from TCM.	OK/UNKWN/–	
	EPS	EPS is not diagnosed.	–	
	IPDM E/R	Make sure of normal reception from IPDM E/R.	OK/UNKWN/–	
	e4WD	e4WD is not diagnosed.	–	
	AWD/4WD	Make sure of normal reception from AWD control unit.	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

DESCRIPTION OF “CAN DIAG SUPPORT MNTR” SCREEN FOR TCM

(Example)

CAN DIAG SUPPORT MNTR

A/T	
	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
ECM	OK
VDC/TCS/ABS	OK
METER/M&A	OK
ICC/e4WD	UNKWN
AWD/4WD	OK
PRINT	
MODE / BACK / LIGHT / COPY	

SKIB2335E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
A/T	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from VDC/TCS/ABS control unit.	OK/UNKWN
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	ICC/e4WD	ICC/e4WD is not diagnosed.	UNKWN
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN

Display Results (Present)

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

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

(Example)

CAN DIAG SUPPORT MNTR

INTELLIGENT KEY		
	PRSNT	PAST
TRANSMIT DIAG	OK	OK
ECM	OK	OK
METER/M&A	OK	OK
BCM/SEC	OK	OK
PRINT		
MODE / BACK	LIGHT	COPY

SKIB2359E

"SELECT SYSTEM" screen	"CAN DIAG SUPPORT MNTR" screen	Description	Present	past
INTELLIGENT KEY	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN	OK/0/1 – 39/–
	ECM	Make sure of normal reception from ECM.	OK/UNKWN	
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN	
	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.

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

DESCRIPTION OF “CAN DIAG SUPPORT MNTR” SCREEN FOR VDC/TCS/ABS CONTROL UNIT

AWD models

(Example) CAN DIAG SUPPORT MNTR

ABS	
	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
ECM	OK
TCM	OK
METER/M&A	OK
STRG	OK
AWD/4WD	OK
PRINT	
MODE BACK LIGHT COPY	

SKIB2336E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
ABS	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	TCM	Make sure of normal reception from TCM.	OK/UNKWN
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	STRG	Make sure of normal reception from steering angle sensor.	OK/UNKWN
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN

Display Results (Present)

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

2WD models

(Example) CAN DIAG SUPPORT MNTR

ABS	
	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
ECM	OK
TCM	OK
METER/M&A	OK
STRG	OK
ICC	UNKWN
PRINT	
MODE BACK LIGHT COPY	

PKIB8720E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
ABS	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	TCM	Make sure of normal reception from TCM.	OK/UNKWN
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN
	STRG	Make sure of normal reception from steering angle sensor.	OK/UNKWN
	ICC	ICC 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 FOR AWD CONTROL UNIT

(Example)

CAN DIAG SUPPORT MNTR

ALL MODE AWD/4WD	
	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
VDC/TCS/ABS	OK
ECM	OK
TCM	UNKWN
METER/M&A	OK
PRINT	
MODE / BACK / LIGHT / COPY	

PKIA8948E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
ALL MODE AWD/ 4WD	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from VDC/TCS/ABS control unit.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	TCM	TCM is not diagnosed.	UNKWN
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN

Display Results (Present)

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

DESCRIPTION OF “CAN DIAG SUPPORT MNTR” SCREEN FOR BCM

(Example)

CAN DIAG SUPPORT MNTR

BCM	
	PRSNT
INITIAL DIAG	OK
TRANSMIT DIAG	OK
ECM	OK
IPDM E/R	OK
METER/M&A	OK
I-KEY	OK
PRINT	
MODE / BACK / LIGHT / COPY	

SKIB1625E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
BCM	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	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	Make sure of normal reception from Intelligent Key unit.	OK/UNKWN

Display Results (Present)

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

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

(Example)

CAN DIAG SUPPORT MNTR

AUTO DRIVE POS.		
	PRSNT	PAST
TRANSMIT DIAG	-	-
METER/M&A	OK	OK
BCM/SEC	OK	OK
TCM	OK	OK
PRINT		
MODE / BACK / LIGHT / COPY		

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present	Past
AUTO DRIVE POS.	TRANSMIT DIAG	TRANSMIT DIAG is not diagnosed.	–	OK/0/1 – 39/–
	METER/M&A	Make sure of normal reception from combination meter.	OK/UNKWN/–	
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/–	
	TCM	Make sure of normal reception from TCM.	OK/UNKWN/–	

Display Results (Present)

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

Display Results (Past)

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

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

(Example)

CAN DIAG SUPPORT MNTR

IPDM E/R		
	PRSNT	PAST
TRANSMIT DIAG	OK	OK
ECM	OK	OK
BCM/SEC	OK	OK
PRINT		
MODE / BACK	LIGHT	COPY

SKIB0595E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present	Past
IPDM E/R	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN/–	OK/0/1 – 39/–
	ECM	Make sure of normal reception from ECM.	OK/UNKWN/–	
	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

PFP:23710

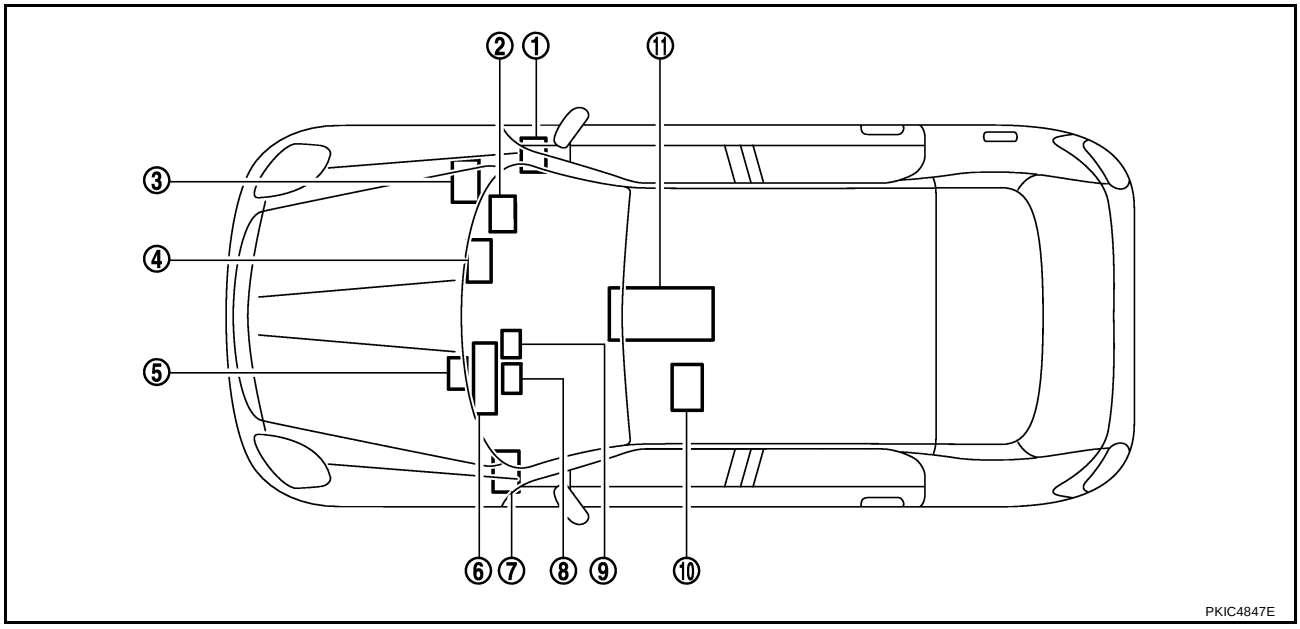
System Description

NKS0010M

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

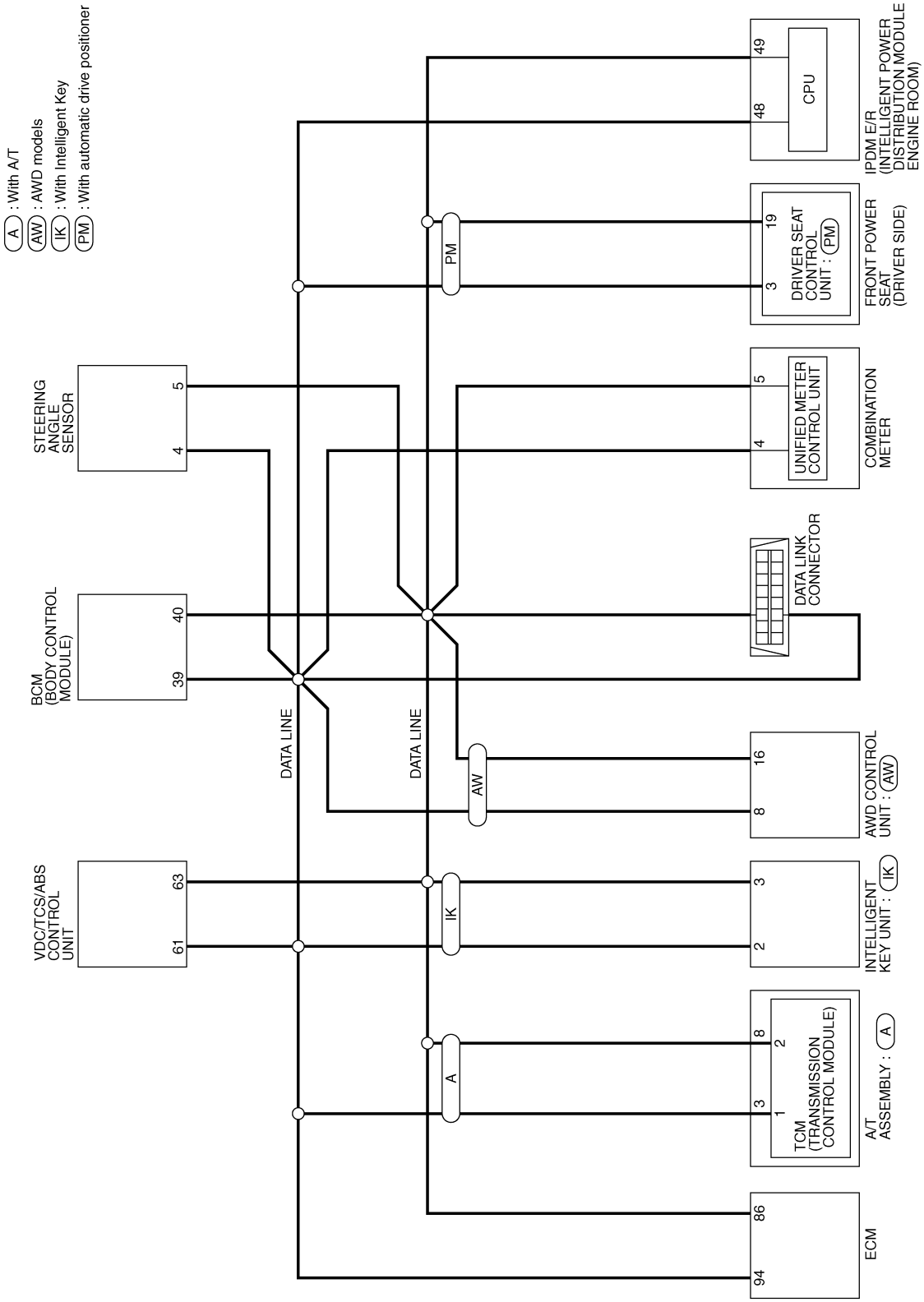
NKS0027A



1. VDC/TCS/ABS control unit M93
2. Intelligent Key unit M75 (with Intelligent Key system)
3. IPDM E/R E9
4. ECM F108
5. AWD control unit M10 (AWD models)
6. Combination meter M19
7. BCM M1
8. Steering angle sensor M22
9. Data link connector M8
10. Driver seat control unit B324 (with automatic drive positioner)
11. A/T assembly F42 (with A/T)

Schematic

NKS0027B

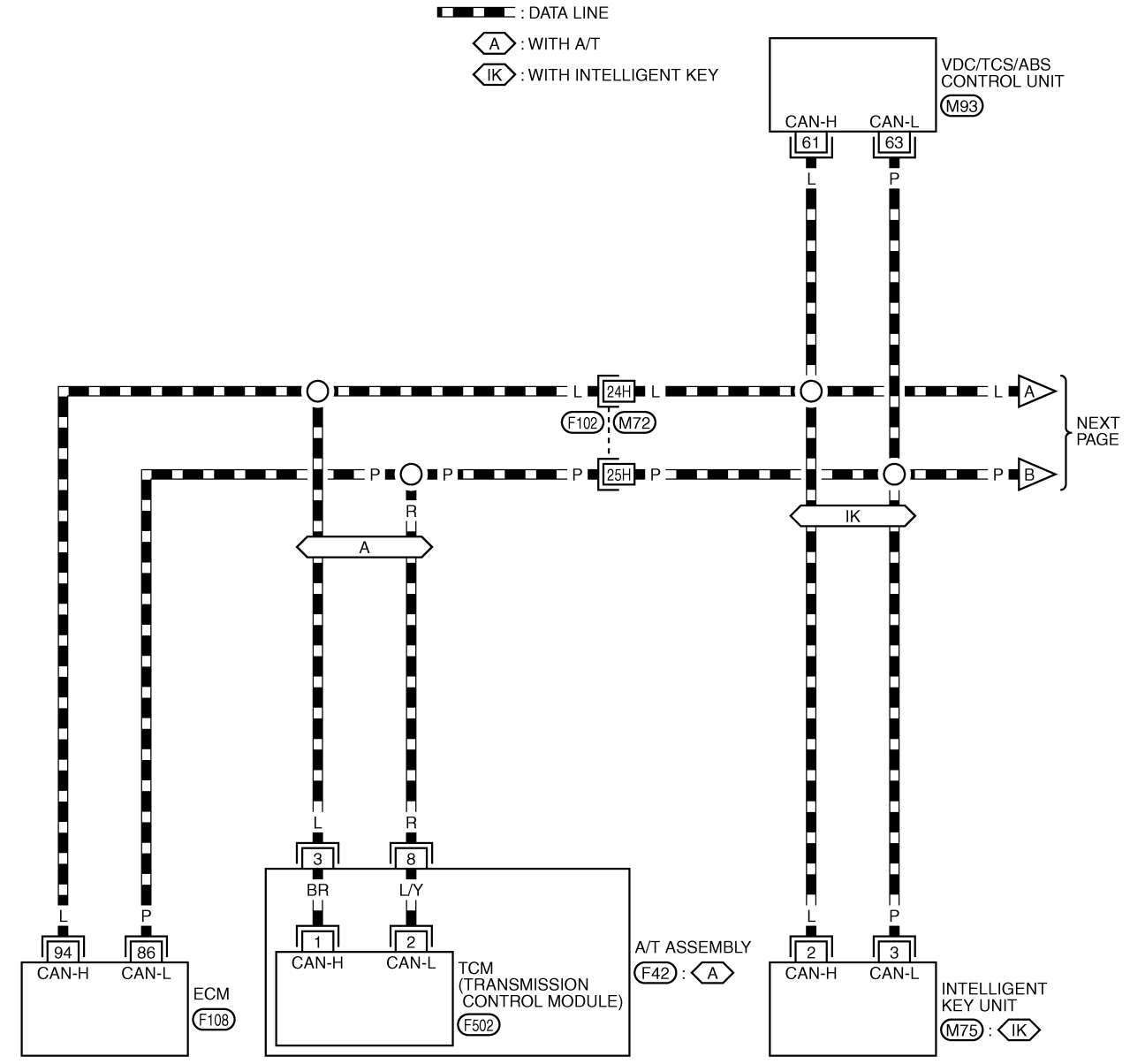


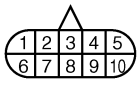
TKWM3407E

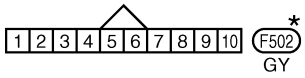
Wiring Diagram — CAN —

NKS0027C

LAN-CAN-01





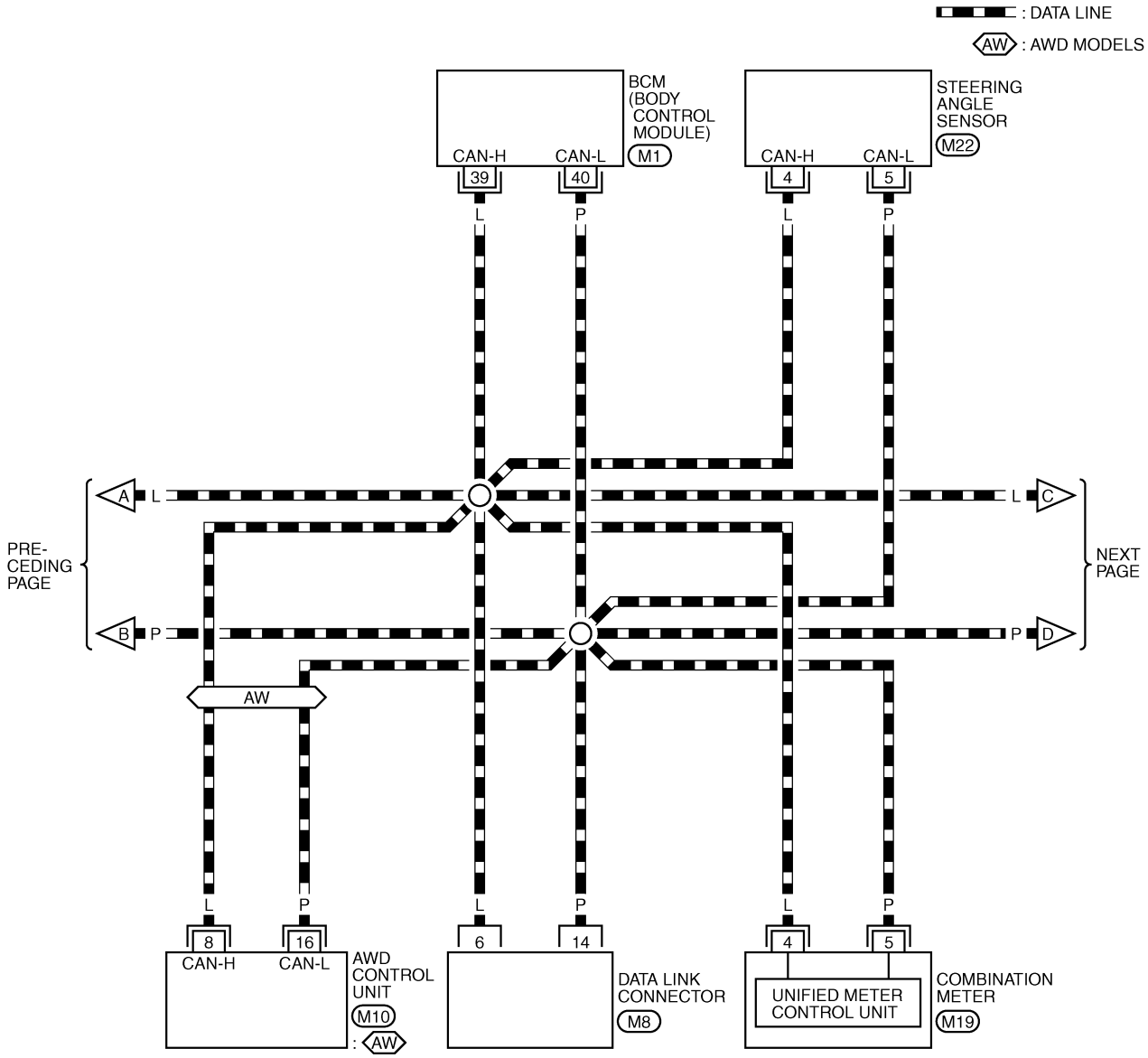


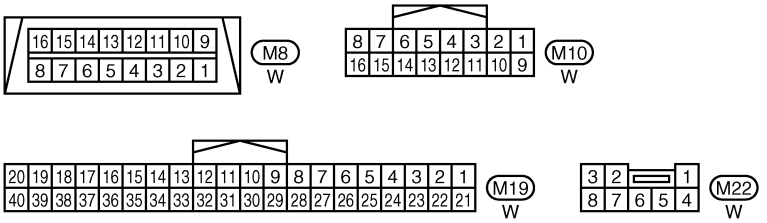
REFER TO THE FOLLOWING.
F102 -SUPER MULTIPLE JUNCTION (SMJ)
M75 , M93 , F108 -ELECTRICAL UNITS

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

TKWM3408E

LAN-CAN-02

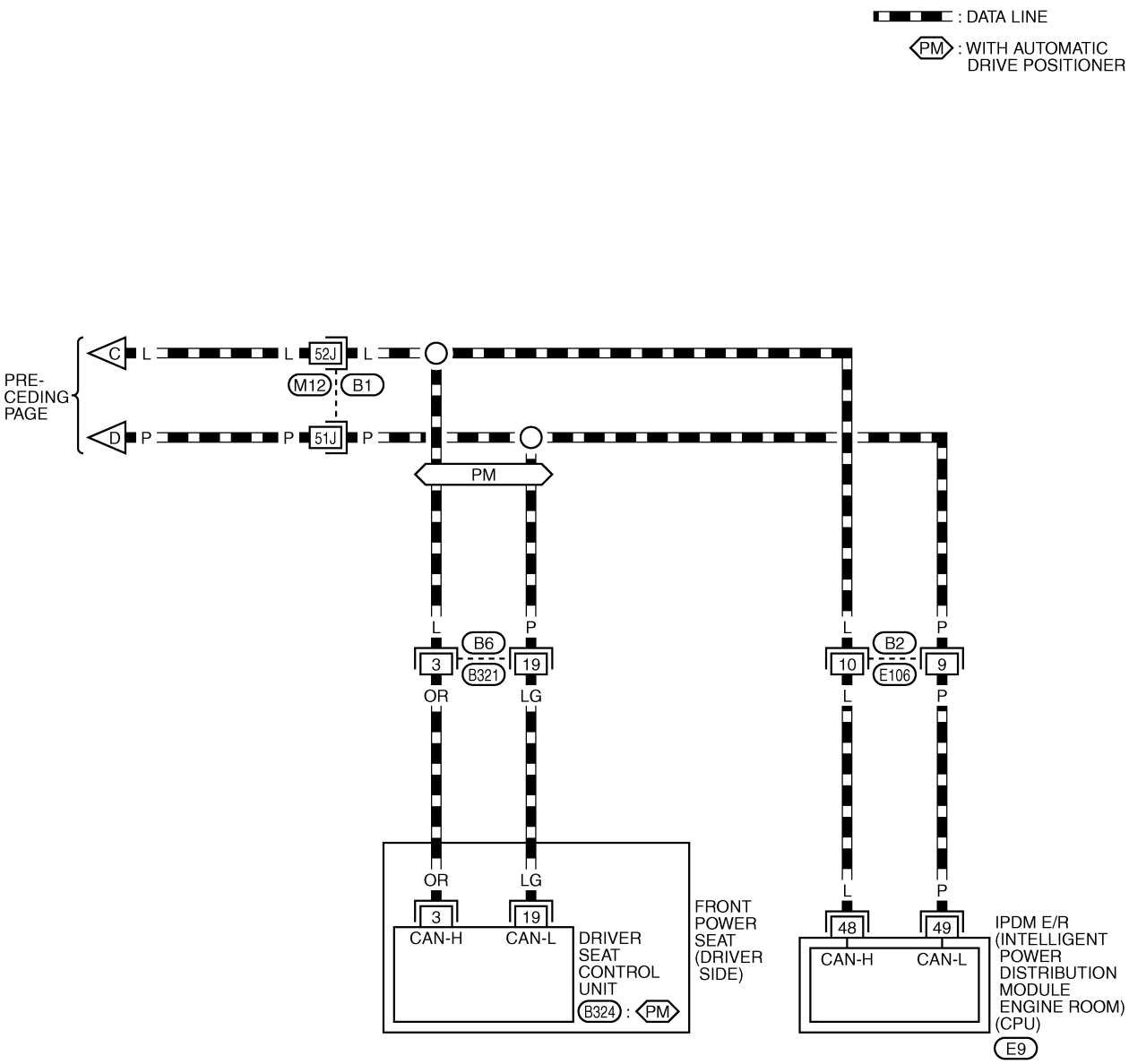


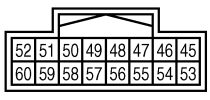


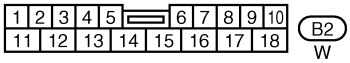
REFER TO THE FOLLOWING.
M1 -ELECTRICAL UNITS

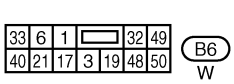
TKWM3409E

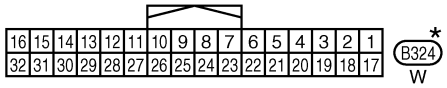
LAN-CAN-03











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

REFER TO THE FOLLOWING.

B1 -SUPER MULTIPLE JUNCTION (SMJ)

TKWM3410E

CAN Communication Unit

NKS0010N

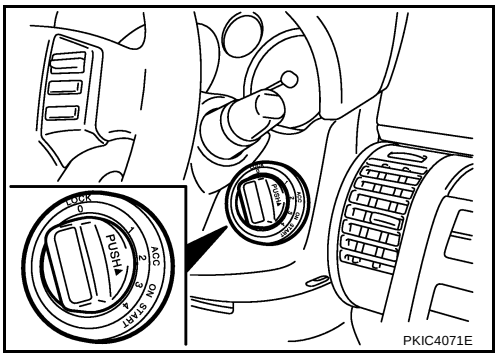
Go to CAN system, when selecting your CAN system type from the following table.

Body type	Sedan					
Axle	2WD				AWD	
Engine	VQ35DE					
Transmission	M/T		A/T			
Brake control	VDC					
Intelligent Key system				×		×
Automatic drive positioner		×		×		×
CAN system type	1	2	3	4	5	6
CAN system trouble diagnosis	LAN-36	LAN-48	LAN-62	LAN-76	LAN-93	LAN-108

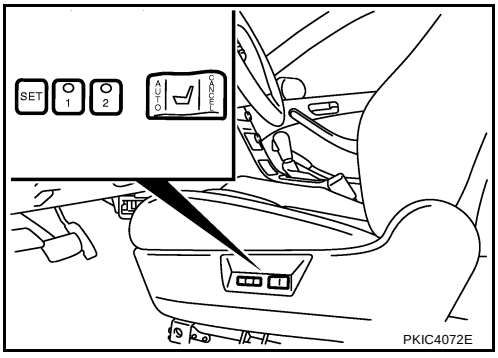
×: Applicable

NOTE:
Confirming the presence of the following items helps to identify CAN system type.

- Models with Intelligent Key system



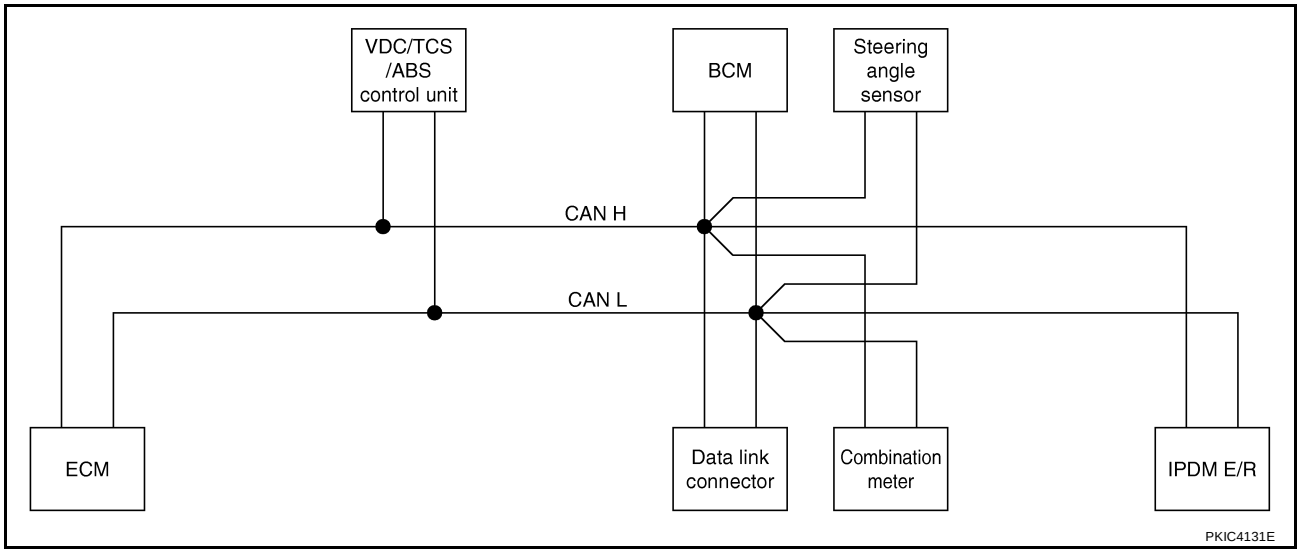
- Models with automatic drive positioner



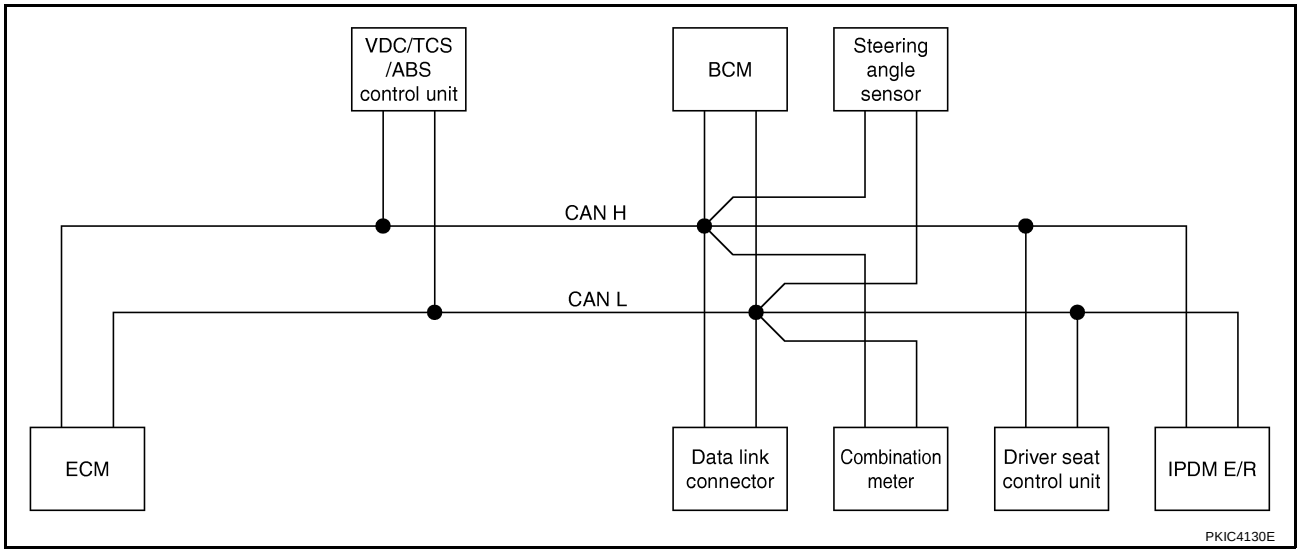
TYPE 1/TYPE 2

System Diagram

- Type 1



- Type 2



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	VDC/TCS/ABS control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*	IPDM E/R
A/C compressor request signal	T						R
Accelerator pedal position signal	T	R					
ASCD CRUISE lamp signal	T		R				
ASCD SET lamp signal	T		R				
Cooling fan motor operation signal	T						R

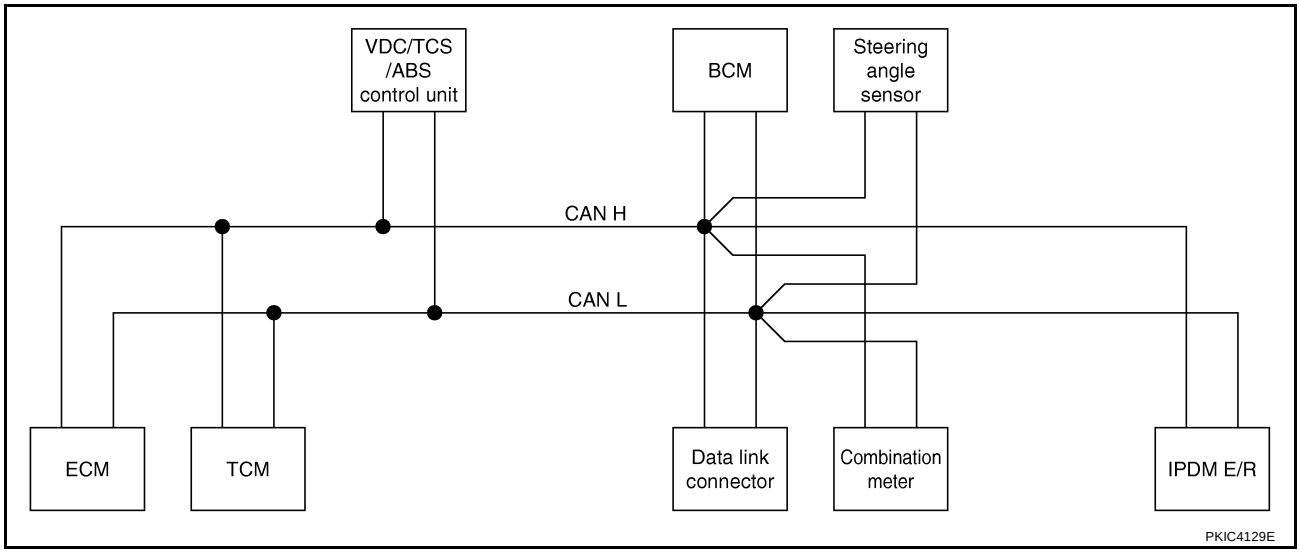
Signals	ECM	VDC/TCS/ABS control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*	IPDM E/R
Engine coolant temperature signal	T		R				
Engine speed signal	T	R	R				
Malfunction indicator lamp signal	T		R				
Vehicle speed signal		T	R				
	R		T	R		R	
Fuel level sensor signal	R		T				
Seat belt buckle switch signal			T	R			
A/C switch signal	R			T			
Blower fan motor switch signal	R			T			
Buzzer output signal			R	T			
Door switch signal			R	T		R	R
Front fog lights request signal				T			R
Front wiper request signal				T			R
High beam request signal			R	T			R
High beam status signal	R						T
Horn chirp signal				T			R
Key fob door unlock signal				T		R	
Key switch signal				T		R	
Low beam request signal				T			R
Low beam status signal	R						T
Position lights request signal			R	T			R
Rear window defogger switch signal				T			R
Rear window defogger control signal	R						T
Sleep request 1 signal			R	T			
Sleep request 2 signal				T			R
Theft warning horn request signal				T			R
Tire pressure signal			R	T			
Turn indicator signal			R	T			
Wake up request 1 signal				T			R
Wake up request 2 signal				T			R
Steering angle sensor signal		R			T		
Front wiper stop position signal				R			T
Hood switch signal				R			T
Oil pressure switch signal			R				T

*: with automatic drive positioner models only

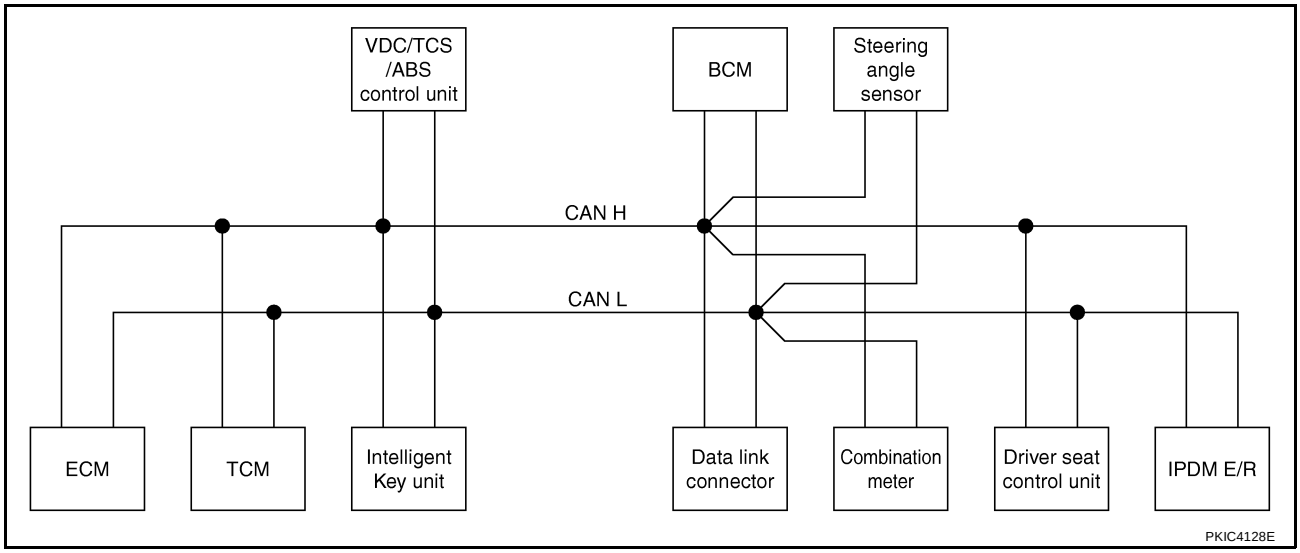
TYPE 3/TYPE 4

System Diagram

- Type 3



- Type 4



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
A/C compressor request signal	T								R
Accelerator pedal position signal	T	R		R					
ASCD CRUISE lamp signal	T				R				
ASCD OD cancel request signal	T	R							
ASCD operation signal	T	R							
ASCD SET lamp signal	T				R				

Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
Battery voltage signal	T	R							
Closed throttle position signal	T	R							
Cooling fan motor operation signal	T								R
Engine coolant temperature signal	T				R				
Engine speed signal	T	R	R	R	R				
Malfunction indicator lamp signal	T				R				
Wide open throttle position signal	T	R							
A/T CHECK indicator lamp signal		T			R				
A/T position indicator signal		T		R	R			R*3	
A/T self-diagnosis signal	R	T							
Manual mode indicator signal		T			R				
Output shaft revolution signal	R	T							
Turbine revolution signal	R	T							
Door lock/unlock/trunk open request signal			T			R			
Hazard and horn request signal			T			R			
Panic alarm request signal			T			R			
Power window open request signal			T			R			
A/T shift schedule change demand signal		R		T					
Vehicle speed signal				T	R				
	R	R	R		T	R		R	
Fuel level sensor signal	R				T				
Manual mode shift down signal		R			T				
Manual mode shift up signal		R			T				
Manual mode signal		R			T				
Not manual mode signal		R			T				
Seat belt buckle switch signal					T	R			
Snow mode switch signal	R				T				
Stop lamp switch signal		R			T				
A/C switch signal	R					T			
Blower fan motor switch signal	R					T			
Buzzer output signal					R	T			
Door lock/unlock status signal			R			T			
Door switch signal			R		R	T		R	R
Front fog lights request signal						T			R
Front wiper request signal						T			R
High beam request signal					R	T			R
High beam status signal	R								T
Horn chirp signal						T			R

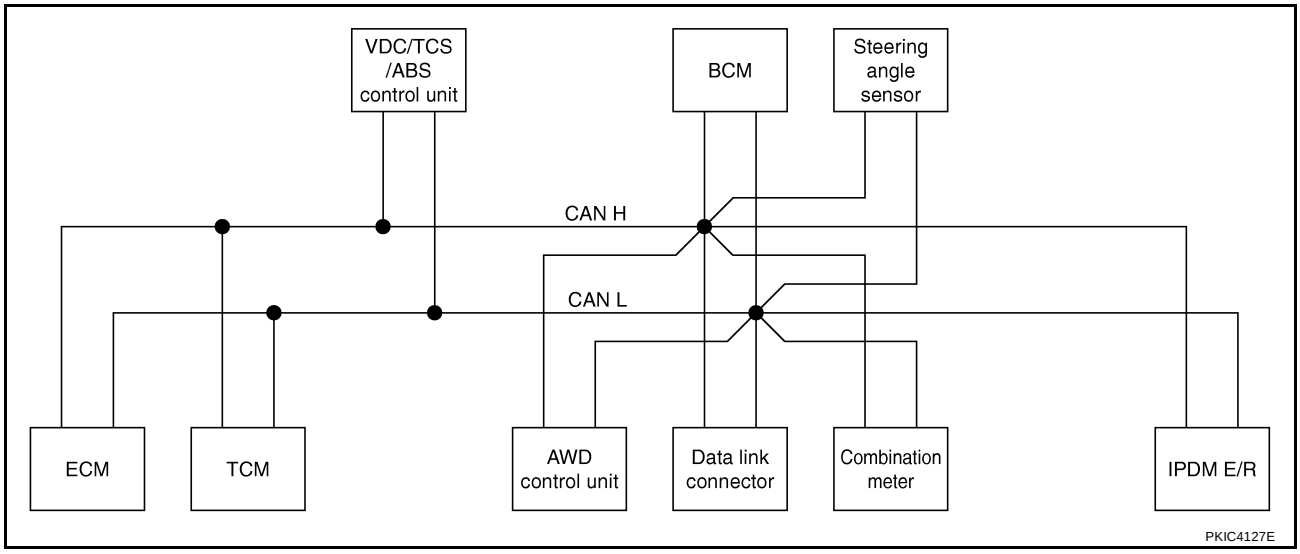
Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
Key fob door unlock signal						T		R	
Key switch signal						T		R	
Low beam request signal						T			R
Low beam status signal	R								T
Position lights request signal					R	T			R
Rear window defogger switch signal						T			R
Rear window defogger control signal	R								T
Sleep request 1 signal					R	T			
Sleep request 2 signal						T			R
Theft warning horn request signal						T			R
Tire pressure signal					R	T			
Turn indicator signal					R	T			
Wake up request 1 signal						T			R
Wake up request 2 signal						T			R
Steering angle sensor signal				R			T		
Front wiper stop position signal						R			T
Hood switch signal						R			T
Oil pressure switch signal					R				T

*1: with Intelligent Key system models only
*2: with automatic drive positioner models only
*3: P range and R range only

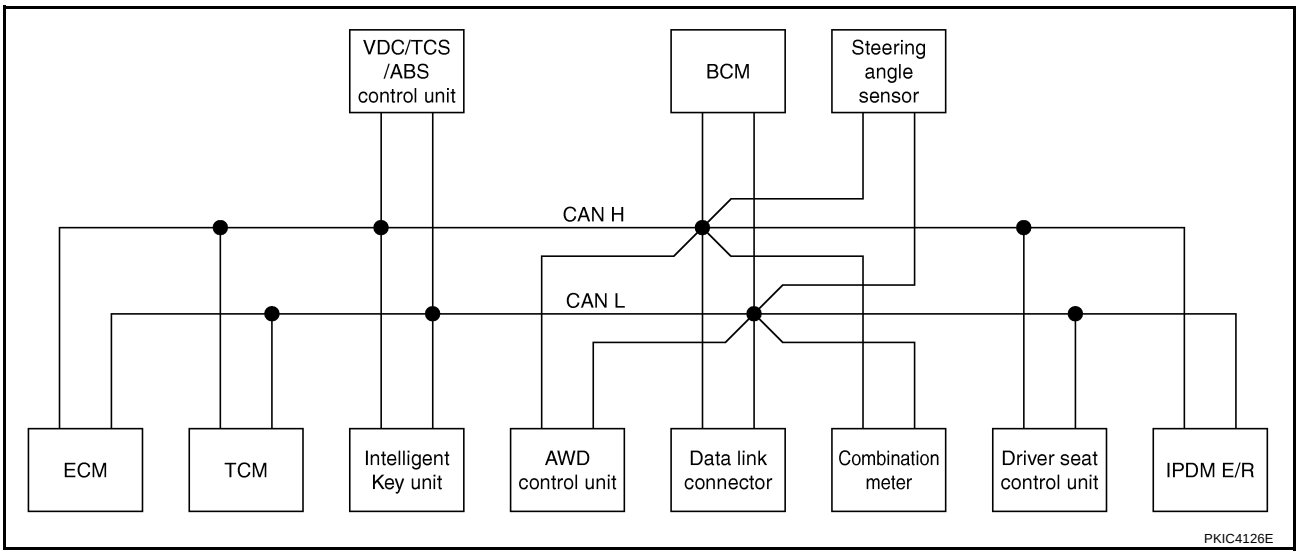
TYPE 5/TYPE 6

System Diagram

- Type 5



- Type 6



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	AWD control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
A/C compressor request signal	T									R
Accelerator pedal position signal	T	R		R	R					
ASCD CRUISE lamp signal	T					R				
ASCD OD cancel request signal	T	R								
ASCD operation signal	T	R								
ASCD SET lamp signal	T					R				
Battery voltage signal	T	R								
Closed throttle position signal	T	R								
Cooling fan motor operation signal	T									R
Engine coolant temperature signal	T					R				
Engine speed signal	T	R	R	R	R	R				
Malfunction indicator lamp signal	T					R				
Wide open throttle position signal	T	R								
A/T CHECK indicator lamp signal		T				R				
A/T position indicator signal		T		R		R			R*3	
A/T self-diagnosis signal	R	T								
Manual mode indicator signal		T				R				
Output shaft revolution signal	R	T								
Turbine revolution signal	R	T								
Door lock/unlock/trunk open request signal			T				R			
Hazard and horn request signal			T				R			
Panic alarm request signal			T				R			

Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	AWD control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
Power window open request signal			T				R			
A/T shift schedule change demand signal		R		T						
Vehicle speed signal				T	R	R				
	R	R	R			T	R		R	
AWD warning lamp signal					T	R				
Fuel level sensor signal	R					T				
Manual mode shift down signal		R				T				
Manual mode shift up signal		R				T				
Manual mode signal		R				T				
Not manual mode signal		R				T				
Parking brake switch signal					R	T				
Seat belt buckle switch signal						T	R			
SNOW mode switch signal	R				R	T				
Stop lamp switch signal		R				T				
				T	R					
A/C switch signal	R						T			
Blower fan motor switch signal	R						T			
Buzzer output signal						R	T			
Door lock/unlock status signal			R				T			
Door switch signal			R			R	T		R	R
Front fog lights request signal							T			R
Front wiper request signal							T			R
High beam request signal						R	T			R
High beam status signal	R									T
Horn chirp signal							T			R
Key fob door unlock signal							T		R	
Key switch signal							T		R	
Low beam request signal							T			R
Low beam status signal	R									T
Position lights request signal						R	T			R
Rear window defogger control signal	R									T
Rear window defogger switch signal							T			R
Sleep request 1 signal						R	T			
Sleep request 2 signal							T			R
Theft warning horn request signal							T			R
Tire pressure signal						R	T			
Turn indicator signal						R	T			
Wake up request 1 signal							T			R

Signals	ECM	TCM	Intelligent Key unit*1	VDC/TCS/ABS control unit	AWD control unit	Combination meter	BCM	Steering angle sensor	Driver seat control unit*2	IPDM E/R
Wake up request 2 signal							T			R
Steering angle sensor signal				R				T		
Front wiper stop position signal							R			T
Hood switch signal							R			T
Oil pressure switch signal						R				T

*1: with Intelligent Key system models only
*2: with automatic drive positioner models only
*3: P range and R range only

CAN SYSTEM (TYPE 1)

PFP:23710

Component Parts and Harness Connector Location

NKS0010P

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS0010Q

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS0010R

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS0010S

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

Check sheet table

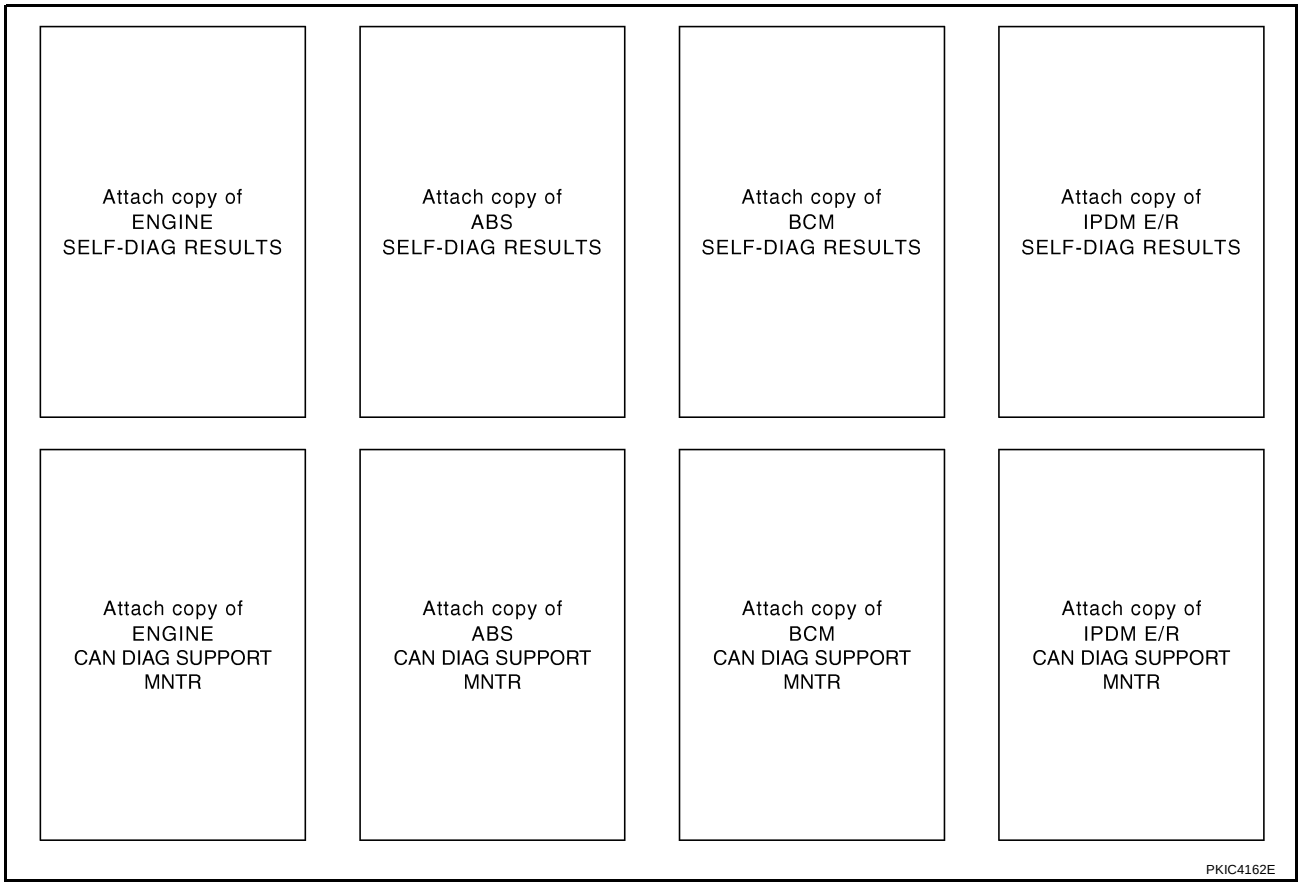
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

PKIC4161E


Attach copy of
ENGINE
SELF-DIAG RESULTS
Attach copy of
ABS
SELF-DIAG RESULTS
Attach copy of
BCM
SELF-DIAG RESULTS
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IPDM E/R
SELF-DIAG RESULTS
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ENGINE
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ABS
CAN DIAG SUPPORT
MNTR
Attach copy of
BCM
CAN DIAG SUPPORT
MNTR
Attach copy of
IPDM E/R
CAN DIAG SUPPORT
MNTR
PKIC4162E

CHECK SHEET RESULTS (EXAMPLE)

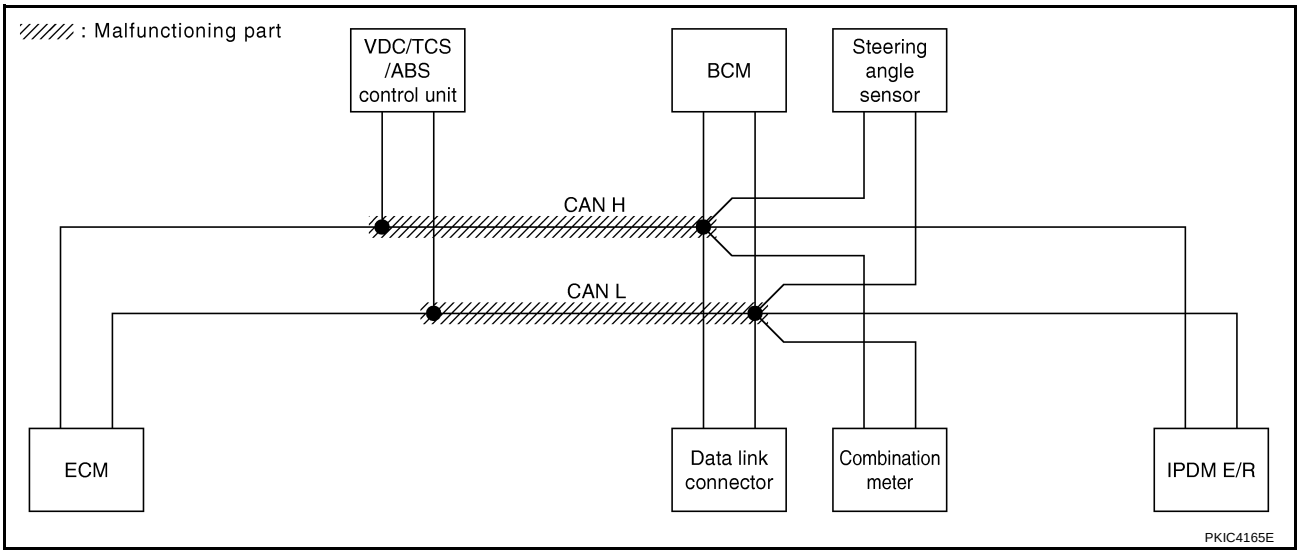
NOTE:
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-127, "Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN ✓	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN ✓	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4274E



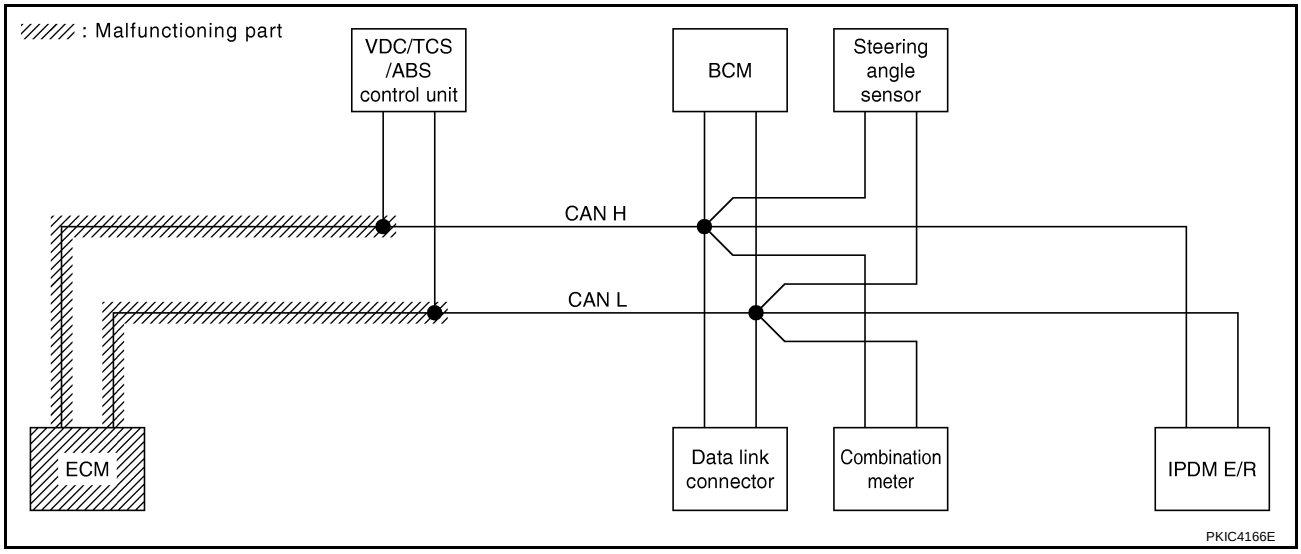
PKIC4165E

Case 2

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4275E



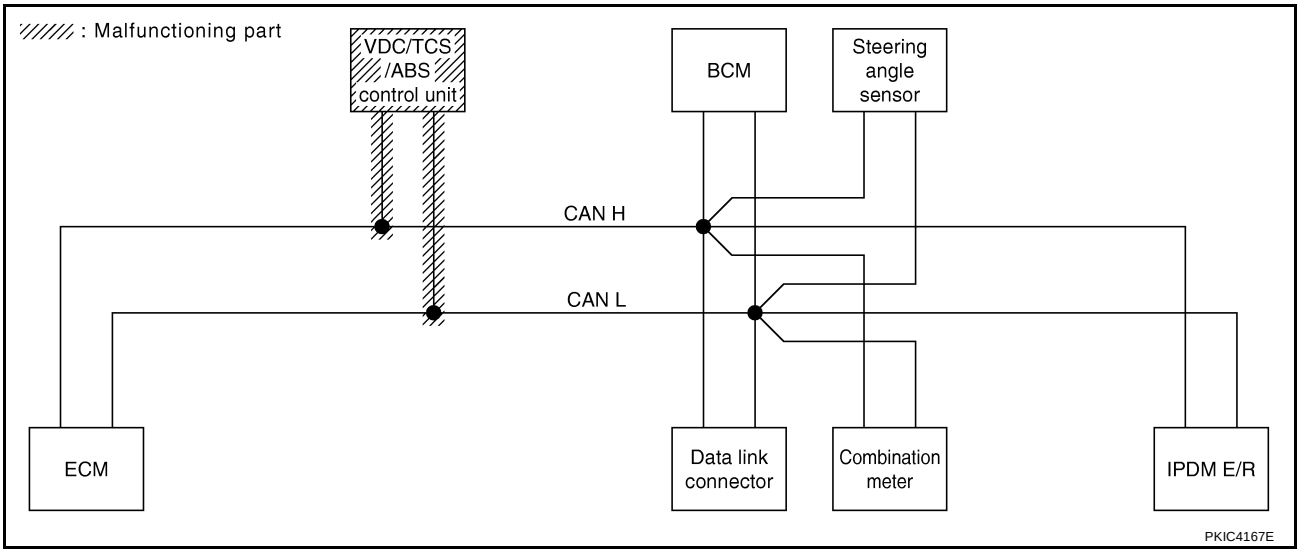
PKIC4166E

Case 3

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4276E



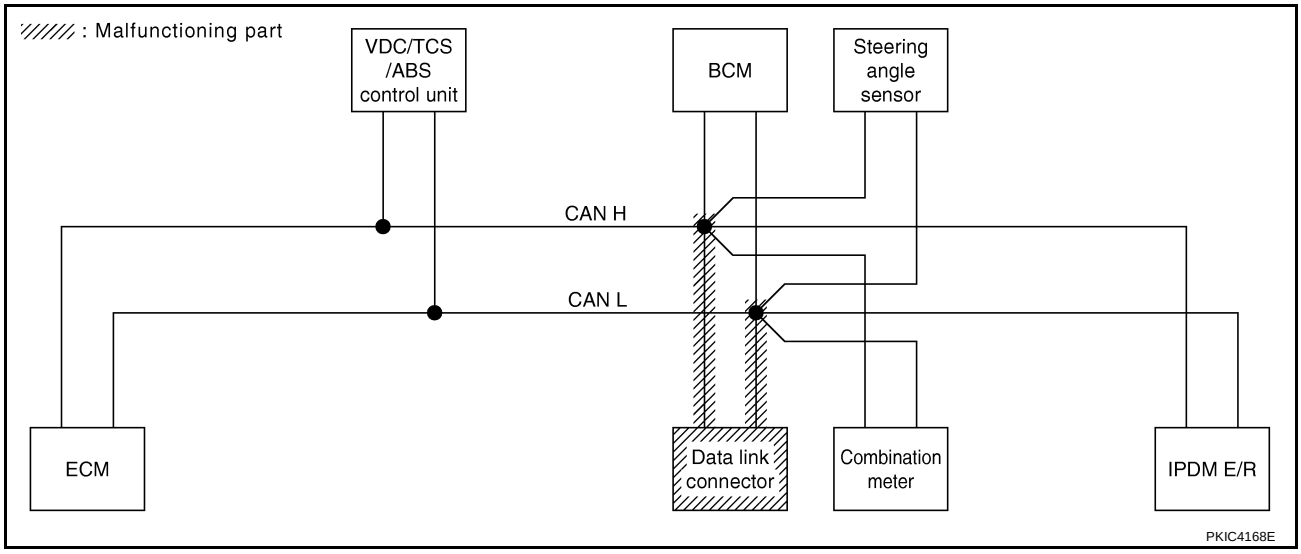
PKIC4167E

Case 4

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4277E



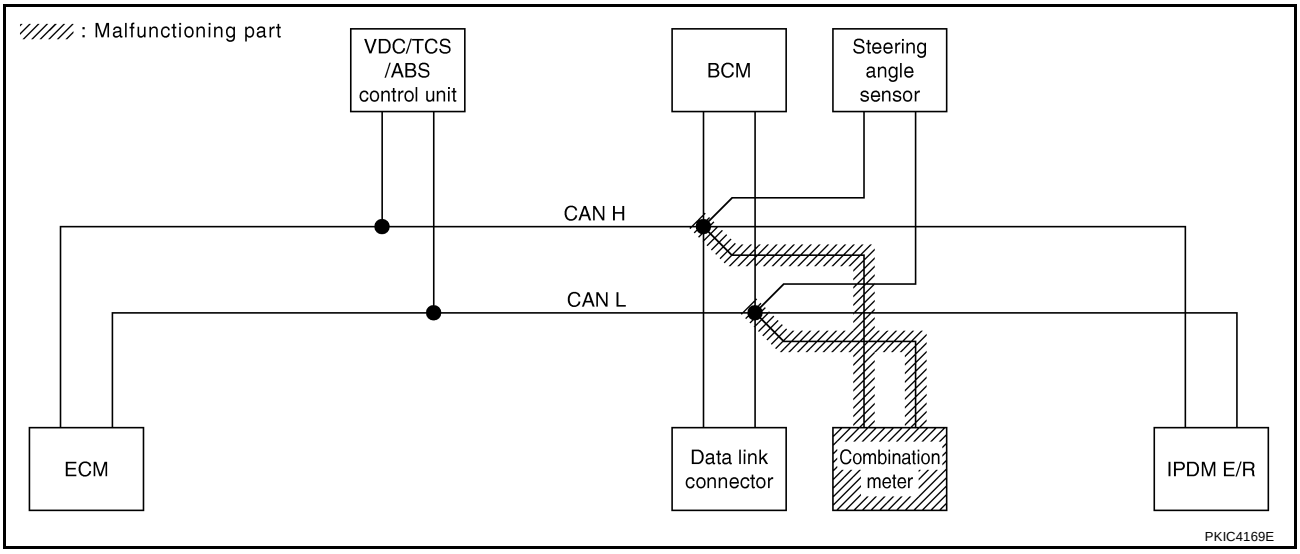
PKIC4168E

Case 5

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4278E



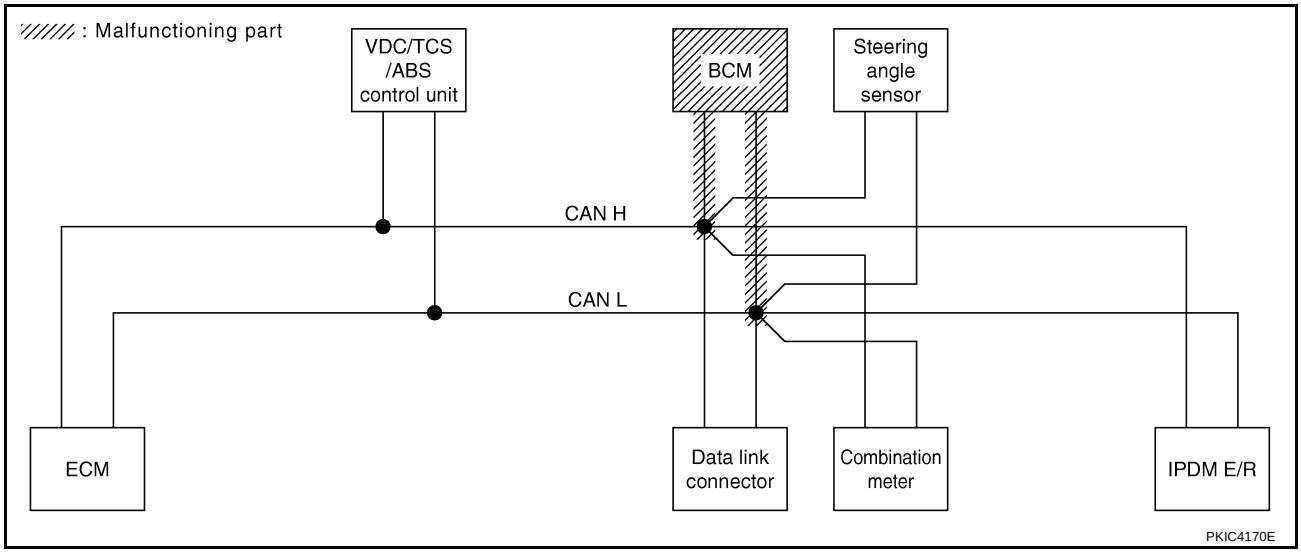
PKIC4169E

Case 6

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4279E



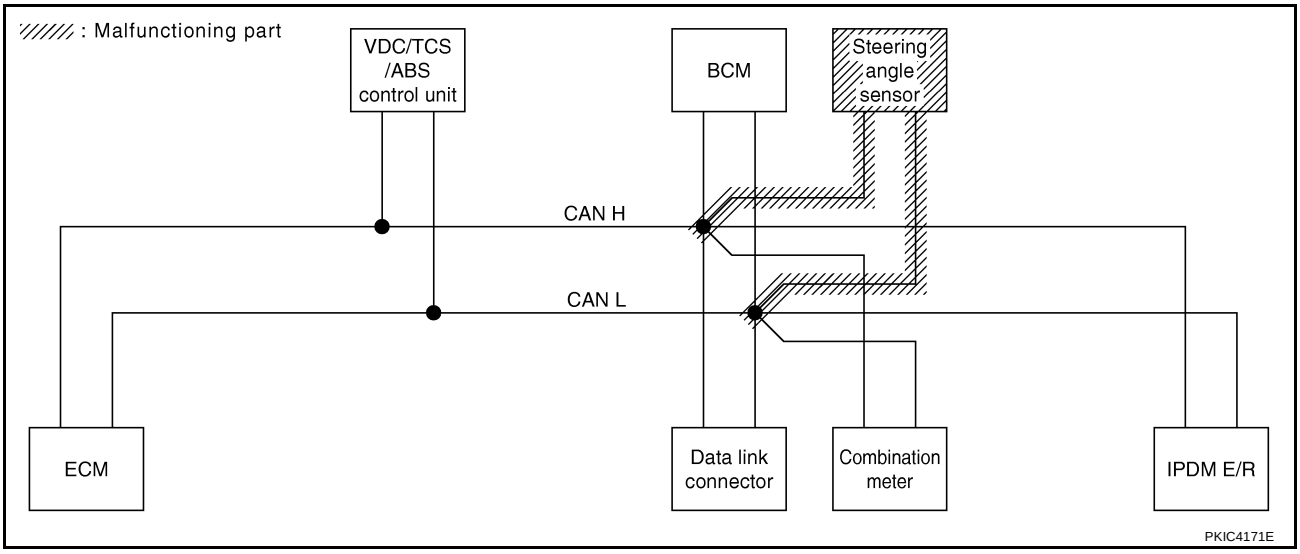
PKIC4170E

Case 7

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4280E



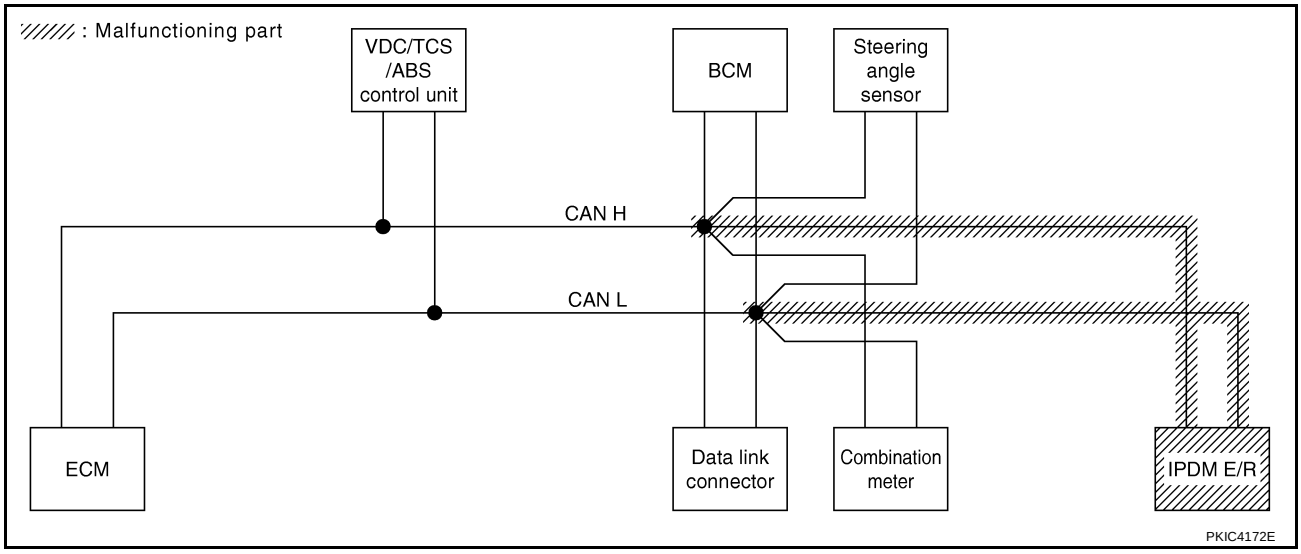
PKIC4171E

Case 8

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4281E



PKIC4172E

Case 9

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	–	NG	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4282E

Case 10

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4283E

Case 11

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4284E

CAN SYSTEM (TYPE 2)

PFP:23710

Component Parts and Harness Connector Location

NKS00116

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS00117

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS00118

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS00119

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	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

PKIC4163E

Attach copy of
ENGINE
SELF-DIAG RESULTS

Attach copy of
ABS
SELF-DIAG RESULTS

Attach copy of
BCM
SELF-DIAG RESULTS

Attach copy of
AUTO DRIVE POS.
SELF-DIAG RESULTS

Attach copy of
IPDM E/R
SELF-DIAG RESULTS

Attach copy of
ENGINE
CAN DIAG SUPPORT
MNTR

Attach copy of
ABS
CAN DIAG SUPPORT
MNTR

Attach copy of
BCM
CAN DIAG SUPPORT
MNTR

Attach copy of
AUTO DRIVE POS.
CAN DIAG SUPPORT
MNTR

Attach copy of
IPDM E/R
CAN DIAG SUPPORT
MNTR

PKIC4164E

CHECK SHEET RESULTS (EXAMPLE)

NOTE:

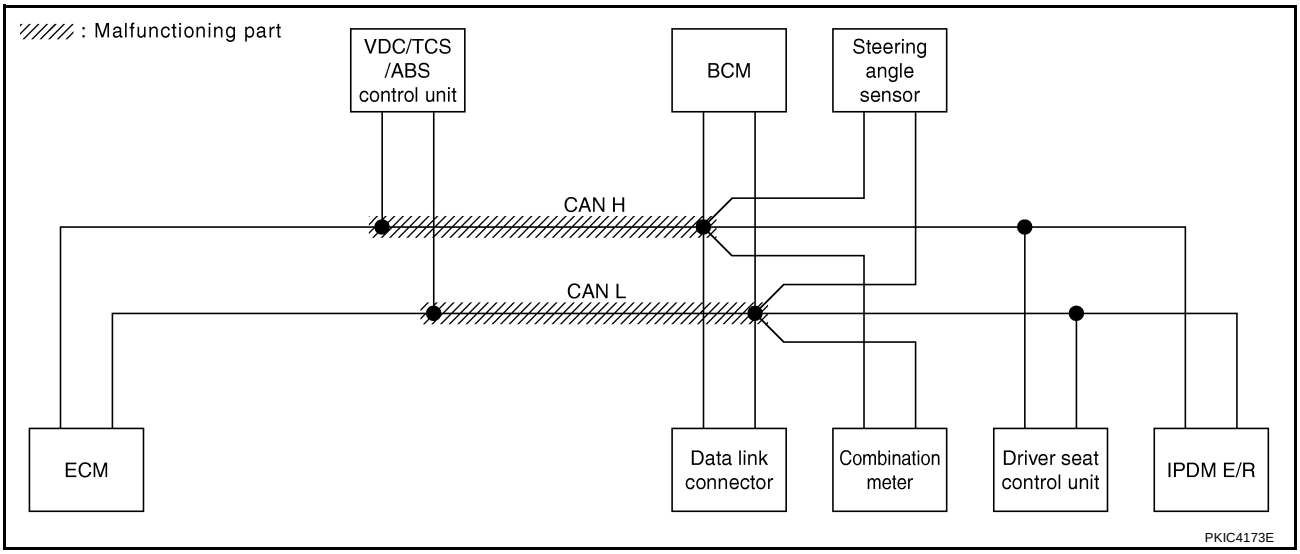
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-127, "Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN ✓	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN ✓	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4285E

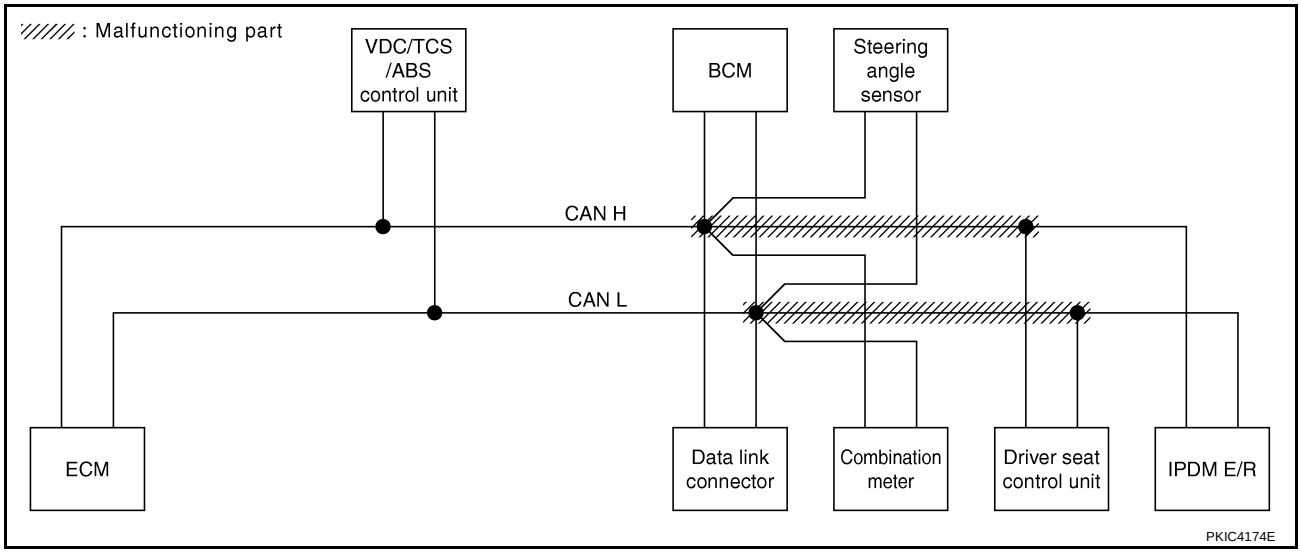


Case 2

Check harness between data link connector and driver seat control unit. Refer to LAN-127, "Inspection Between Data Link Connector and Driver Seat Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS. ✓	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R ✓	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4286E

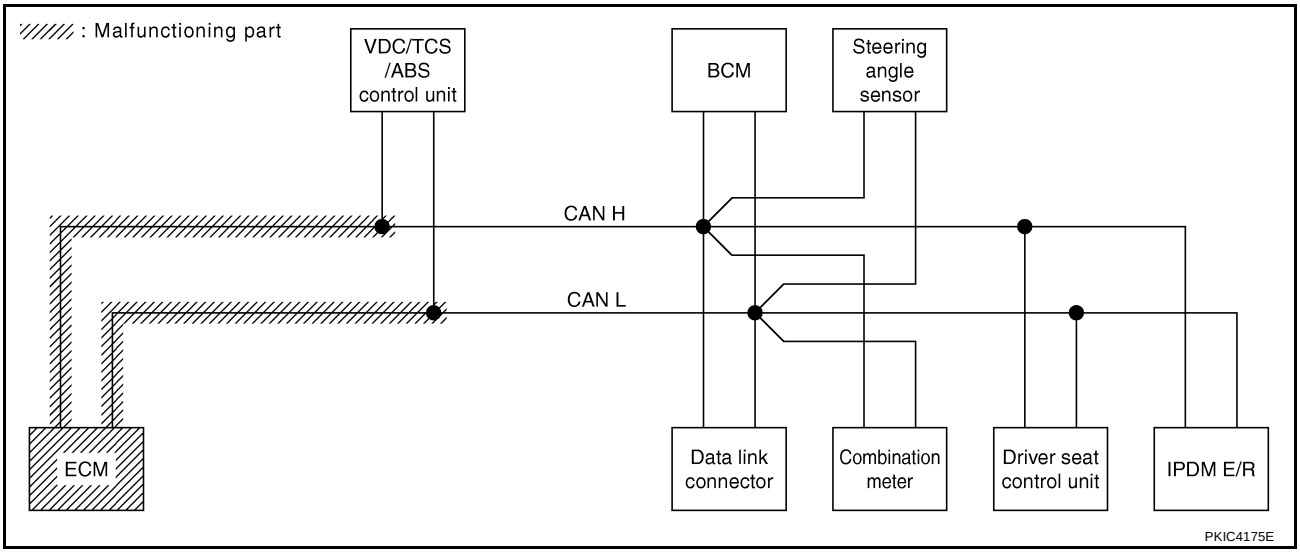


Case 3

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4287E

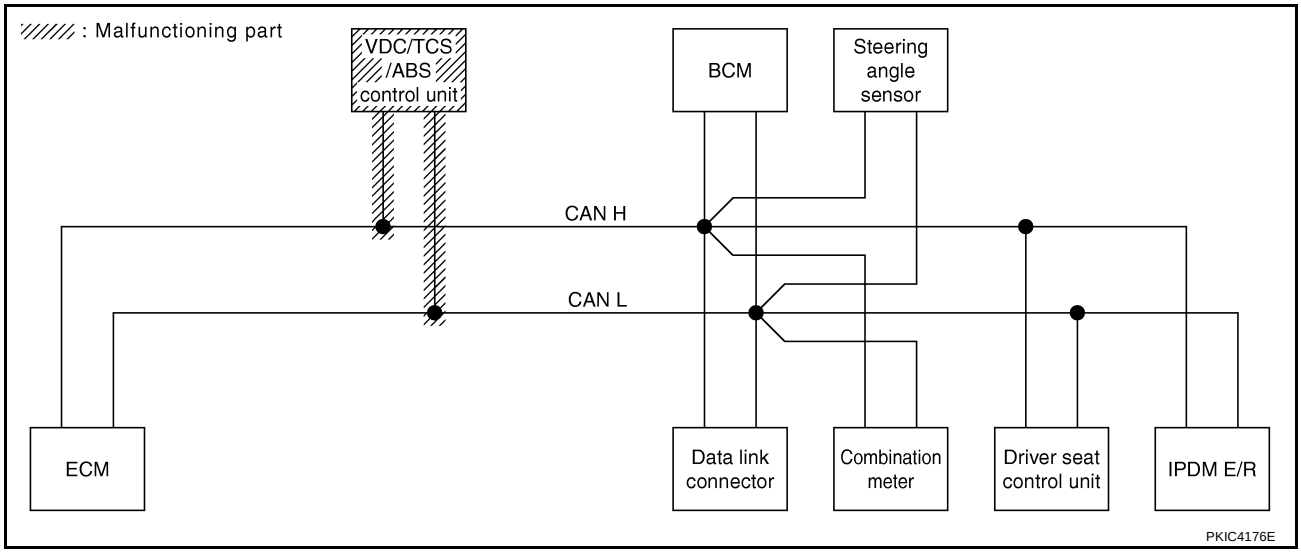


Case 4

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4288E

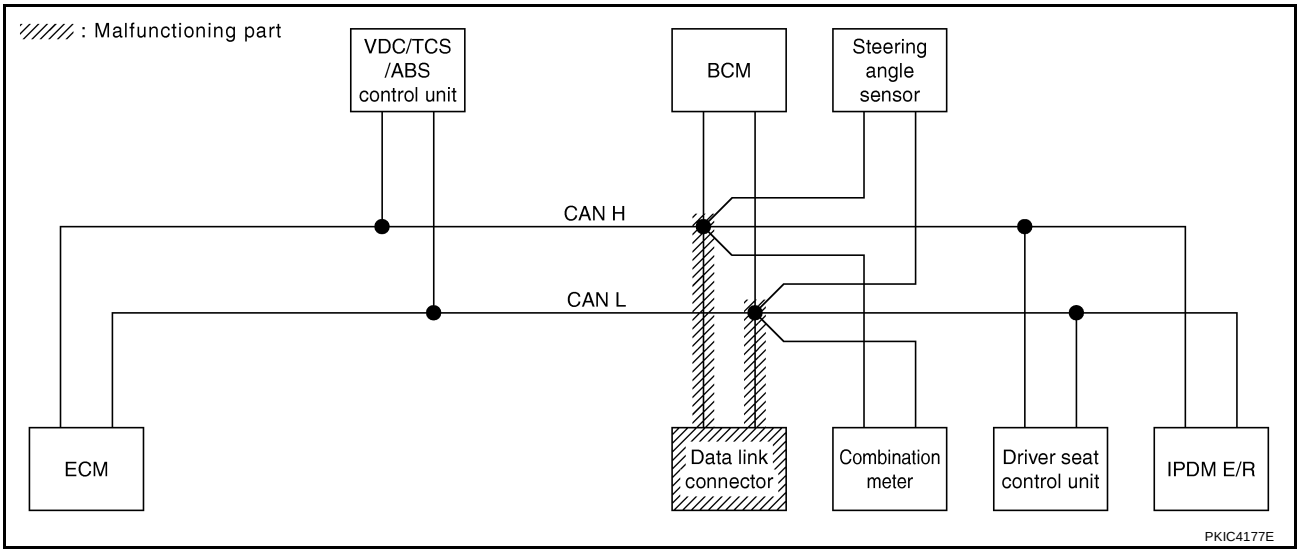


Case 5

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4289E



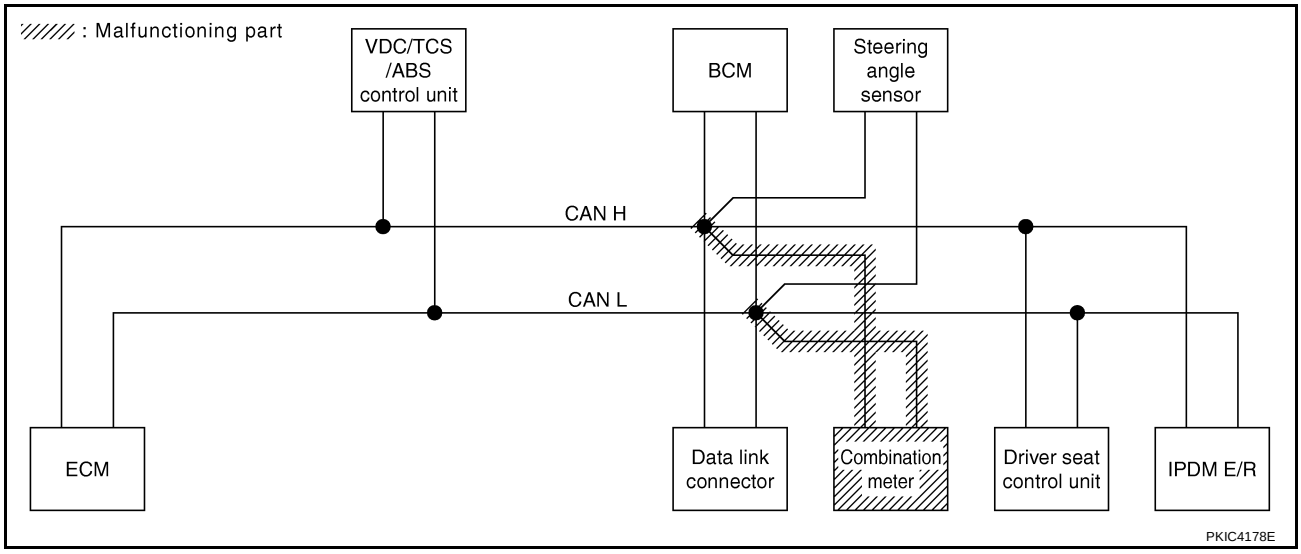
PKIC4177E

Case 6

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN ✓	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4290E



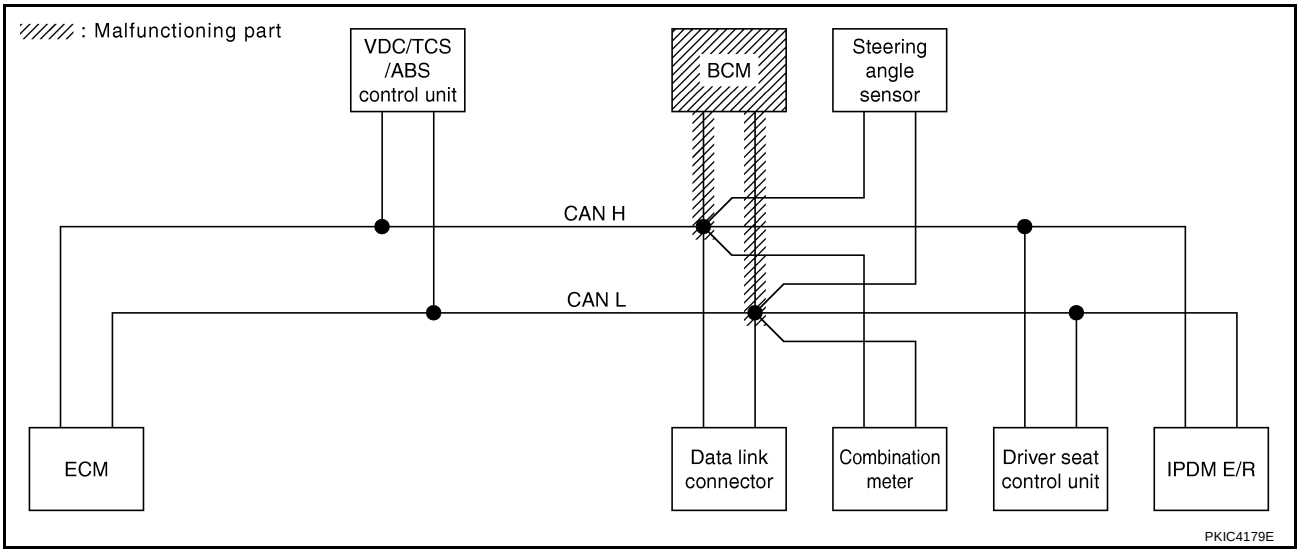
PKIC4178E

Case 7

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4291E



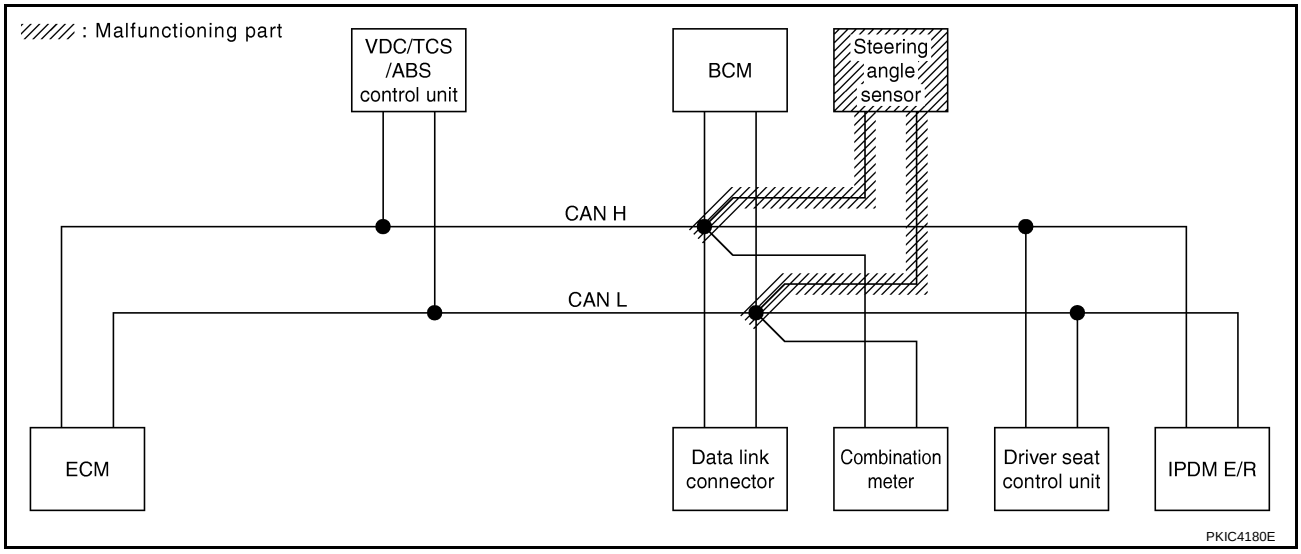
PKIC4179E

Case 8

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4292E



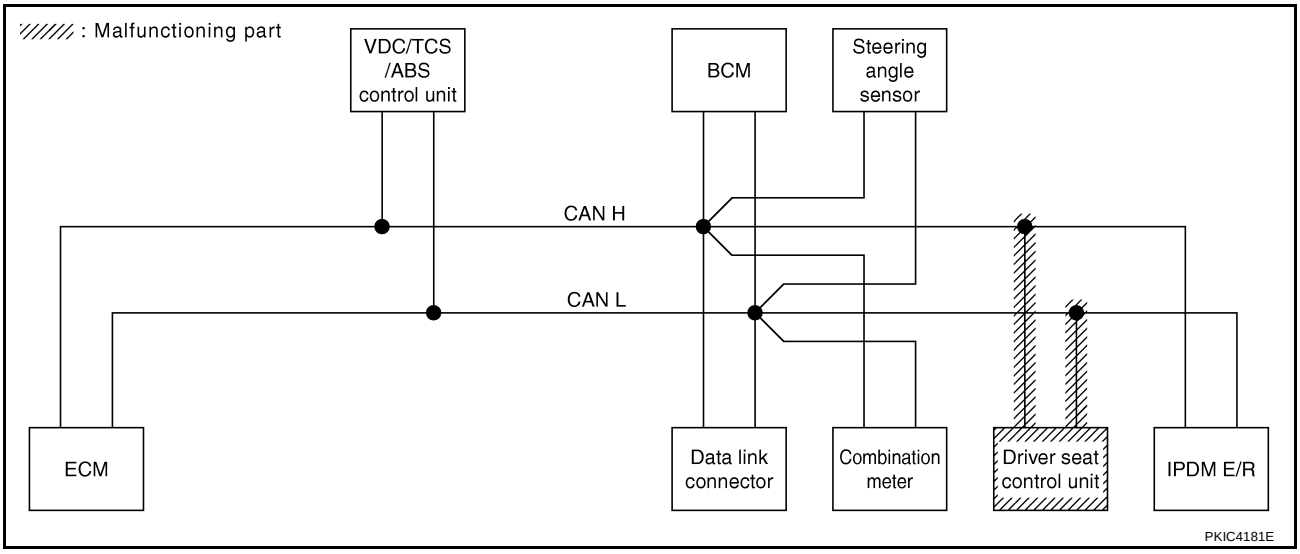
PKIC4180E

Case 9

Check driver seat control unit circuit. Refer to LAN-133, "Driver Seat Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4293E

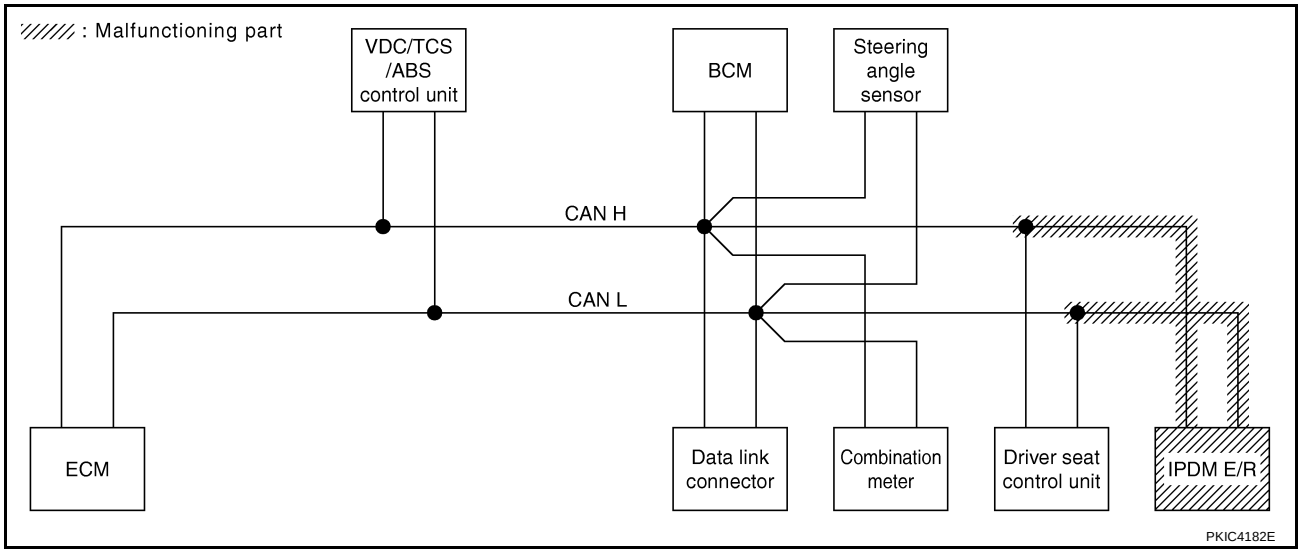


Case 10

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4294E



PKIC4182E

Case 11

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4295E

Case 12

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4296E

Case 13

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
ABS	—	NG	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4297E

CAN SYSTEM (TYPE 3)

PFP:23710

Component Parts and Harness Connector Location

NKS0011Q

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS0011R

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS0011S

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS0011T

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

Check sheet table

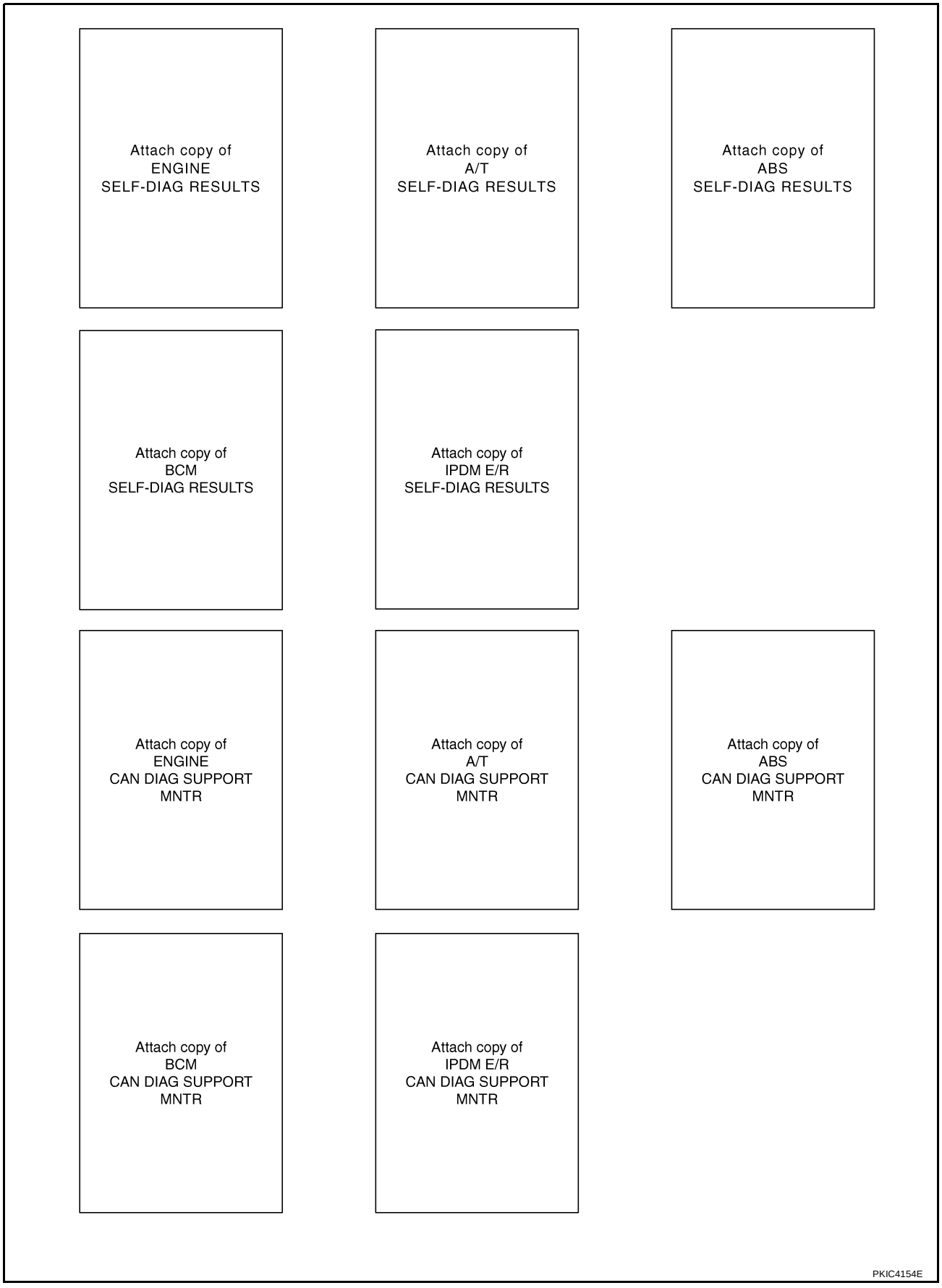
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	UNKWN	–	UNKWN	UNKWN	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

Symptoms :

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

PKIC4153E


Attach copy of
ENGINE
SELF-DIAG RESULTS
Attach copy of
A/T
SELF-DIAG RESULTS
Attach copy of
ABS
SELF-DIAG RESULTS
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SELF-DIAG RESULTS
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CAN DIAG SUPPORT
MNTR
Attach copy of
BCM
CAN DIAG SUPPORT
MNTR
Attach copy of
IPDM E/R
CAN DIAG SUPPORT
MNTR
PKIC4154E

CHECK SHEET RESULTS (EXAMPLE)

NOTE:

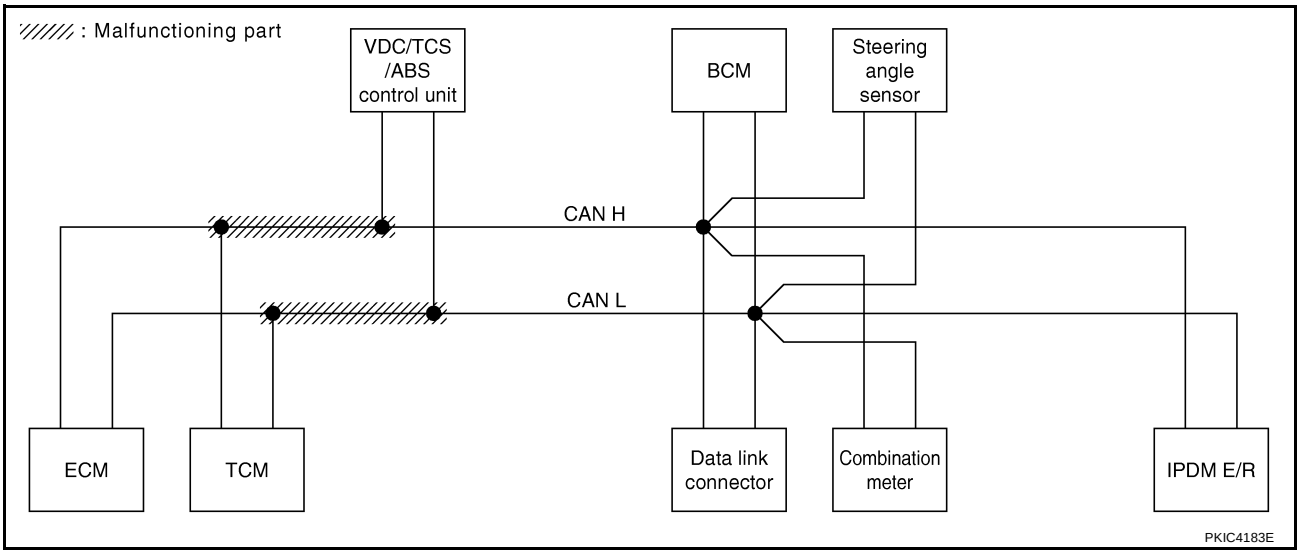
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and VDC/TCS/ABS control unit. Refer to LAN-126, "Inspection Between TCM and VDC/TCS/ABS Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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) ✓	—
ABS	—	NG	UNKWN	UNKWN ✓	UNKWN ✓	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN ✓	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4298E

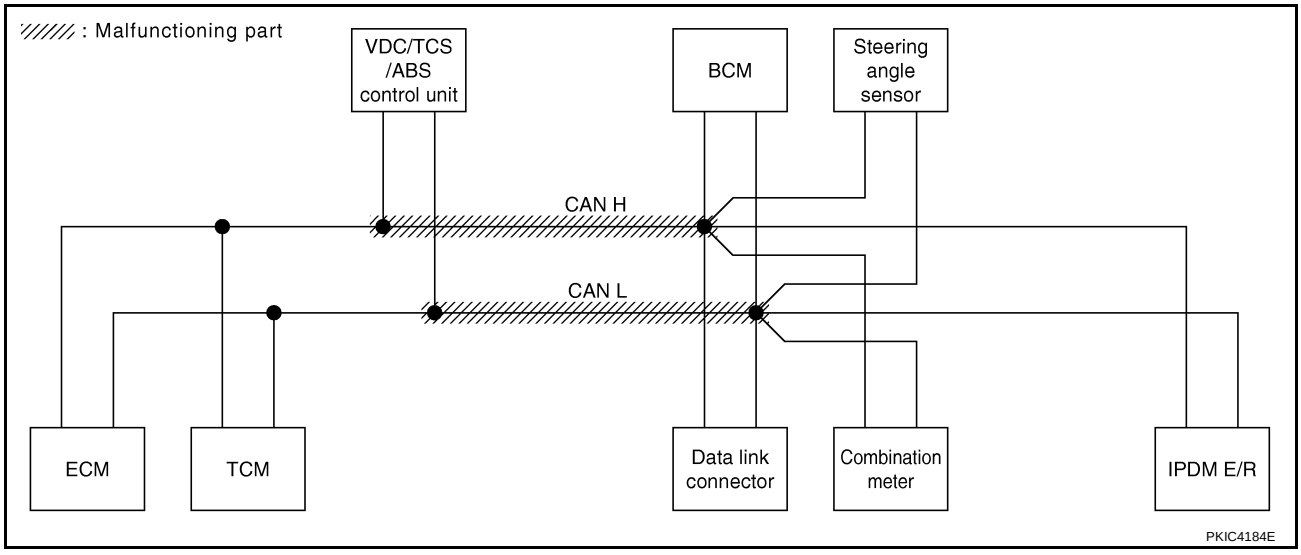


Case 2

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-127, "Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4299E



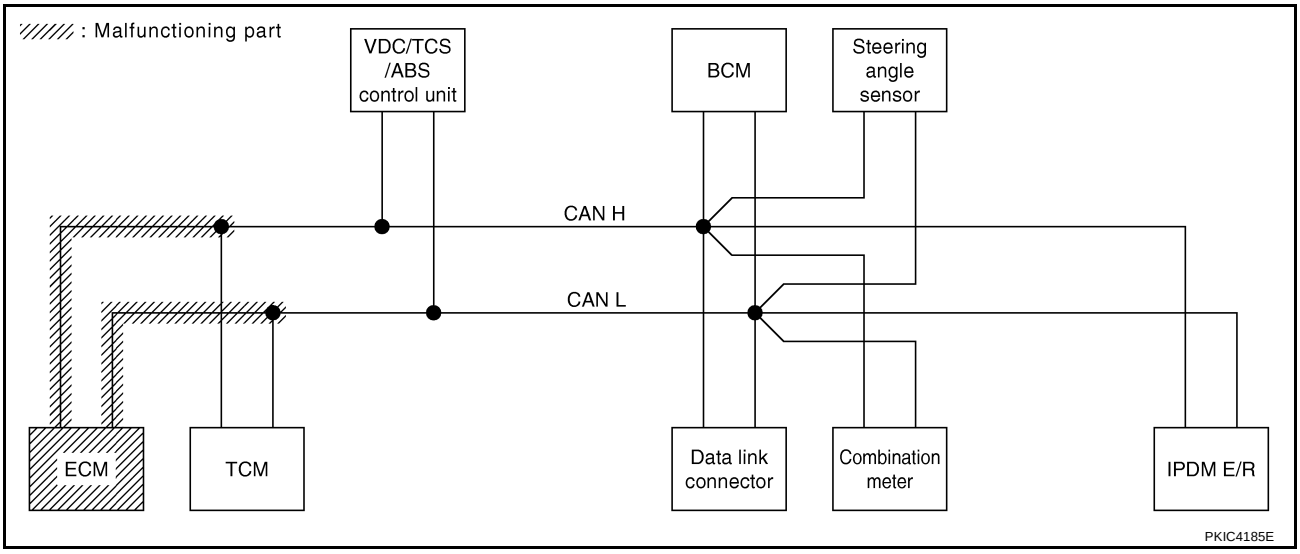
PKIC4184E

Case 3

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4300E



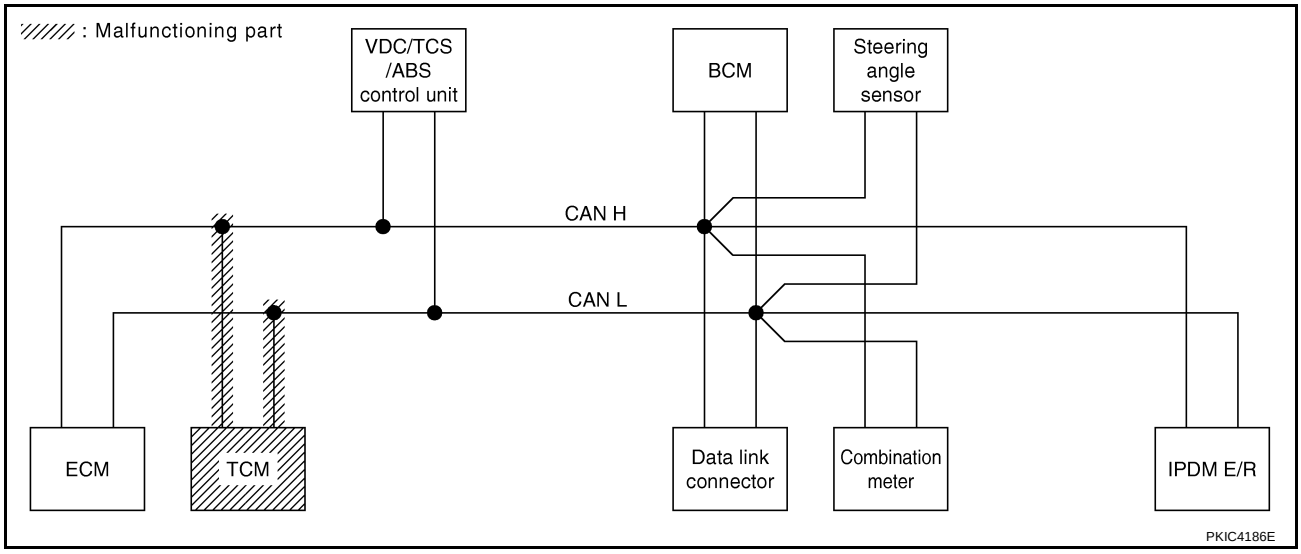
PKIC4185E

Case 4

Check TCM circuit. Refer to LAN-129, "TCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4301E



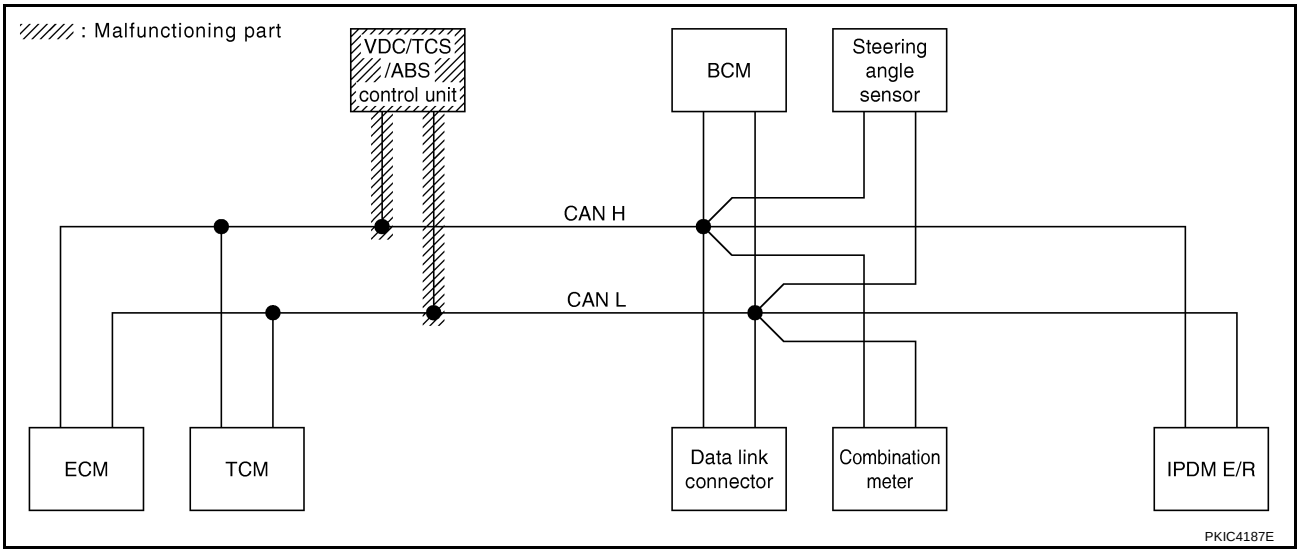
PKIC4186E

Case 5

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	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)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4302E



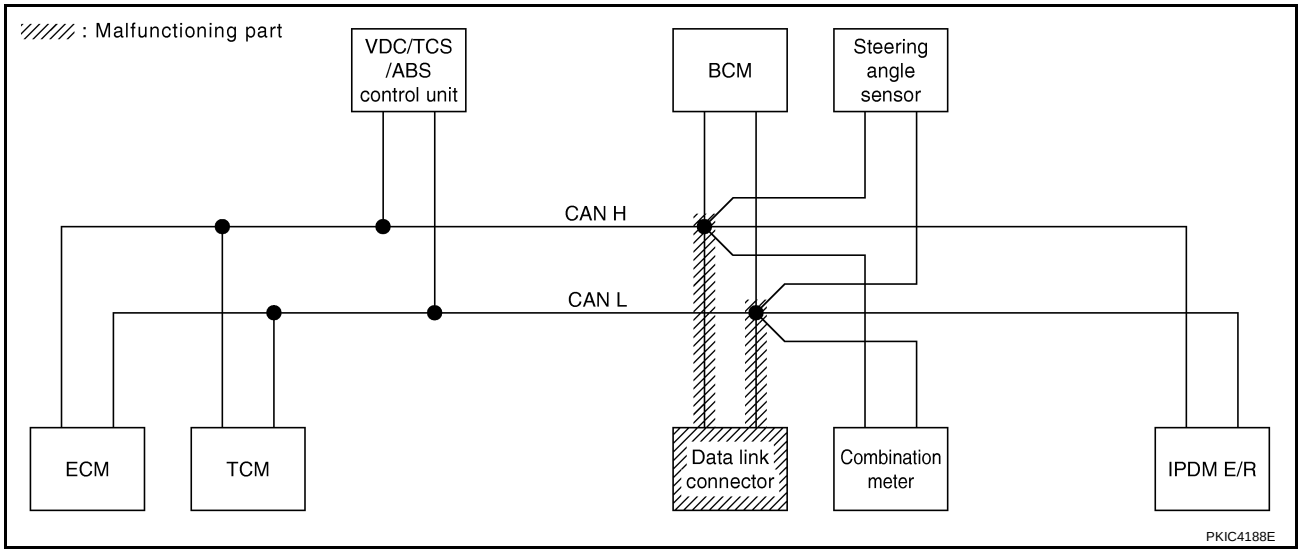
PKIC4187E

Case 6

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	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)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication ✓	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication ✓	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4303E



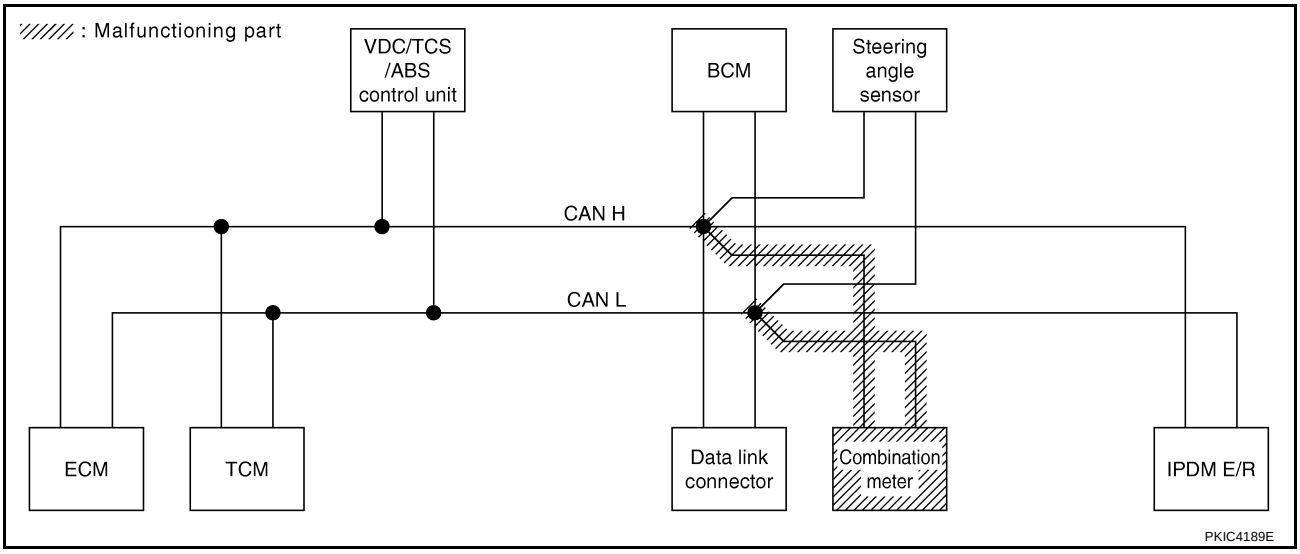
PKIC4188E

Case 7

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	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) ✓	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN ✓	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	UNKWN ✓	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4304E



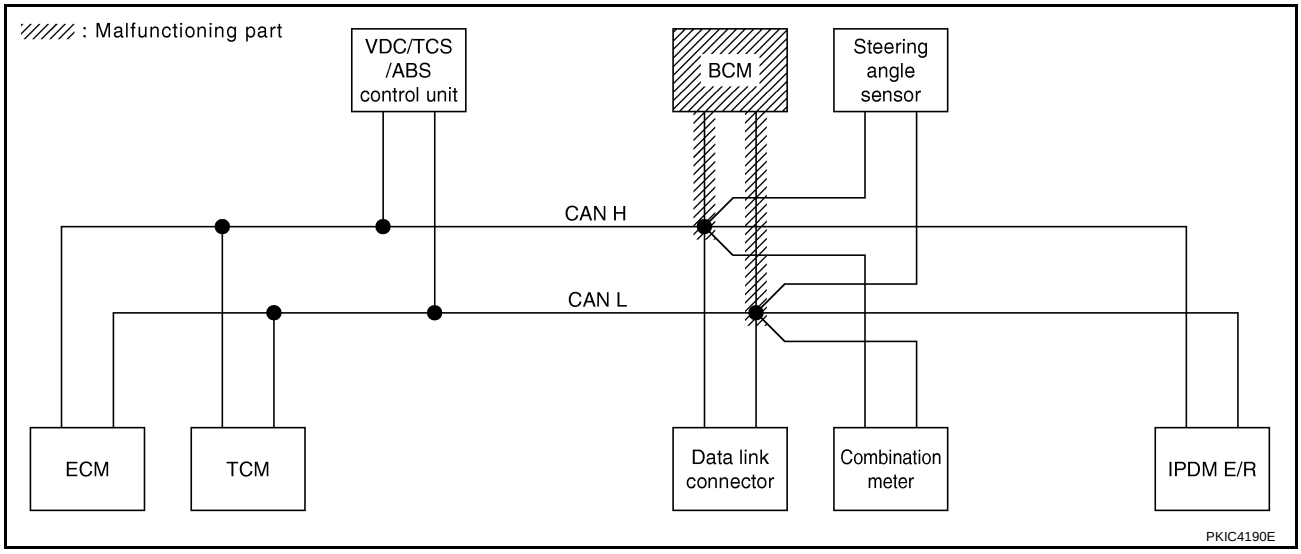
PKIC4189E

Case 8

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	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)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication ✓	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN ✓	–	–	CAN COMM CIRCUIT (U1000) ✓	–

PKIC4305E



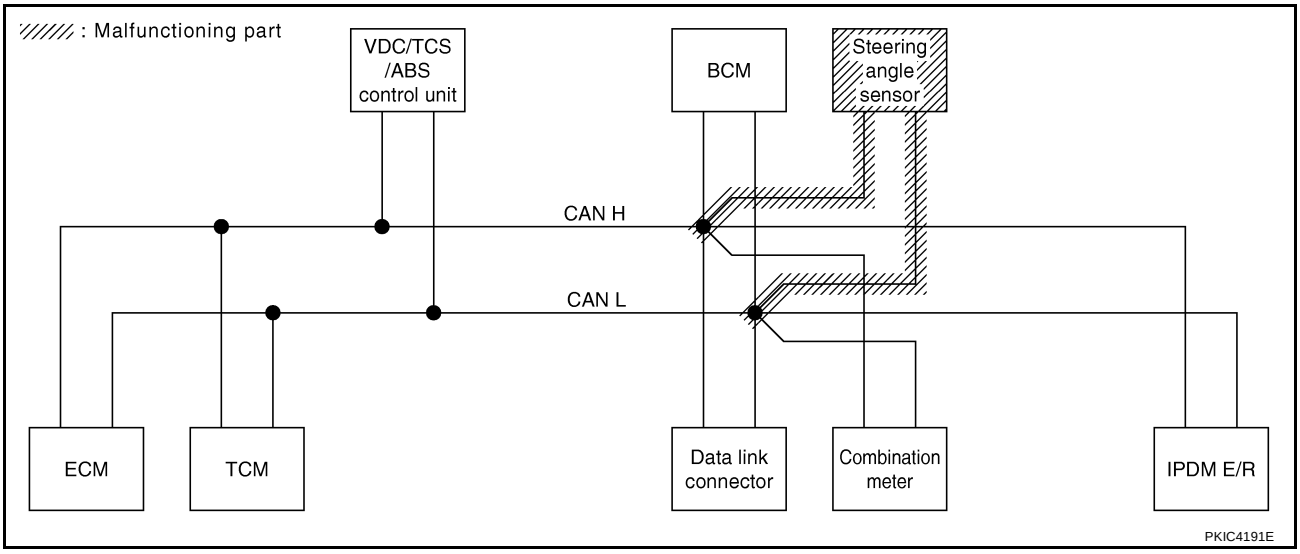
PKIC4190E

Case 9

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4306E



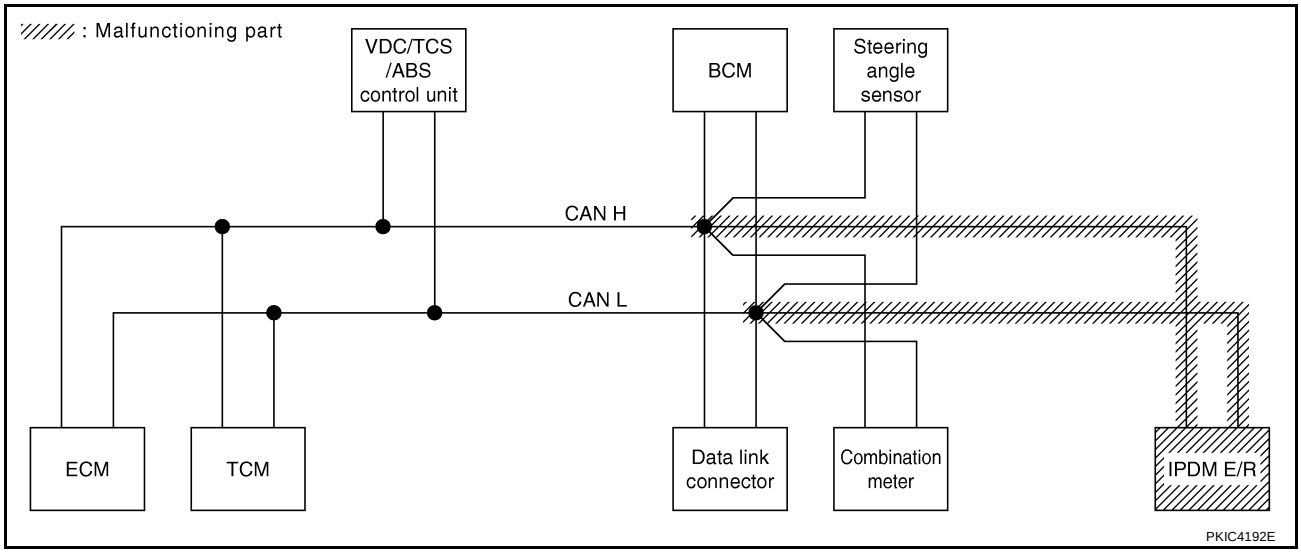
PKIC4191E

Case 10

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4307E



PKIC4192E

Case 11

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4308E

Case 12

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	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)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4309E

Case 13

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	–	–	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	–	NG	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	–	UNKWN	–	–	–	–	–	CAN COMM CIRCUIT (U1000)	–
BCM	No indication	NG	UNKWN	UNKWN	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–

PKIC4310E

CAN SYSTEM (TYPE 4)

PFP:23710

Component Parts and Harness Connector Location

NKS00128

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS00129

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS0012A

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS0012B

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

Check sheet table

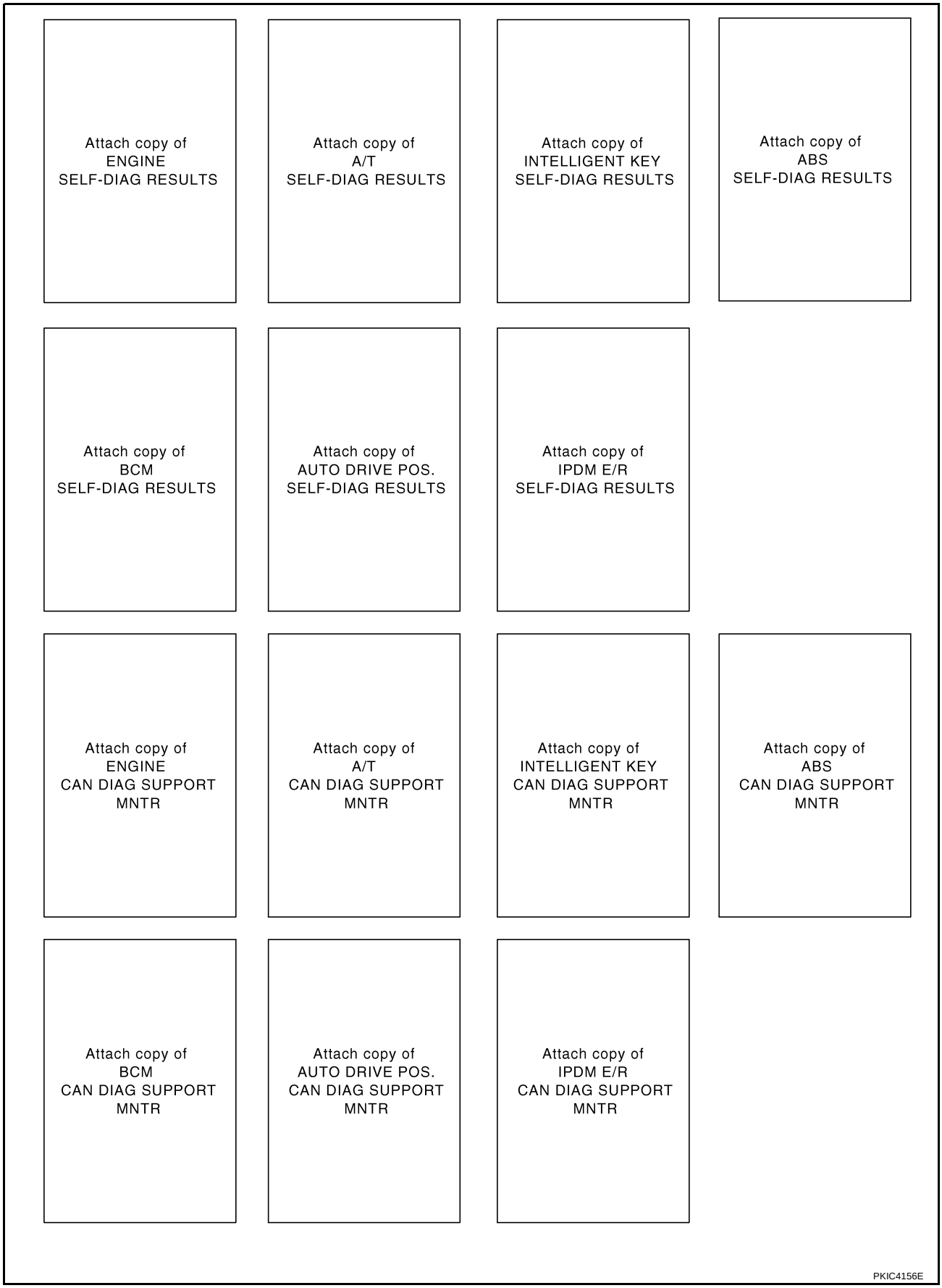
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	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

PKIC4155E


Attach copy of
ENGINE
SELF-DIAG RESULTS
Attach copy of
A/T
SELF-DIAG RESULTS
Attach copy of
INTELLIGENT KEY
SELF-DIAG RESULTS
Attach copy of
ABS
SELF-DIAG RESULTS
Attach copy of
BCM
SELF-DIAG RESULTS
Attach copy of
AUTO DRIVE POS.
SELF-DIAG RESULTS
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SELF-DIAG RESULTS
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ENGINE
CAN DIAG SUPPORT
MNTR
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A/T
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ABS
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MNTR
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BCM
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MNTR
Attach copy of
AUTO DRIVE POS.
CAN DIAG SUPPORT
MNTR
Attach copy of
IPDM E/R
CAN DIAG SUPPORT
MNTR
PKIC4156E

CHECK SHEET RESULTS (EXAMPLE)

NOTE:

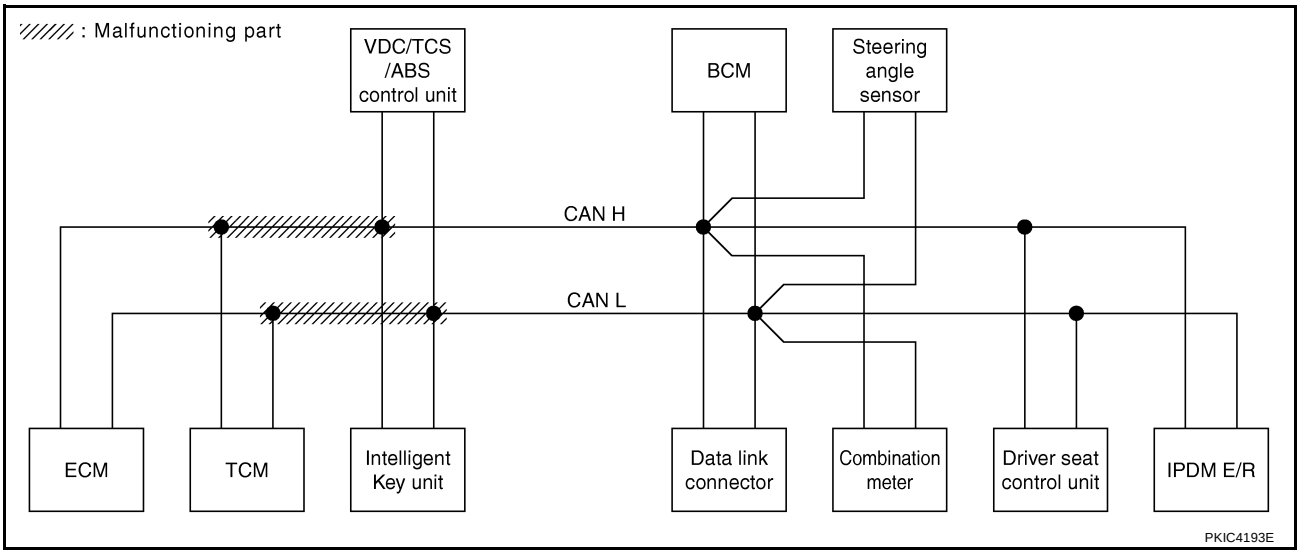
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and VDC/TCS/ABS control unit. Refer to LAN-126, "Inspection Between TCM and VDC/TCS/ABS Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4311E

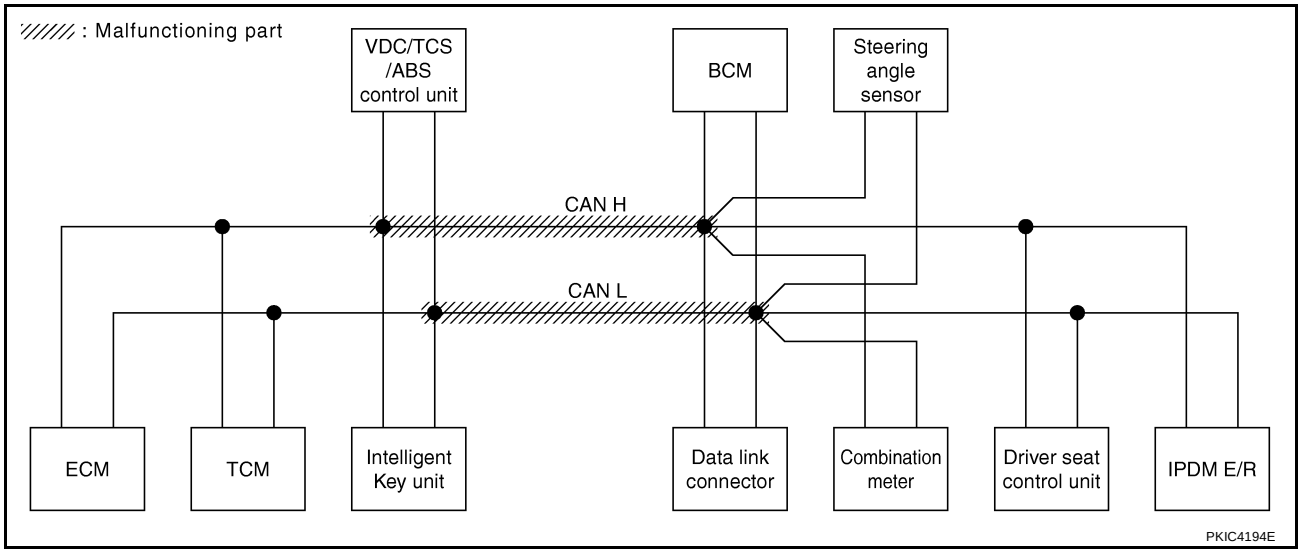


Case 2

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4312E



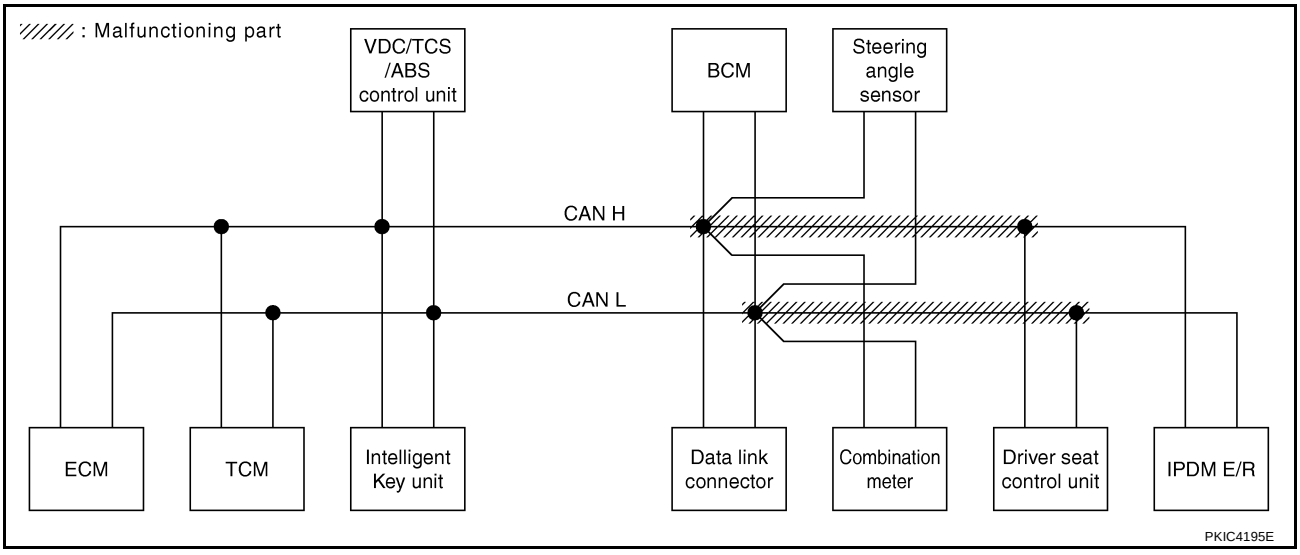
PKIC4194E

Case 3

Check harness between data link connector and driver seat control unit. Refer to LAN-127, "Inspection Between Data Link Connector and Driver Seat Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4313E



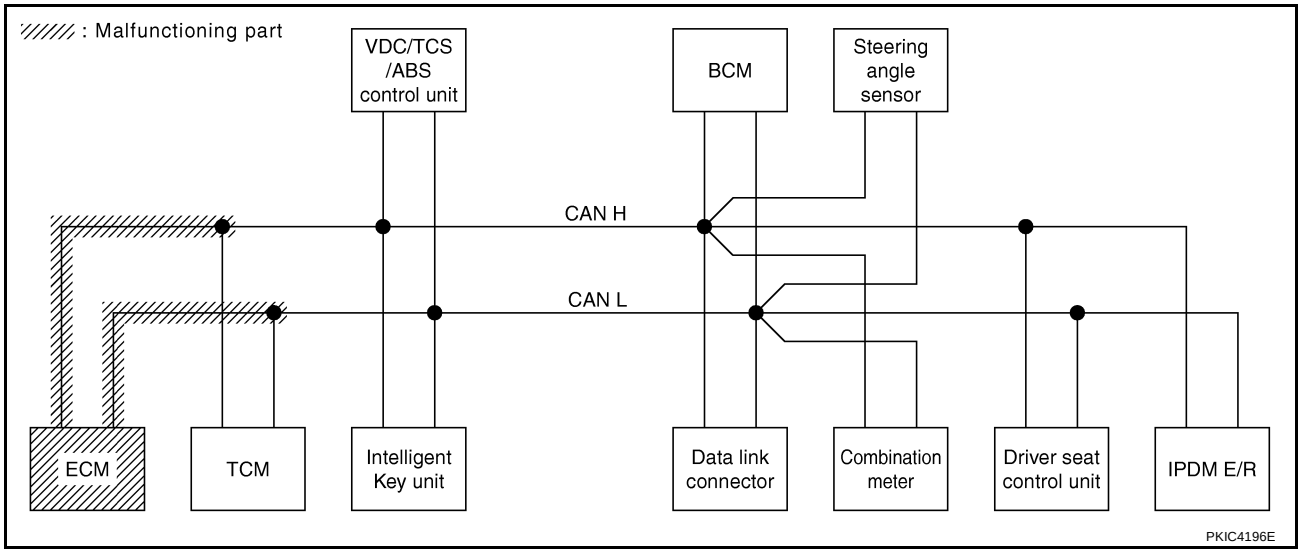
PKIC4195E

Case 4

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4314E



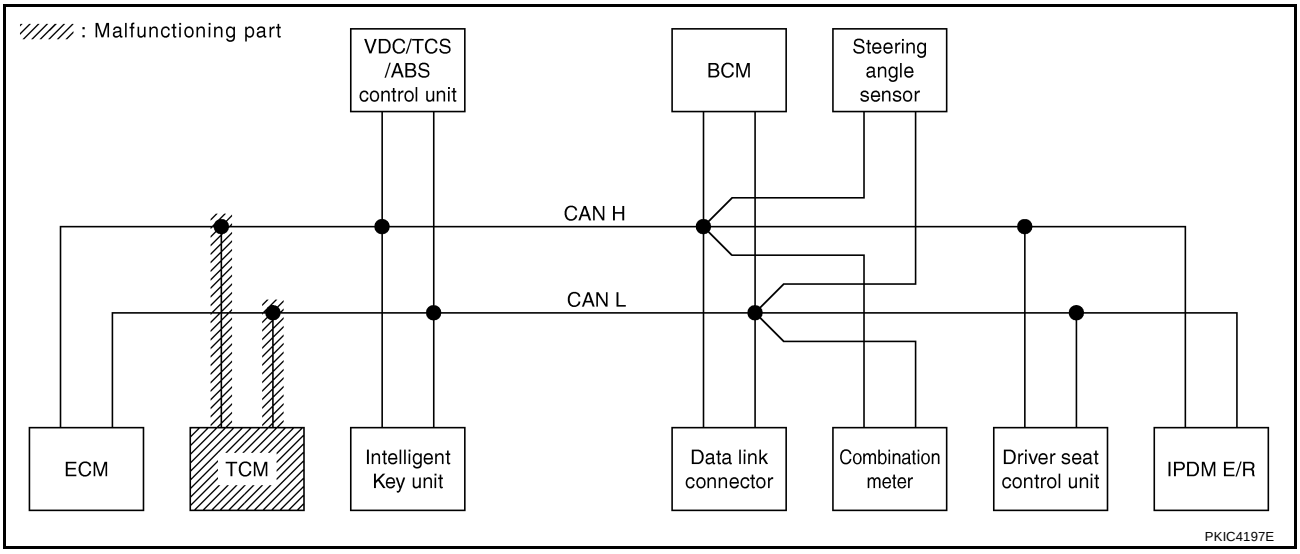
PKIC4196E

Case 5

Check TCM circuit. Refer to LAN-129, "TCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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) ✓	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN ✓	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN ✓	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4315E



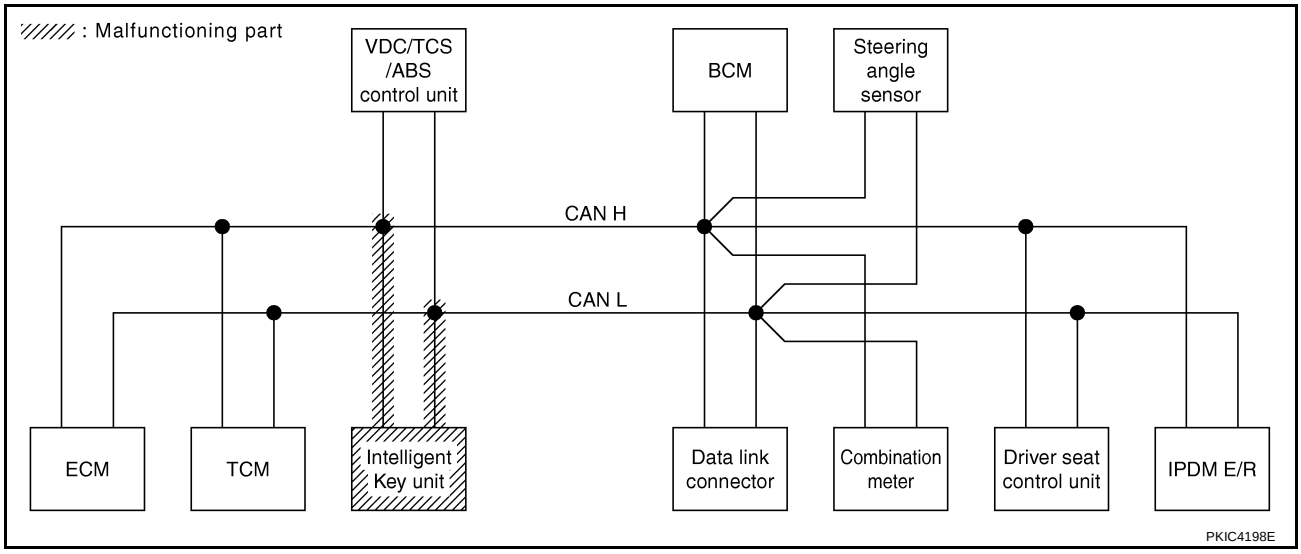
PKIC4197E

Case 6

Check Intelligent Key unit circuit. Refer to LAN-129, "Intelligent Key Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4316E



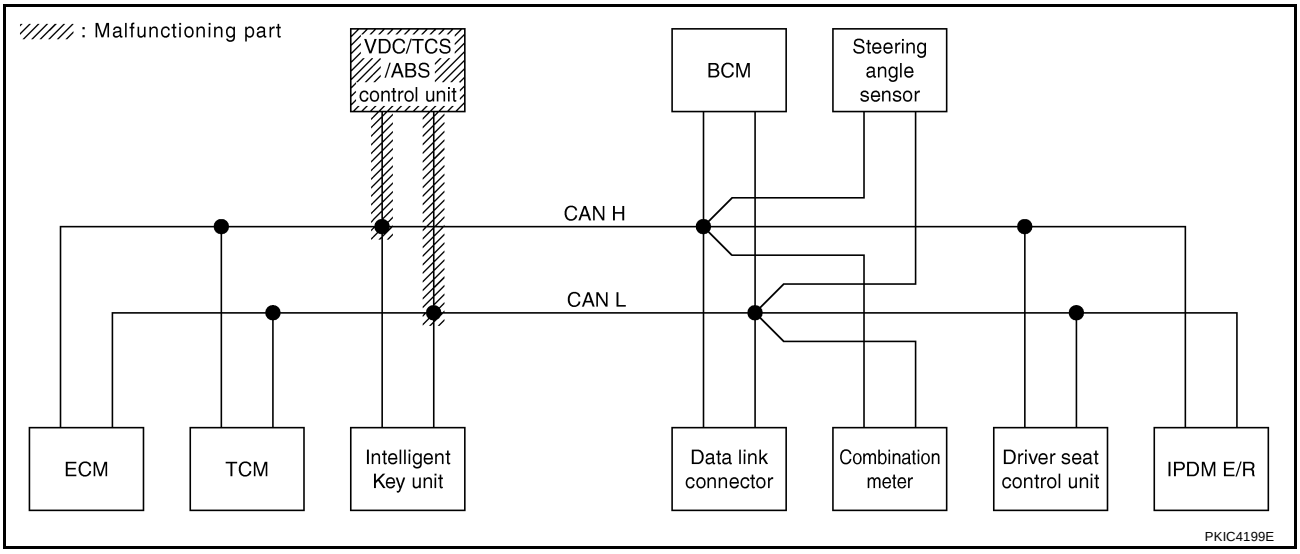
PKIC4198E

Case 7

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4317E



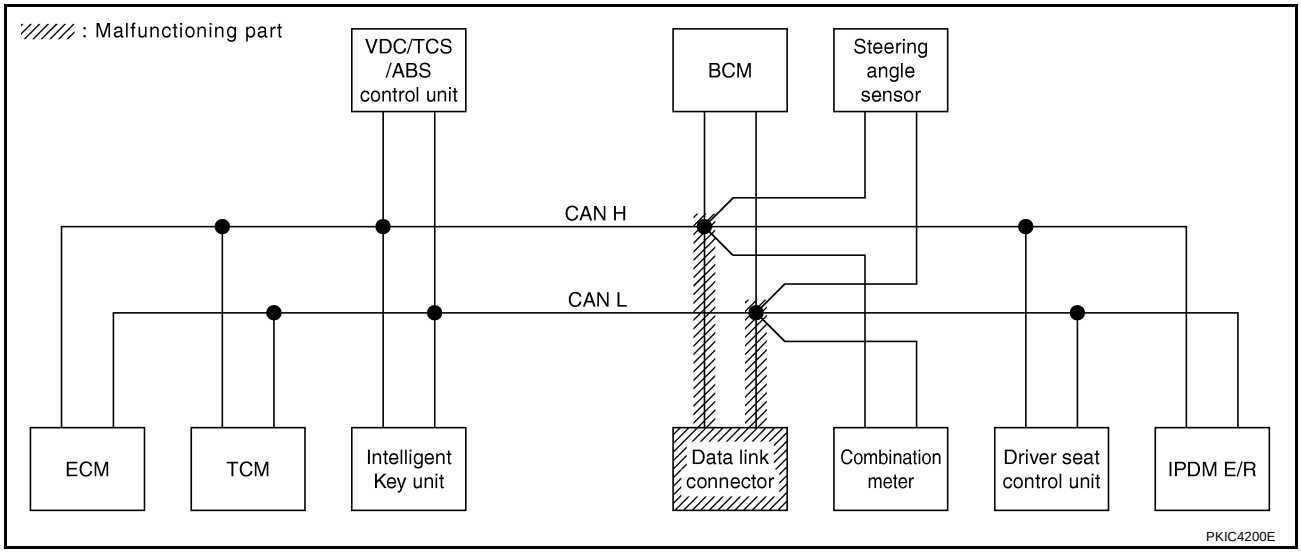
PKIC4199E

Case 8

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4318E



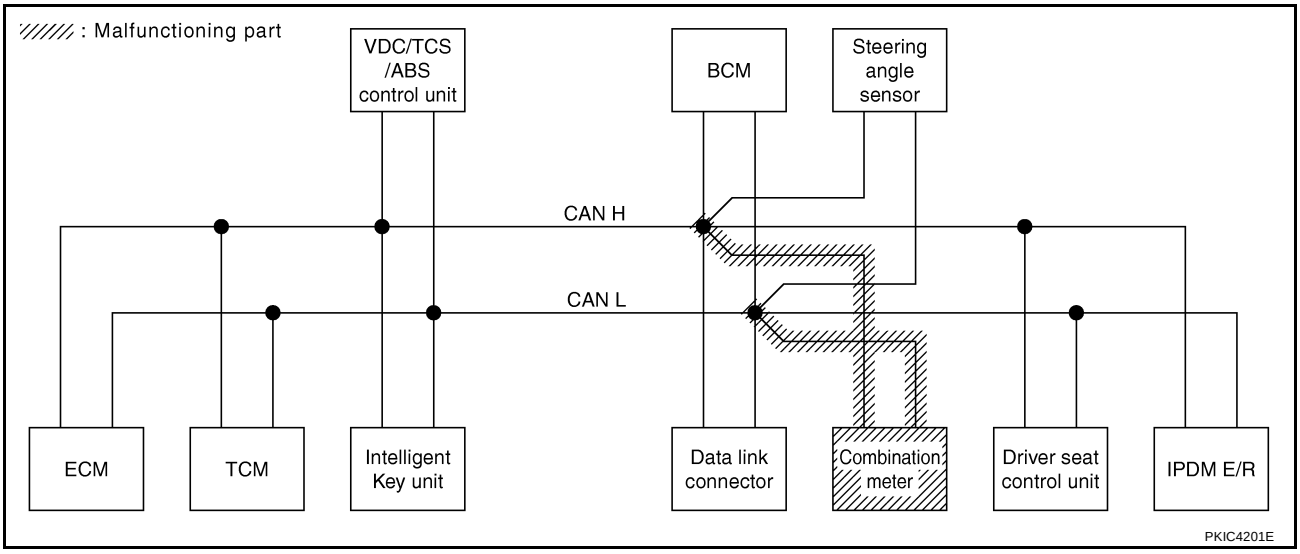
PKIC4200E

Case 9

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4319E



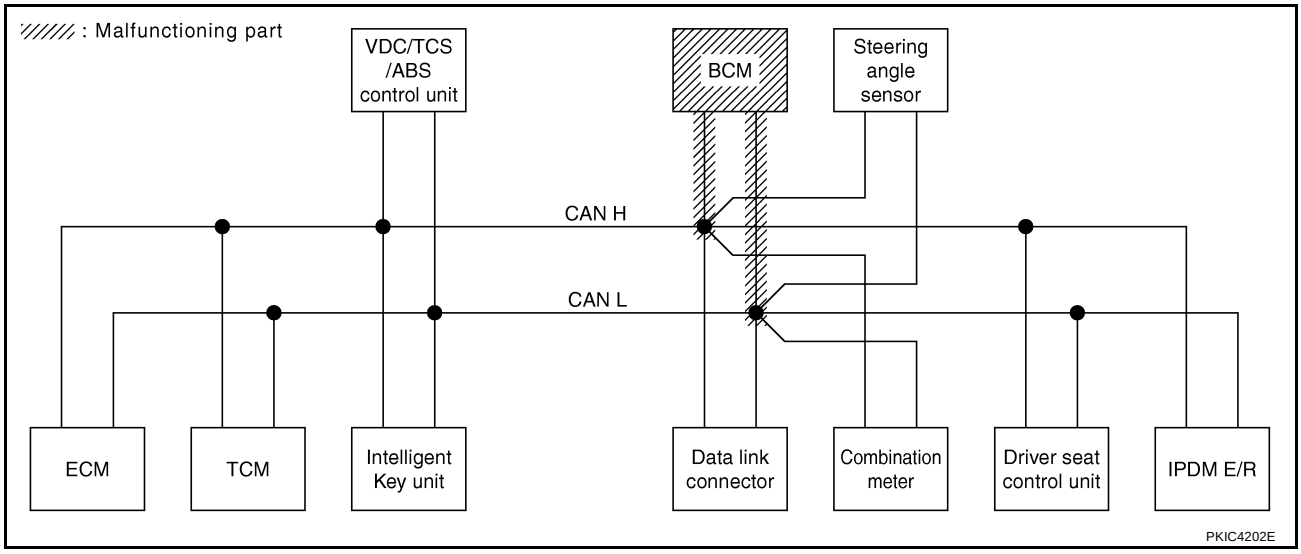
PKIC4201E

Case 10

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4320E



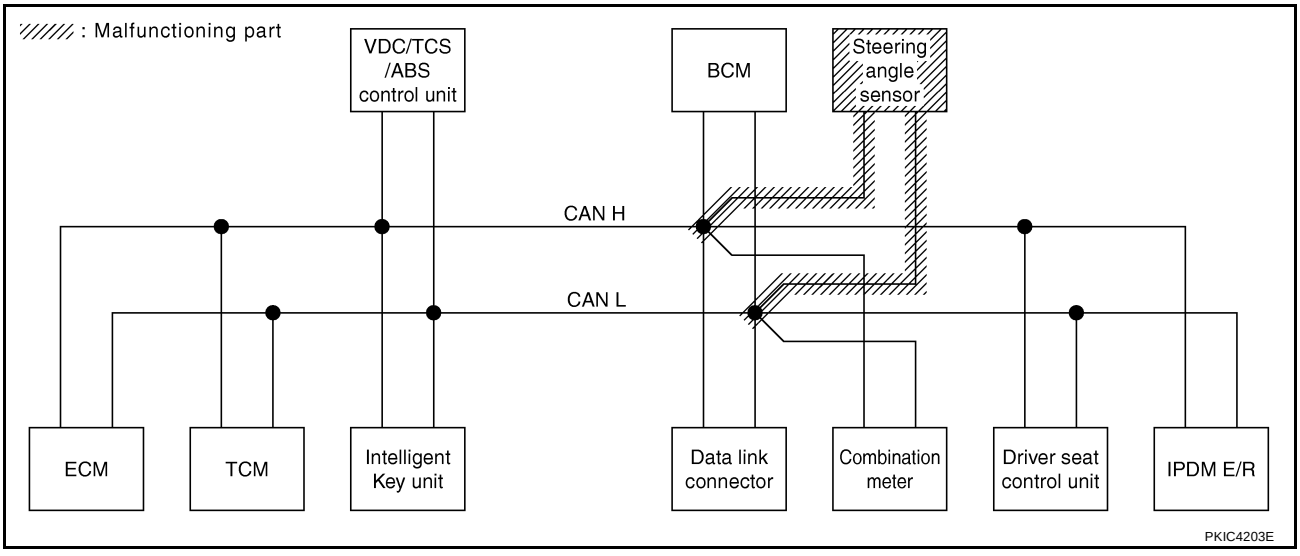
PKIC4202E

Case 11

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4321E



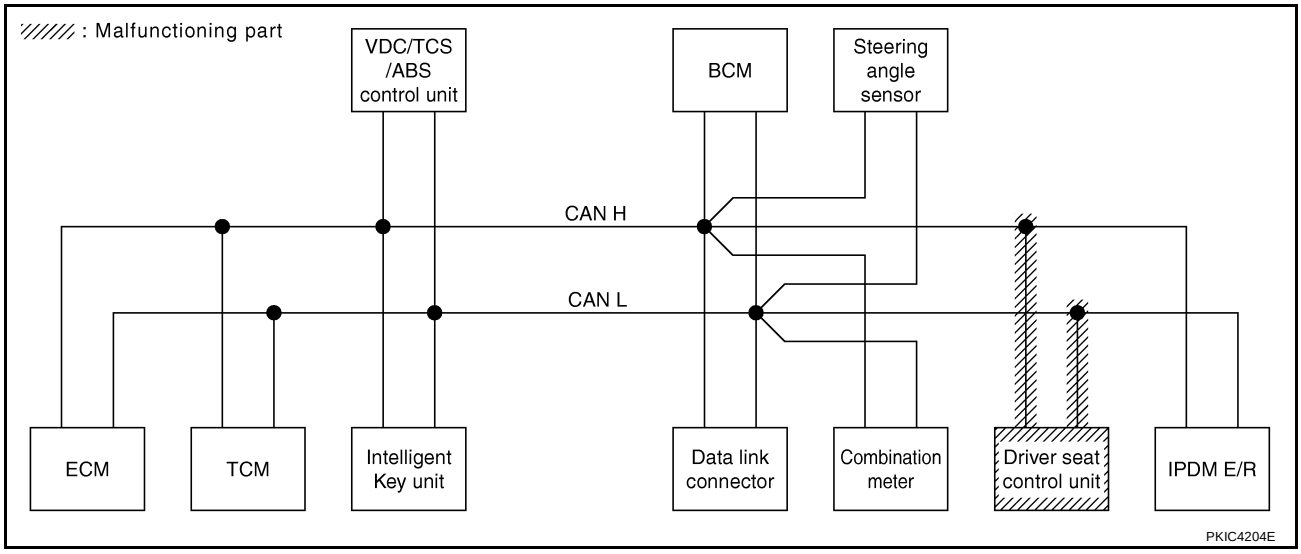
PKIC4203E

Case 12

Check driver seat control unit circuit. Refer to LAN-133, "Driver Seat Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4322E



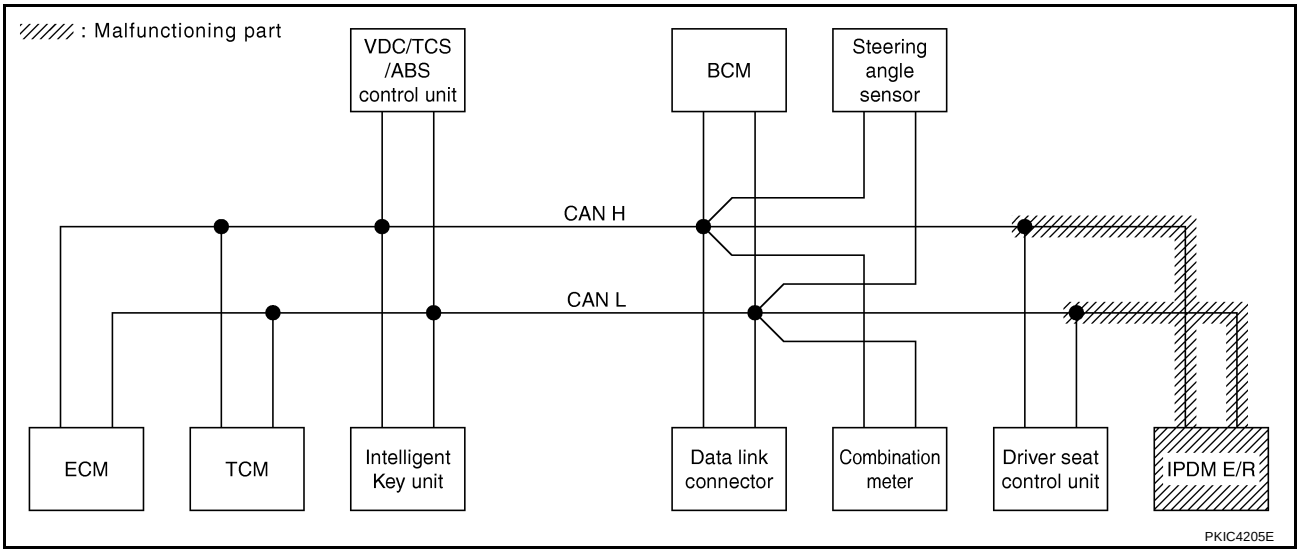
PKIC4204E

Case 13

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4323E



PKIC4205E

Case 14

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4324E

Case 15

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	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)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4325E

Case 16

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	I-KEY	VDC/TCS /ABS	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4326E

CAN SYSTEM (TYPE 5)

PFP:23710

Component Parts and Harness Connector Location

NKS0012T

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS0012U

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS0012V

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS0012W

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

Check sheet table

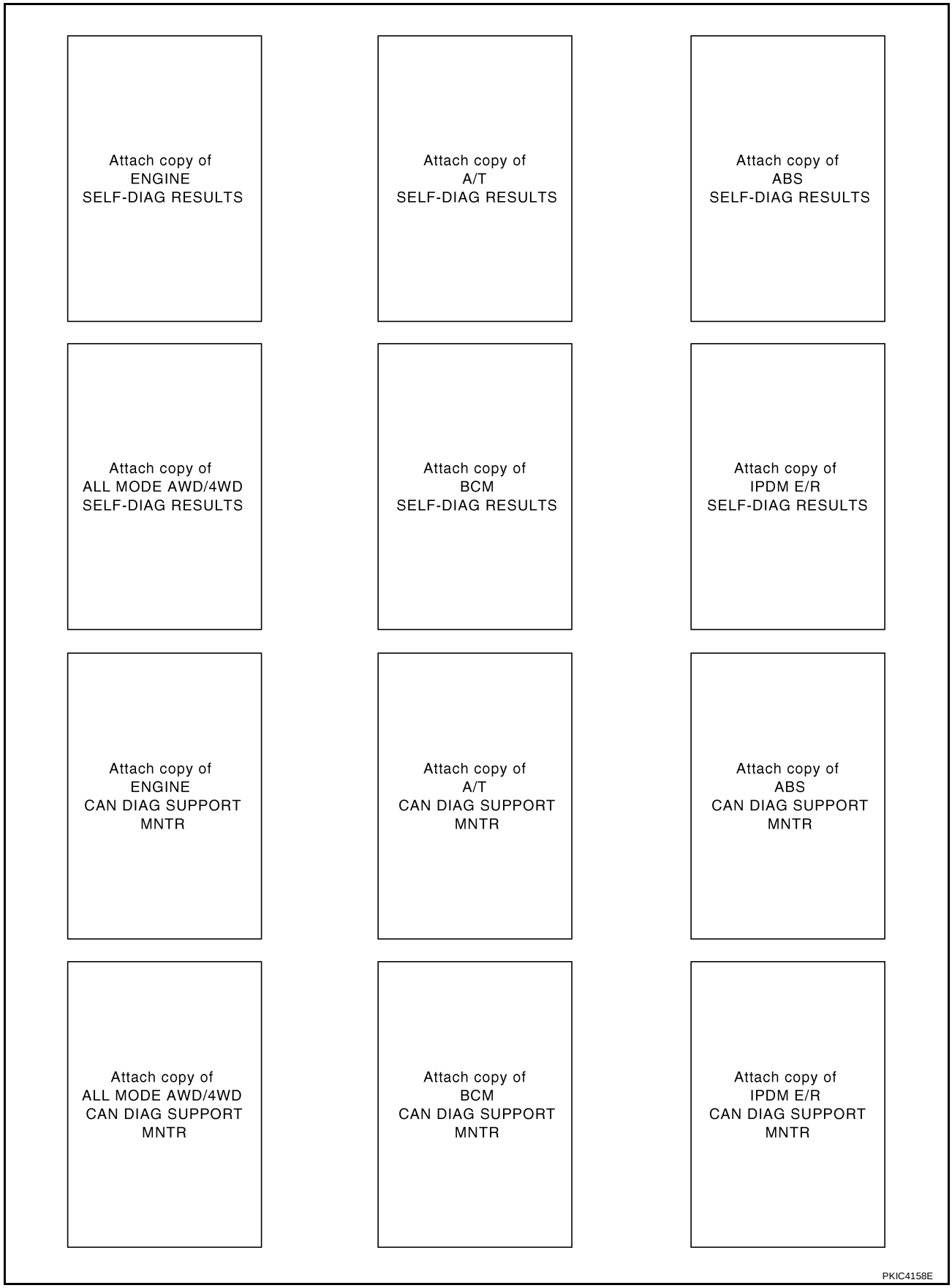
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

PKIC4157E


Attach copy of
ENGINE
SELF-DIAG RESULTS
Attach copy of
A/T
SELF-DIAG RESULTS
Attach copy of
ABS
SELF-DIAG RESULTS
Attach copy of
ALL MODE AWD/4WD
SELF-DIAG RESULTS
Attach copy of
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IPDM E/R
SELF-DIAG RESULTS
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ALL MODE AWD/4WD
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MNTR
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BCM
CAN DIAG SUPPORT
MNTR
Attach copy of
IPDM E/R
CAN DIAG SUPPORT
MNTR
PKIC4158E

CHECK SHEET RESULTS (EXAMPLE)

NOTE:

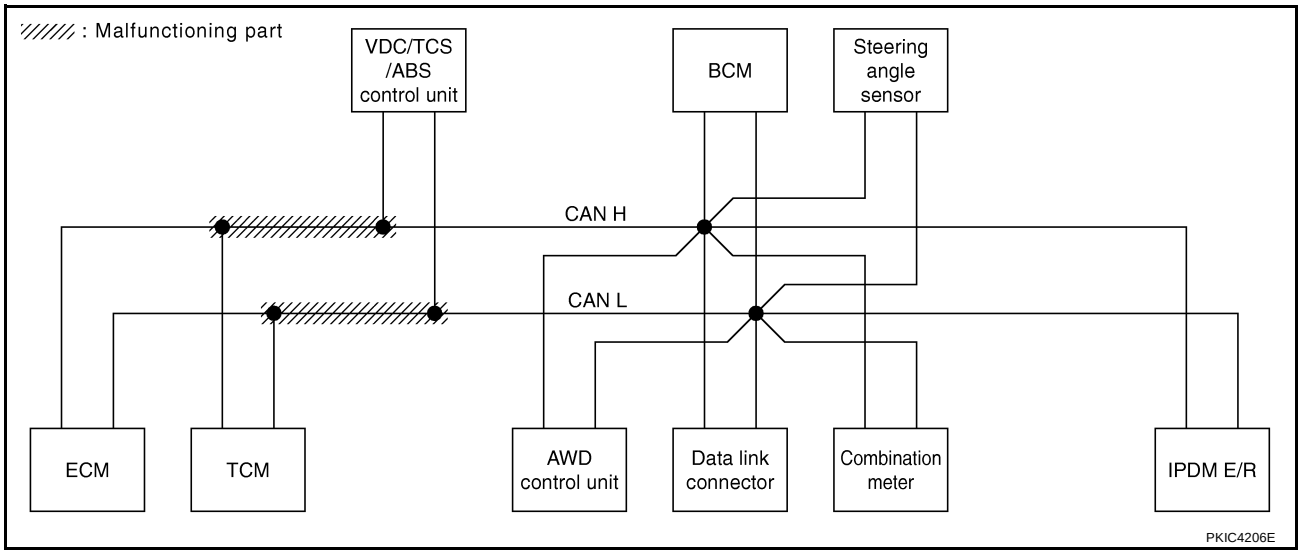
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and VDC/TCS/ABS control unit. Refer to LAN-126, "Inspection Between TCM and VDC/TCS/ABS Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	✓	✓	✓	✓	—	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	✓	✓	✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	✓	✓	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	✓	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	✓	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4327E

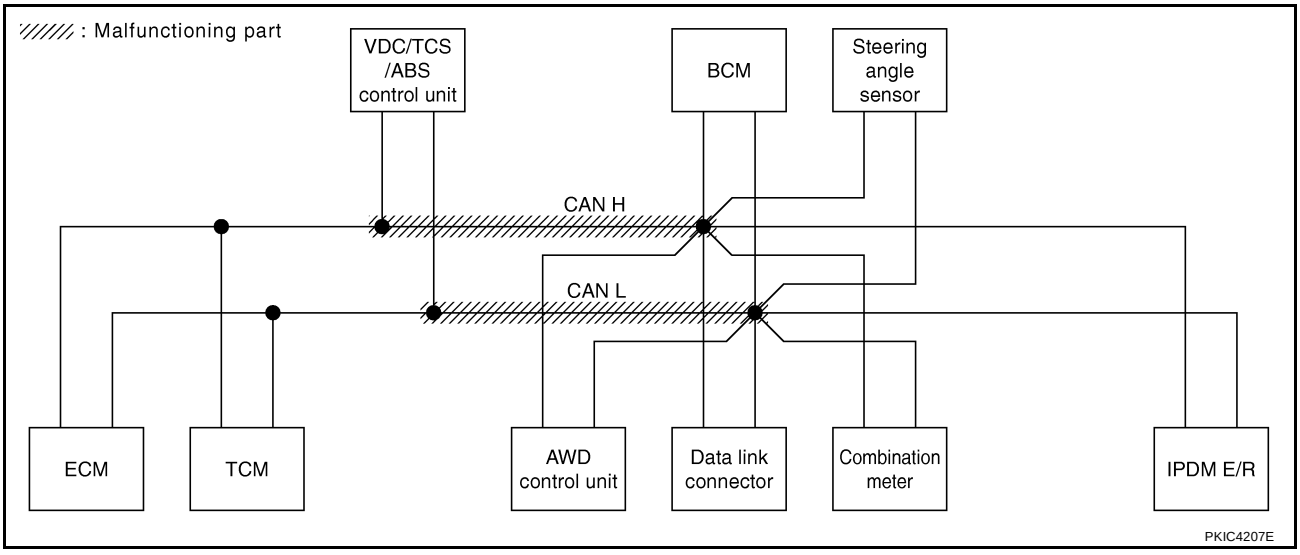


Case 2

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-127, "Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4328E

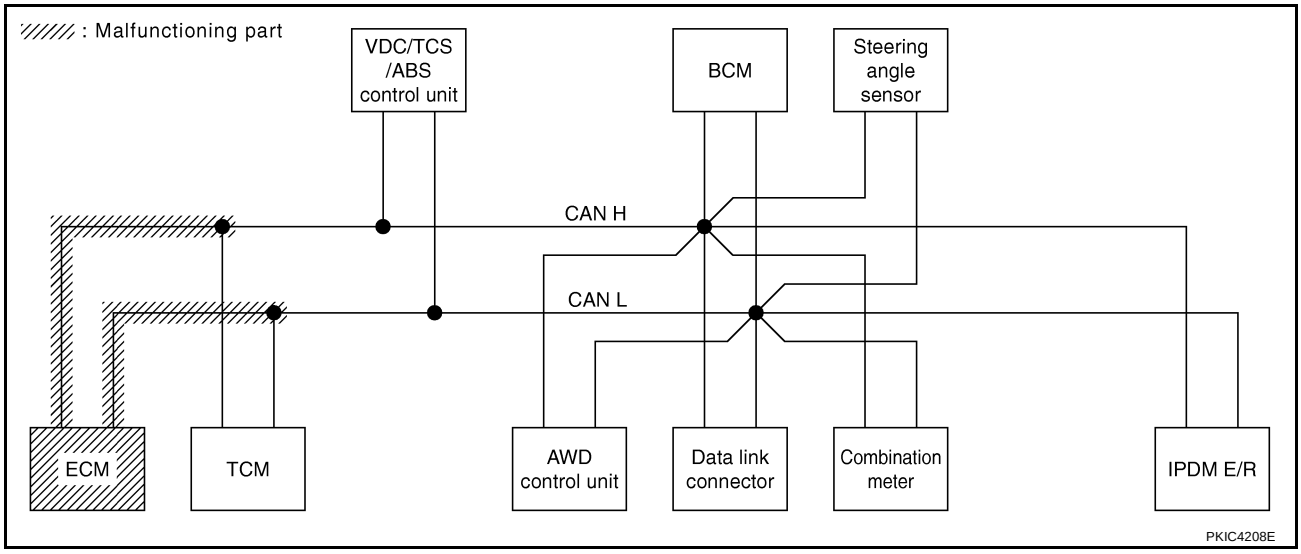


Case 3

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4329E

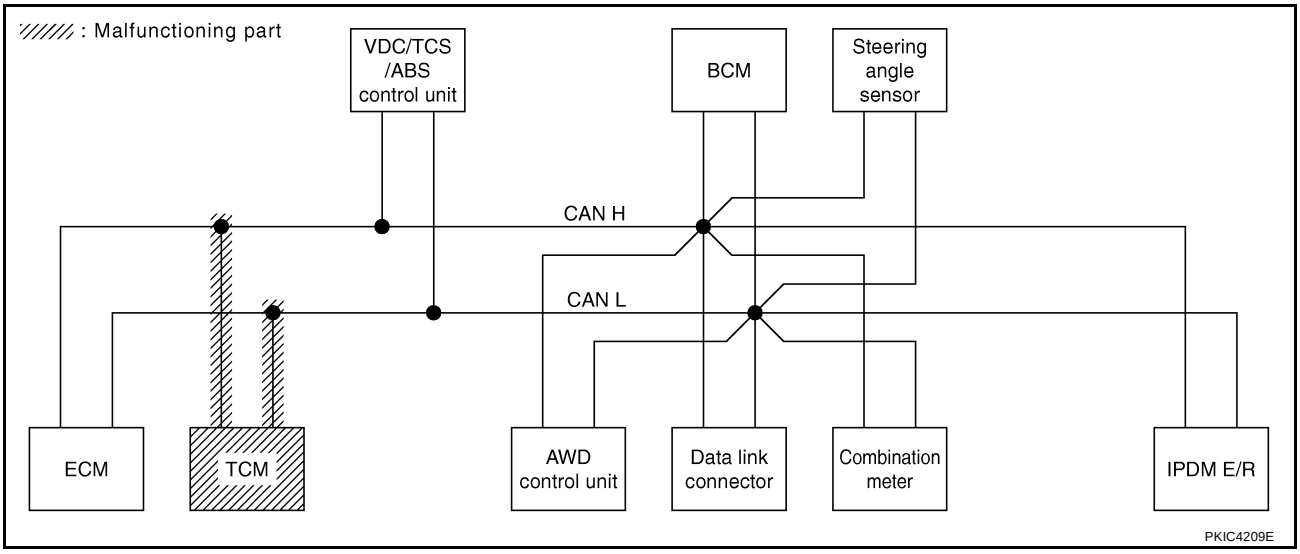


Case 4

Check TCM circuit. Refer to LAN-129, "TCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN ✓	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4330E



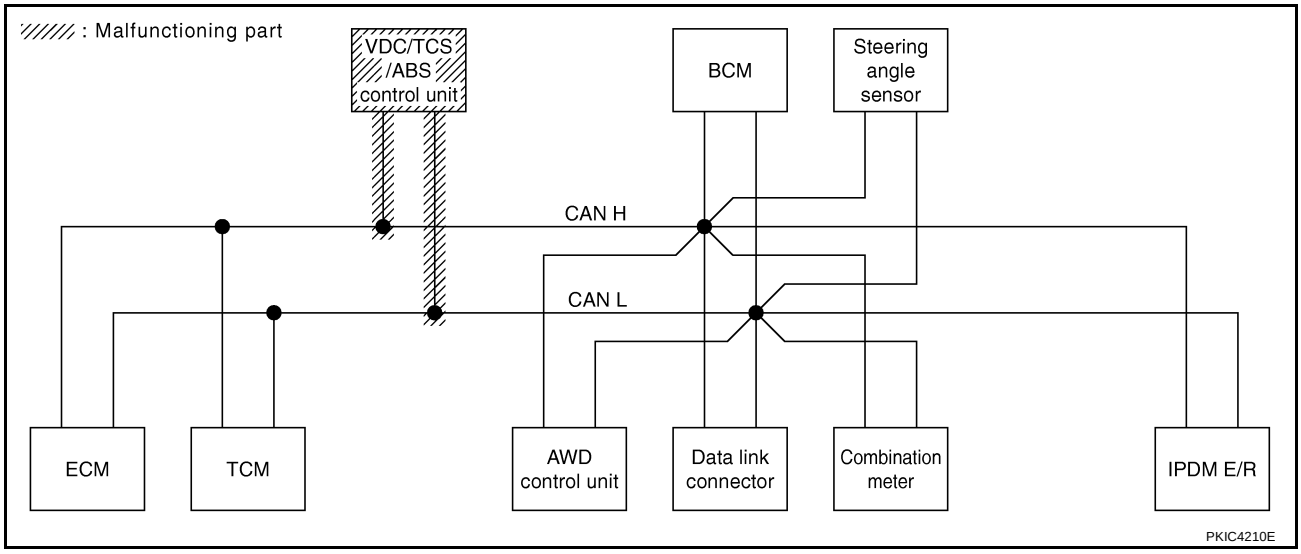
PKIC4209E

Case 5

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG ✓	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN ✓	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4331E



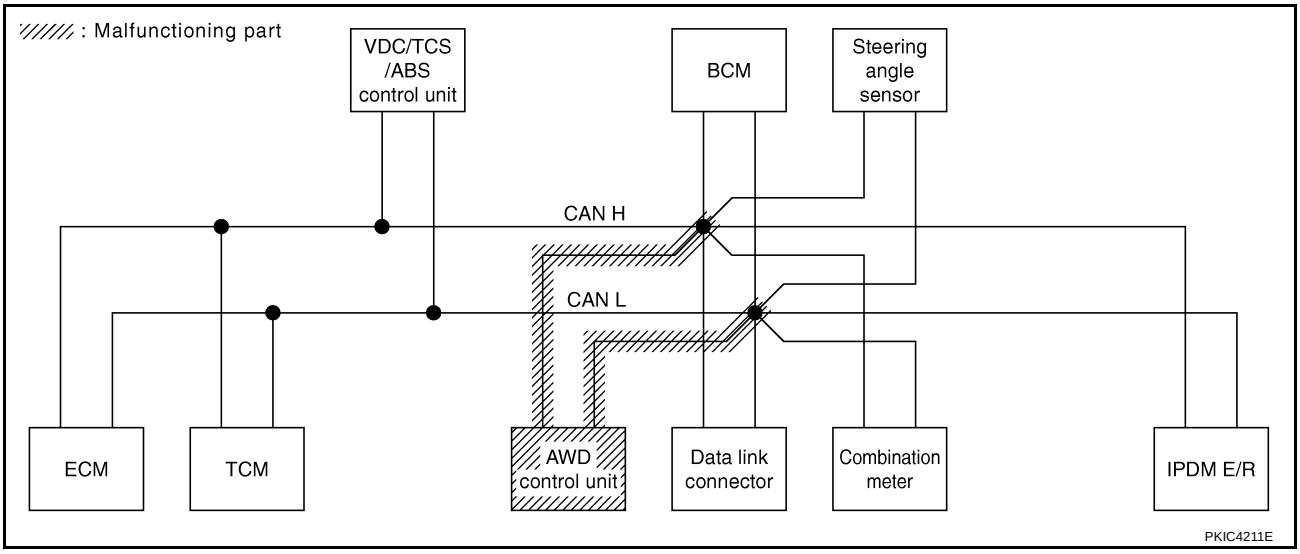
PKIC4210E

Case 6

Check AWD control unit circuit. Refer to LAN-130, "AWD Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN ✓	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN ✓	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4332E



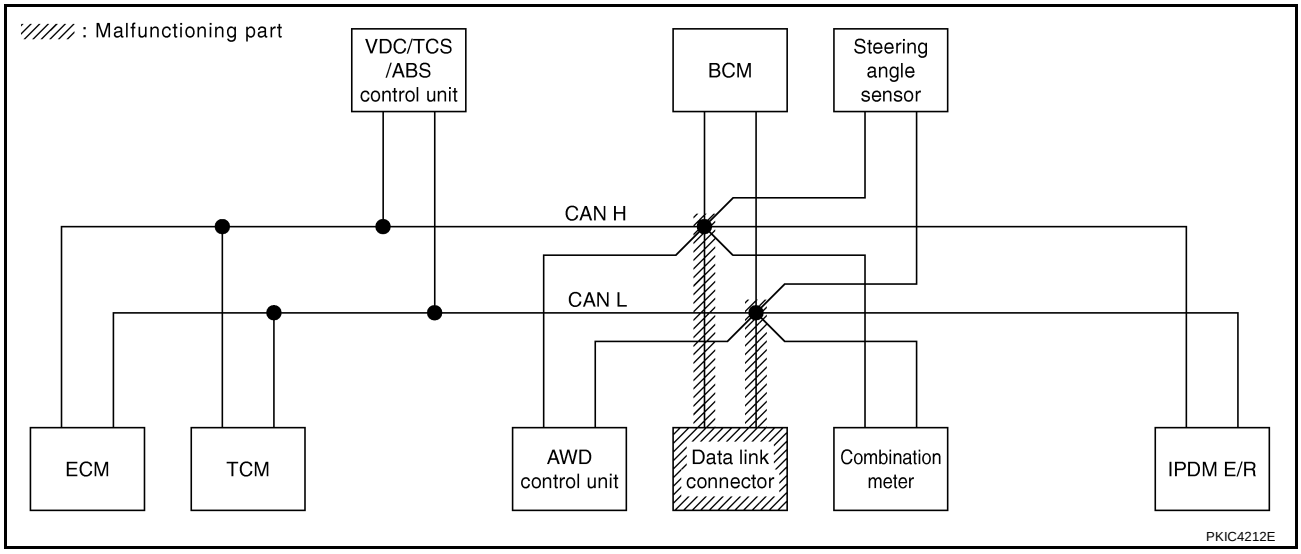
PKIC4211E

Case 7

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4333E



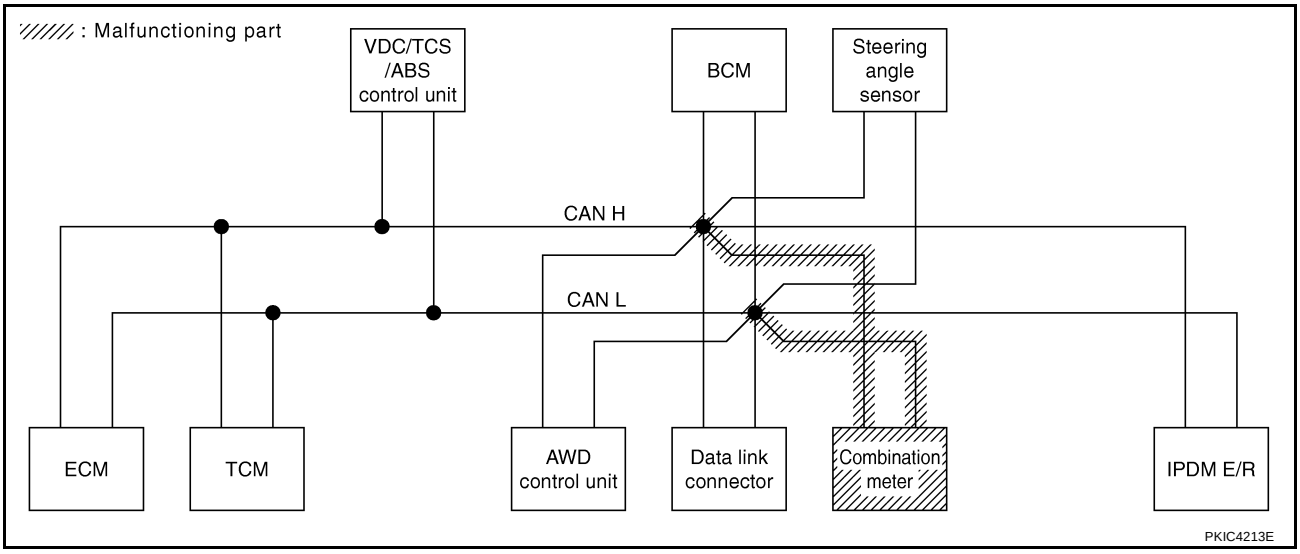
PKIC4212E

Case 8

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN ✓	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4334E

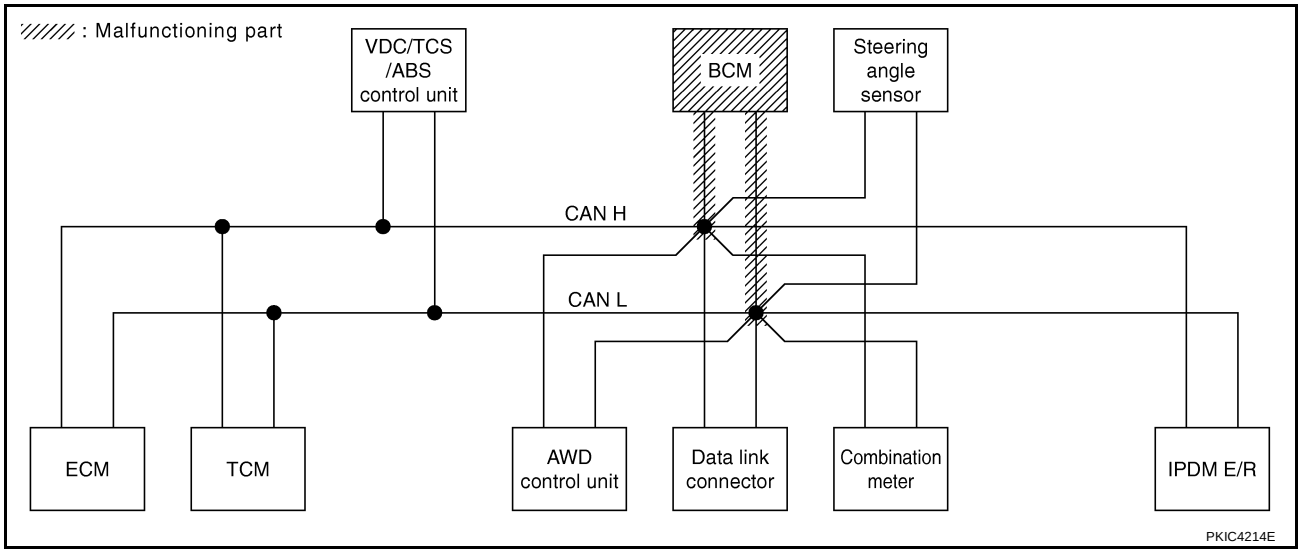


Case 9

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN ✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4335E



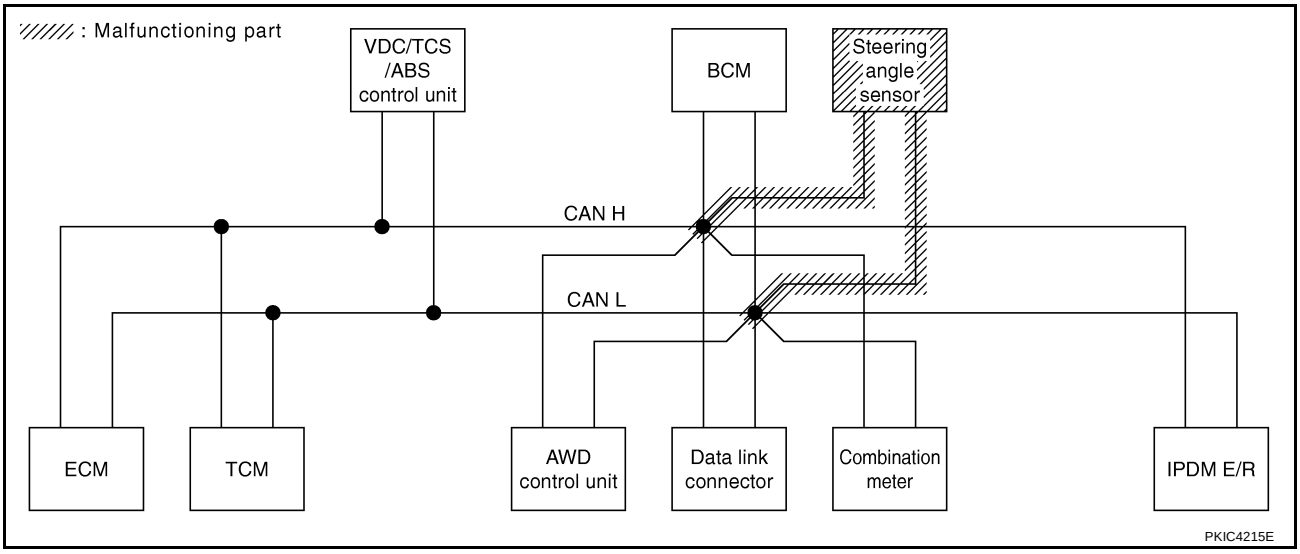
PKIC4214E

Case 10

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4336E



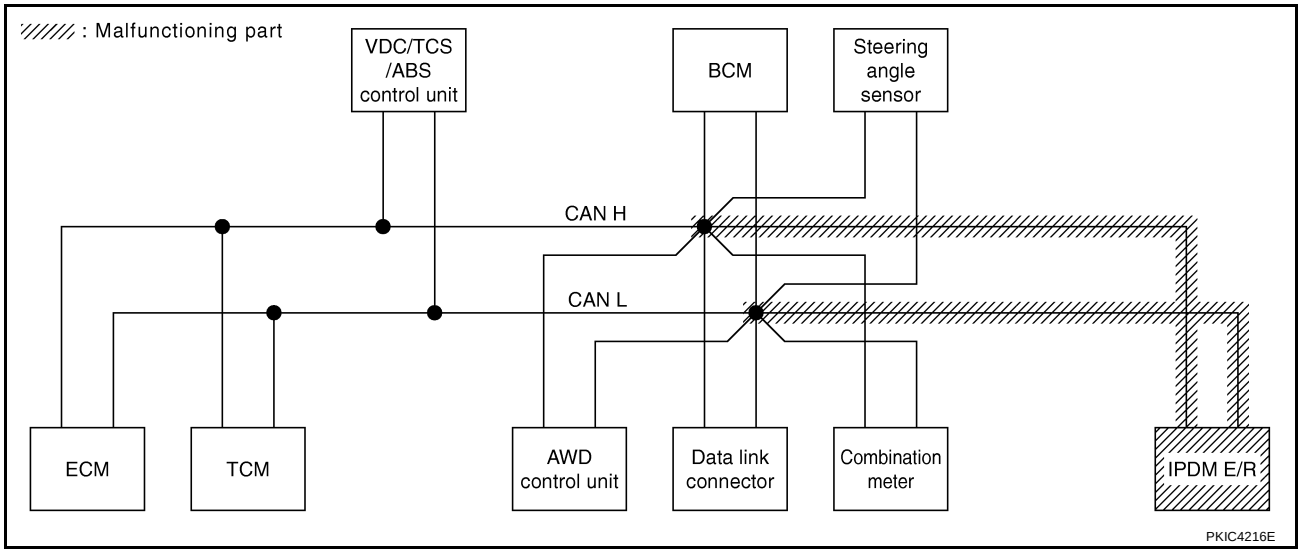
PKIC4215E

Case 11

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	✓ UNKWN	CAN COMM CIRCUIT (U1000)	✓ CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	✓ UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	✓ No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	✓ CAN COMM CIRCUIT (U1000)	—

PKIC4337E



PKIC4216E

Case 12

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	✓ UNKWN	—	✓ UNKWN	✓ UNKWN	✓ UNKWN	✓ UNKWN	✓ UNKWN	—	✓ UNKWN	✓ CAN COMM CIRCUIT (U1000)	✓ CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	✓ UNKWN	—	✓ UNKWN	✓ UNKWN	✓ UNKWN	—	—	—	✓ CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	✓ UNKWN	✓ UNKWN	—	✓ UNKWN	✓ UNKWN	—	✓ UNKWN	—	✓ CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓ UNKWN	—	—	—	—	—	—	—	—	✓ CAN COMM CIRCUIT (U1000)	—
BCM	✓ No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	✓ No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	✓ CAN COMM CIRCUIT (U1000)	—

PKIC4338E

Case 13

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN ✓	UNKWN ✓	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4339E

Case 14

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4340E

CAN SYSTEM (TYPE 6)

PFP:23710

Component Parts and Harness Connector Location

NKS00138

Refer to LAN-22, "Component Parts and Harness Connector Location" .

Schematic

NKS00139

Refer to LAN-23, "Schematic" .

Wiring Diagram — CAN —

NKS0013A

Refer to LAN-24, "Wiring Diagram — CAN —" .

Check Sheet

NKS0013B

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	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

PKIC4159E

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

PKIC4160E

CHECK SHEET RESULTS (EXAMPLE)

NOTE:

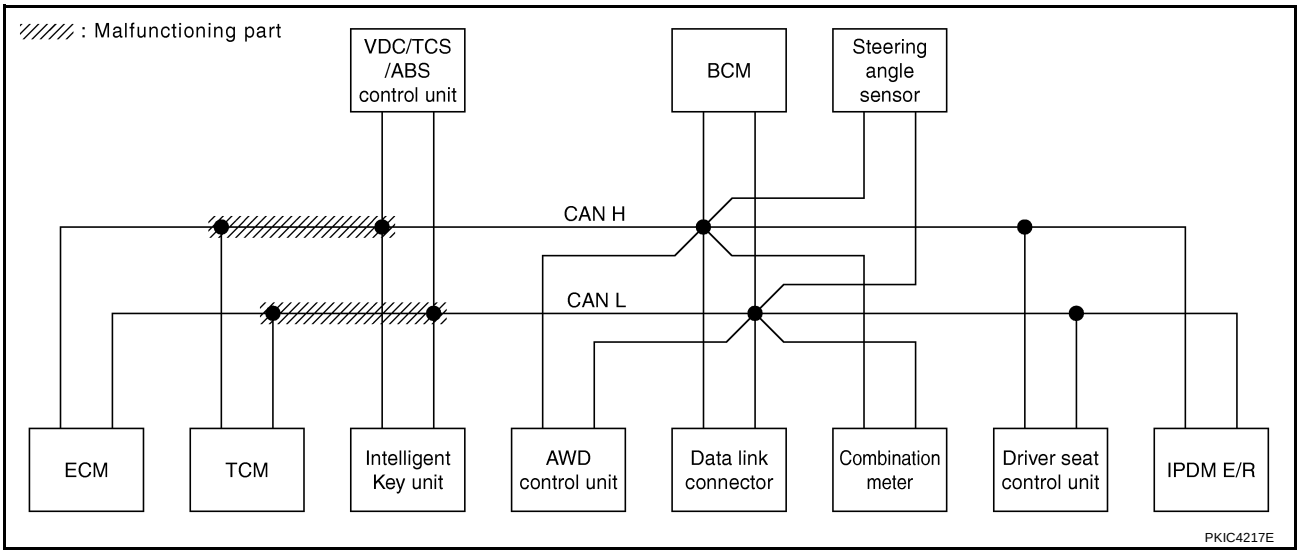
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and VDC/TCS/ABS control unit. Refer to LAN-126, "Inspection Between TCM and VDC/TCS/ABS Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN ✓	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN ✓	UNKWN ✓	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN ✓	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN ✓	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4341E



Case 2

Check harness between VDC/TCS/ABS control unit and data link connector. Refer to LAN-127, "Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

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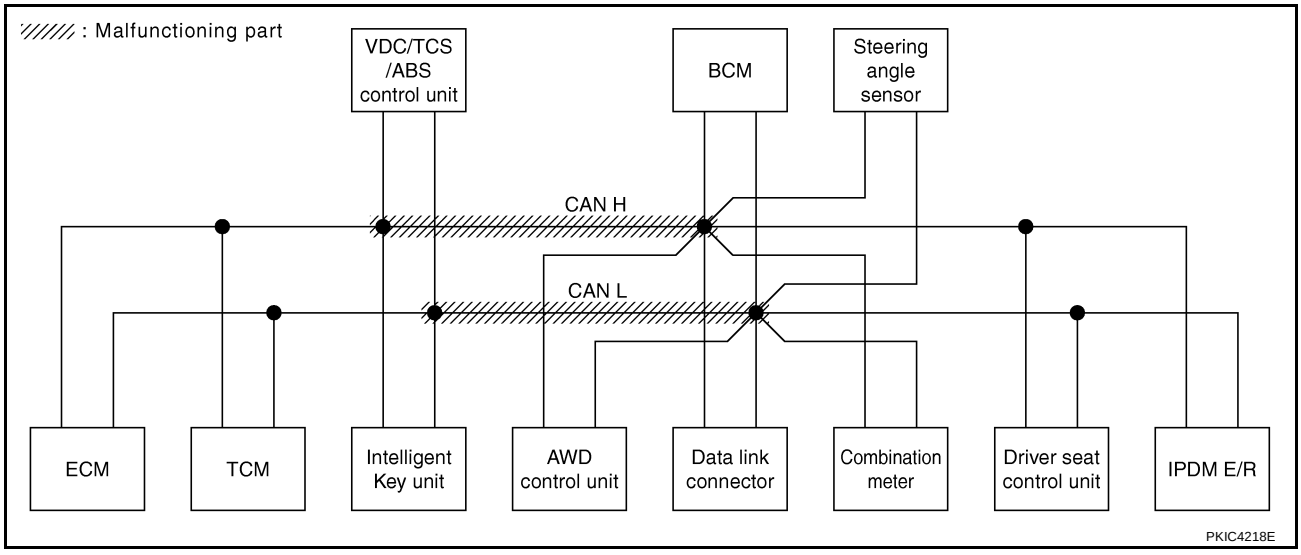
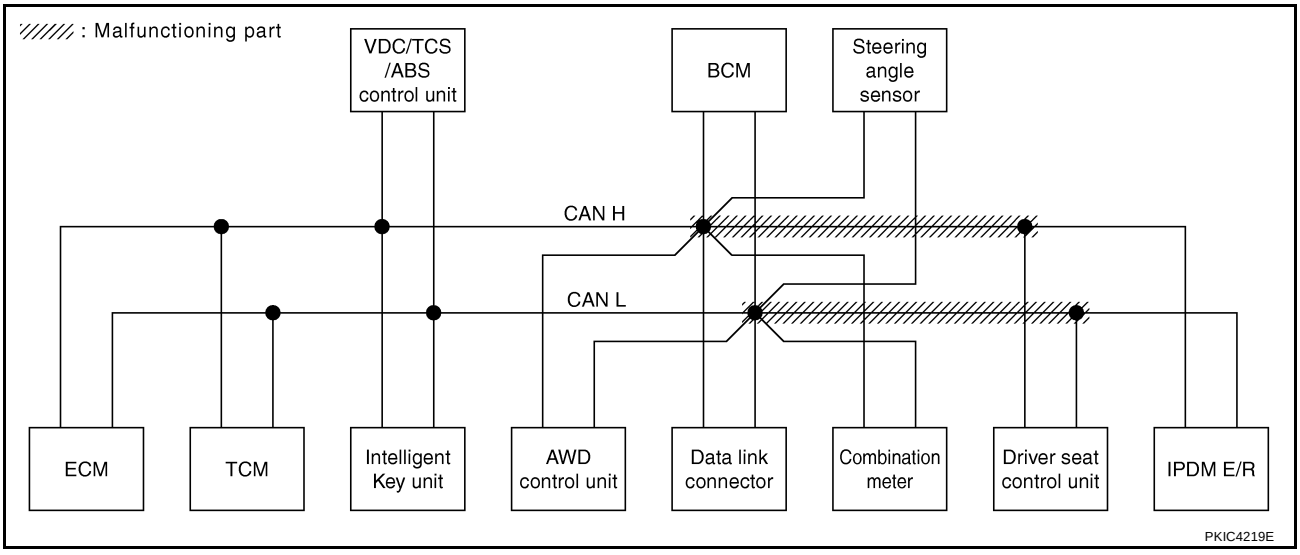


Case 3

Check harness between data link connector and driver seat control unit. Refer to LAN-127, "Inspection Between Data Link Connector and Driver Seat Control Unit Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4343E

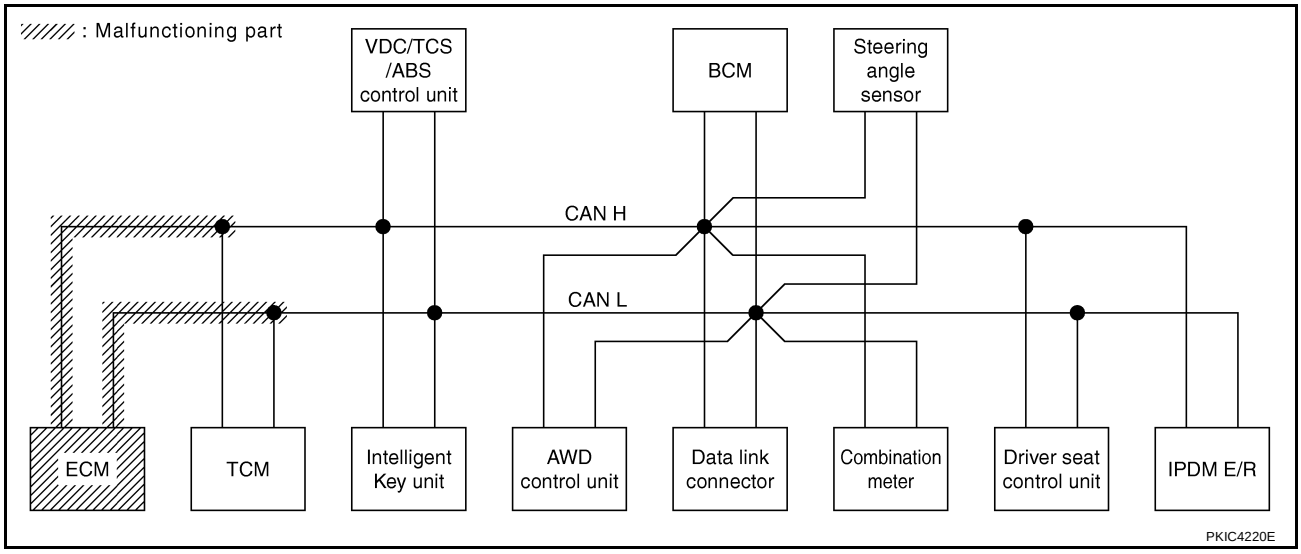


Case 4

Check ECM circuit. Refer to LAN-128, "ECM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4344E



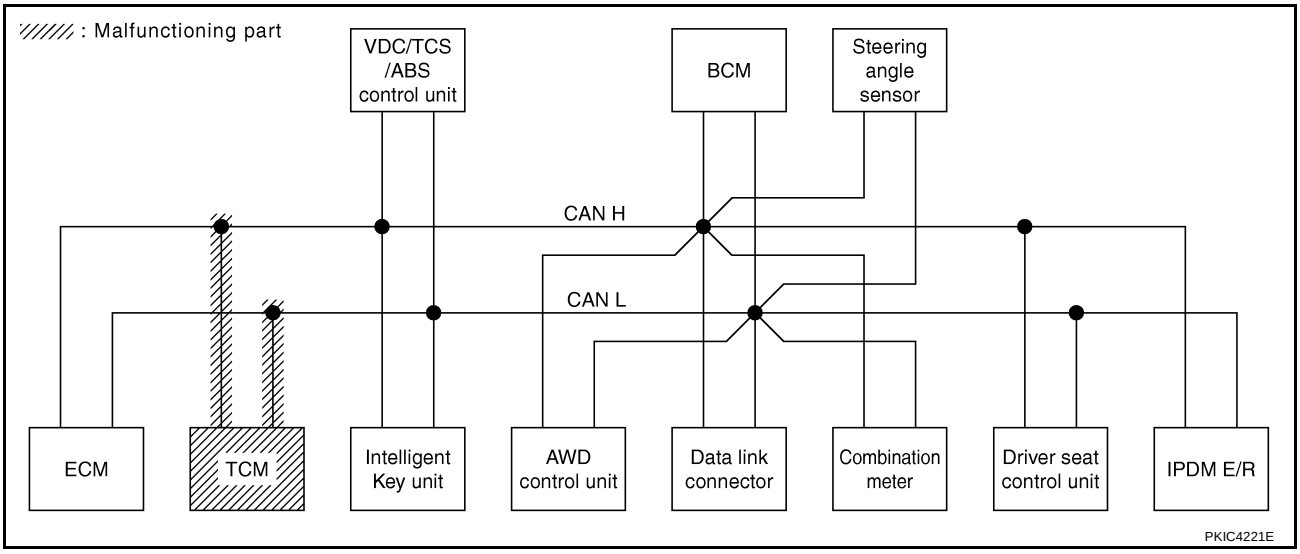
PKIC4220E

Case 5

Check TCM circuit. Refer to LAN-129, "TCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4345E



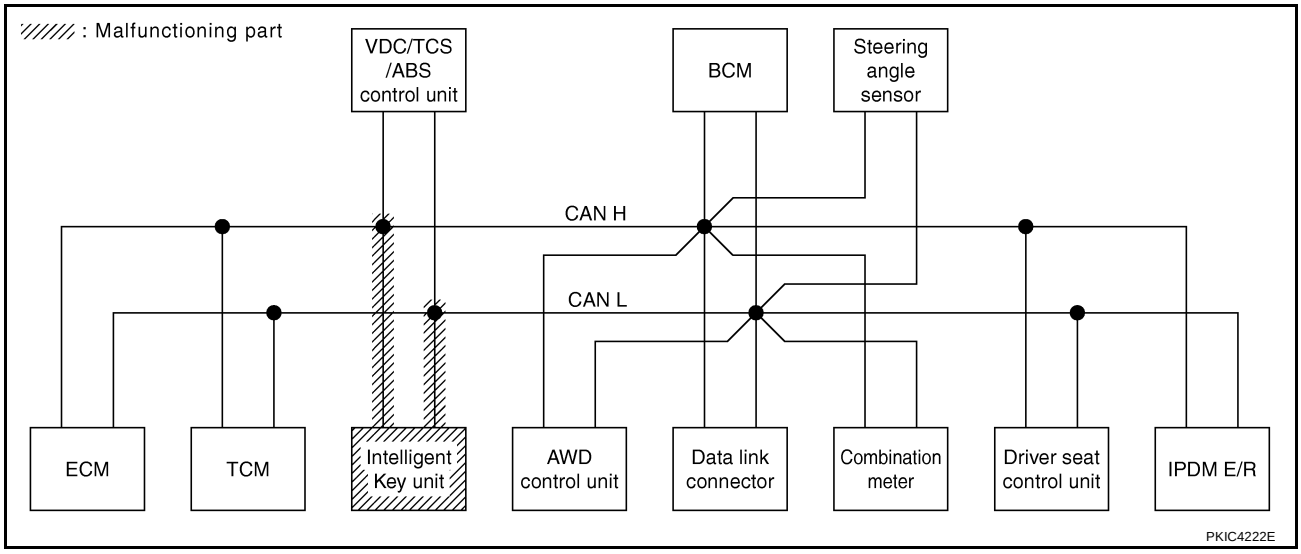
PKIC4221E

Case 6

Check Intelligent Key unit circuit. Refer to LAN-129, "Intelligent Key Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4346E

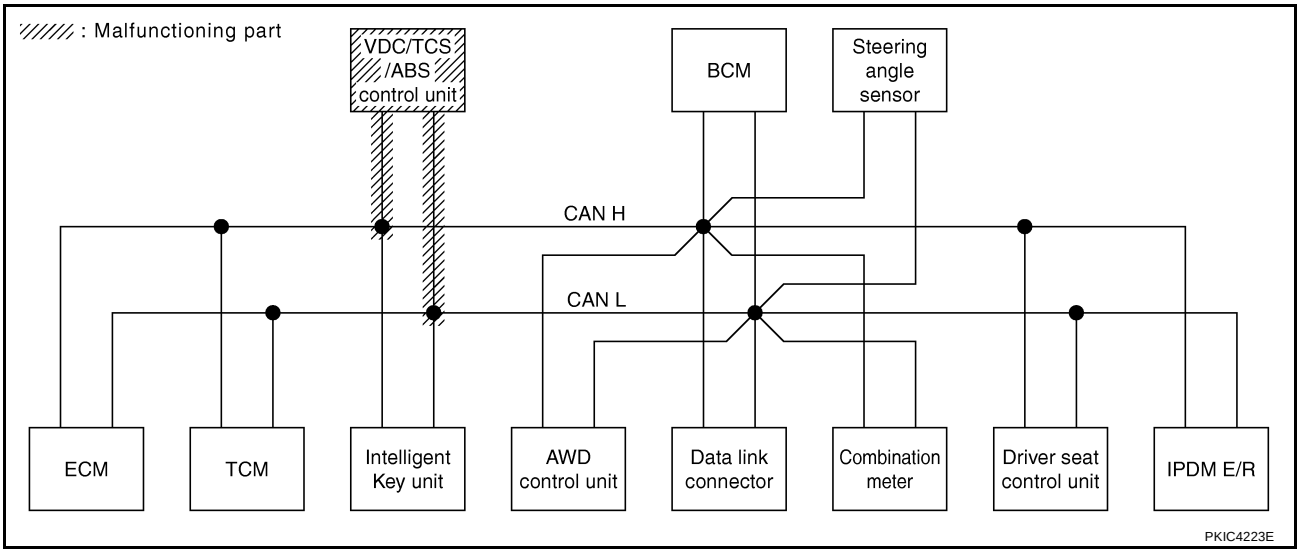


Case 7

Check VDC/TCS/ABS control unit circuit. Refer to LAN-130, "VDC/TCS/ABS Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4347E



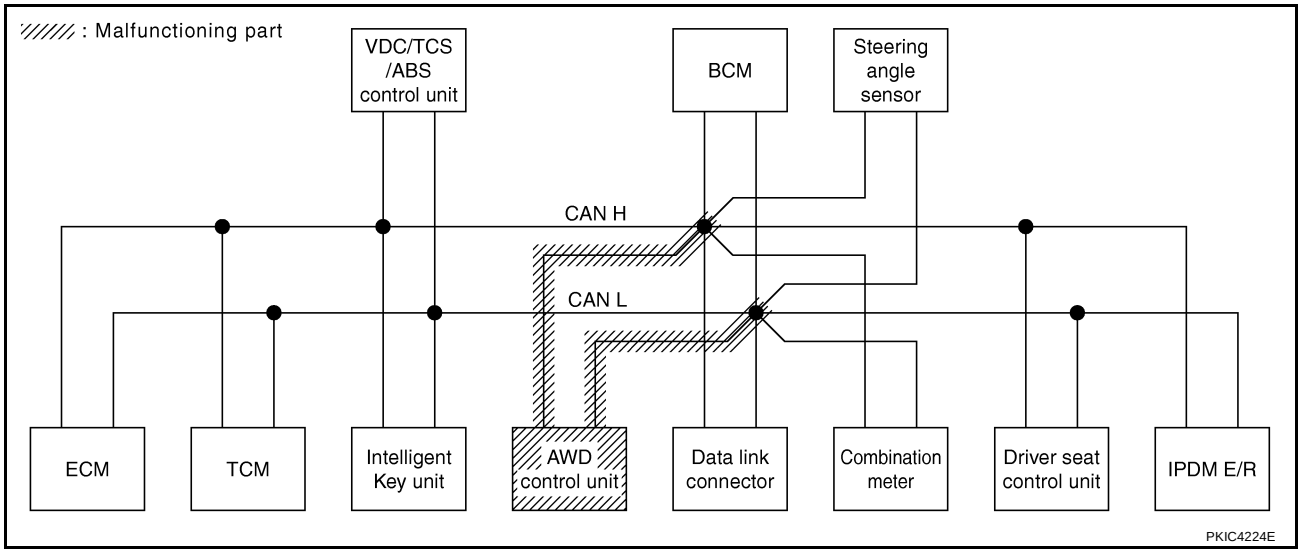
PKIC4223E

Case 8

Check AWD control unit circuit. Refer to LAN-130, "AWD Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN ✓	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN ✓	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4348E

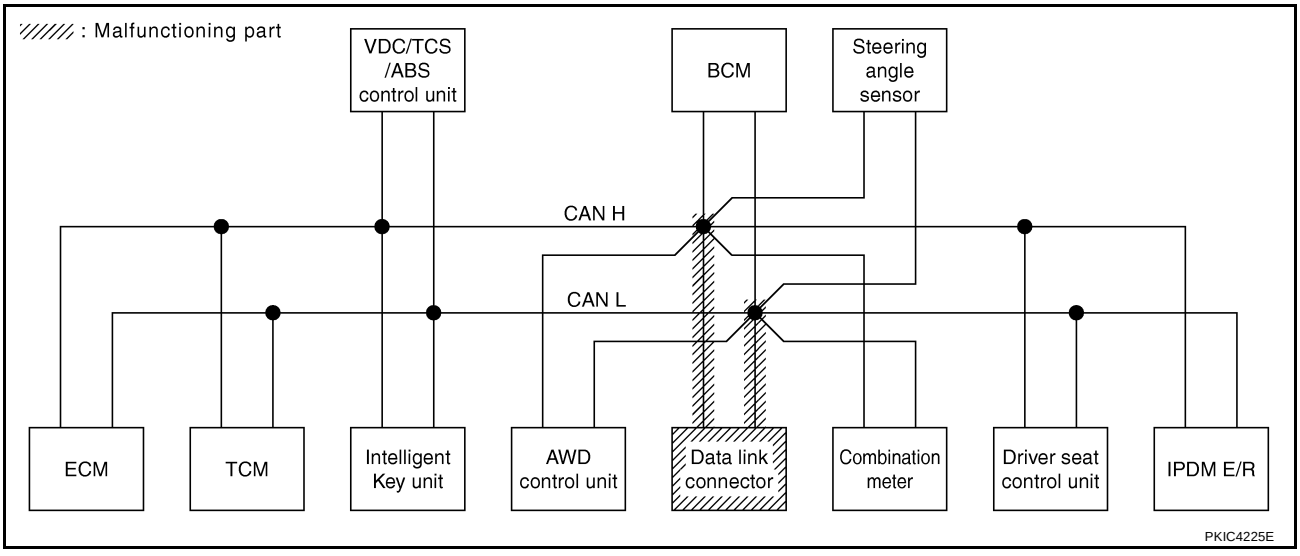


Case 9

Check data link connector circuit. Refer to LAN-131, "Data Link Connector Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4349E

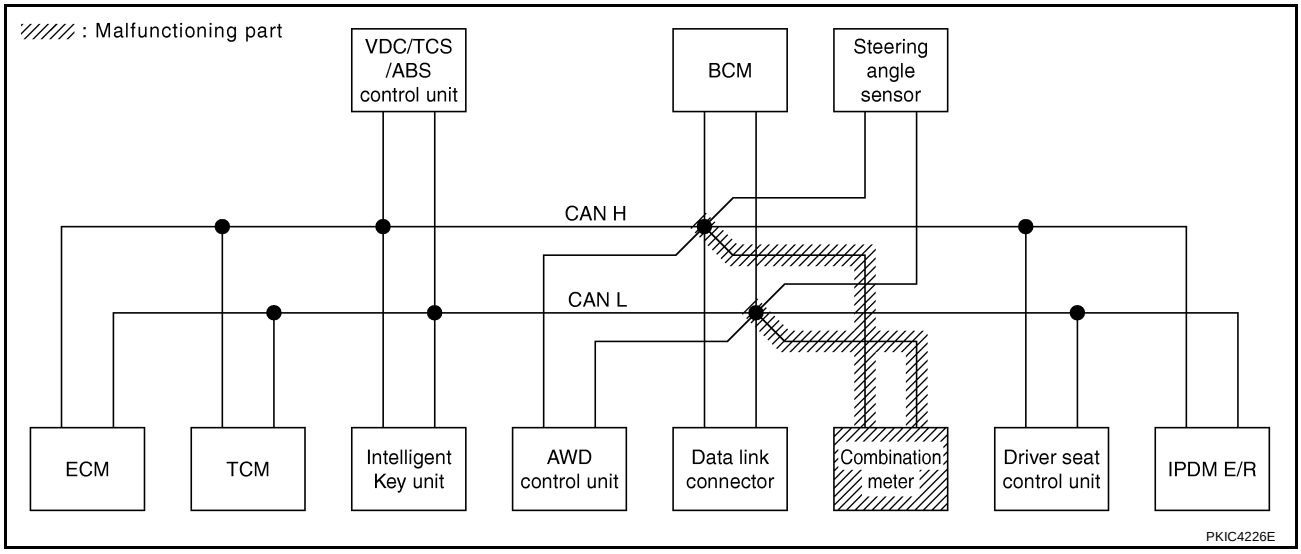


Case 10

Check combination meter circuit. Refer to LAN-131, "Combination Meter Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN ✓	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN ✓	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN ✓	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4350E

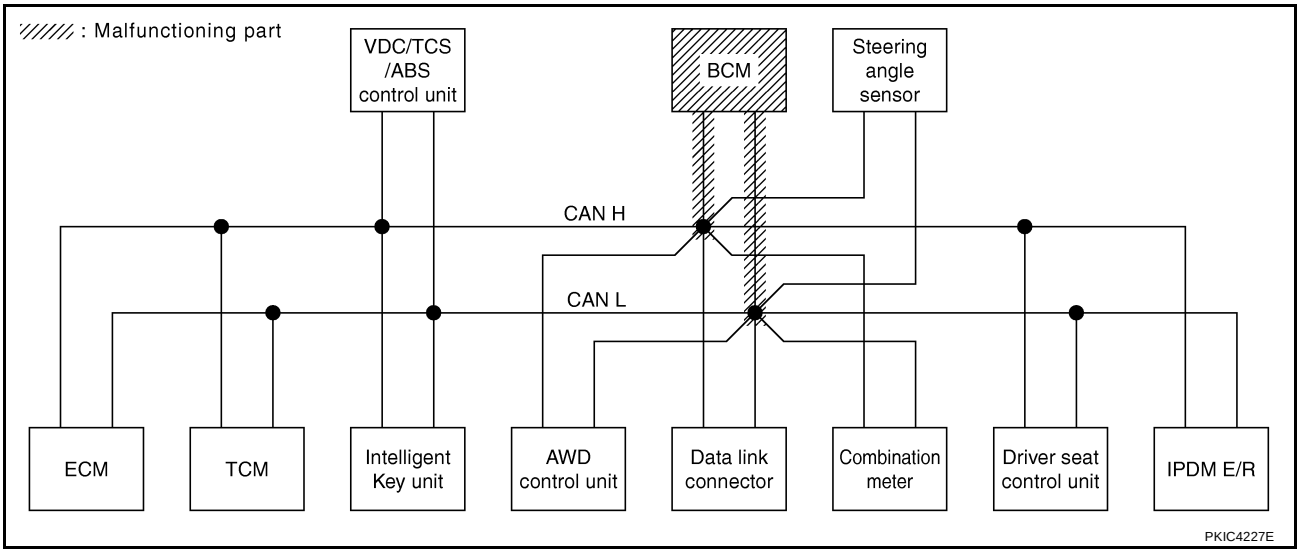


Case 11

Check BCM circuit. Refer to LAN-132, "BCM Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4351E



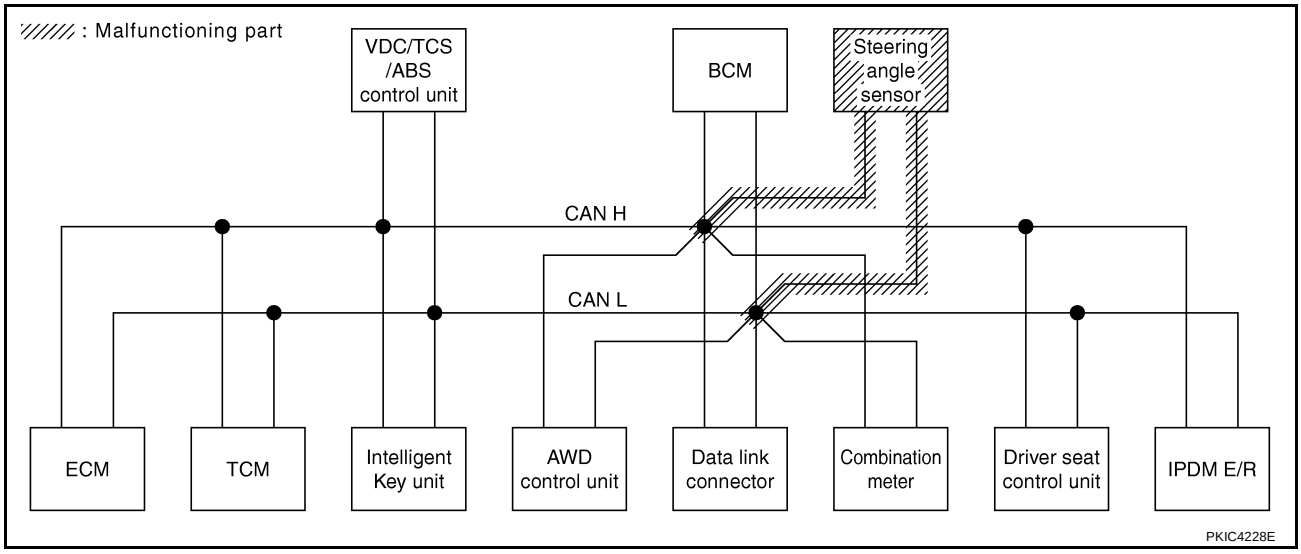
PKIC4227E

Case 12

Check steering angle sensor circuit. Refer to LAN-132, "Steering Angle Sensor Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4352E



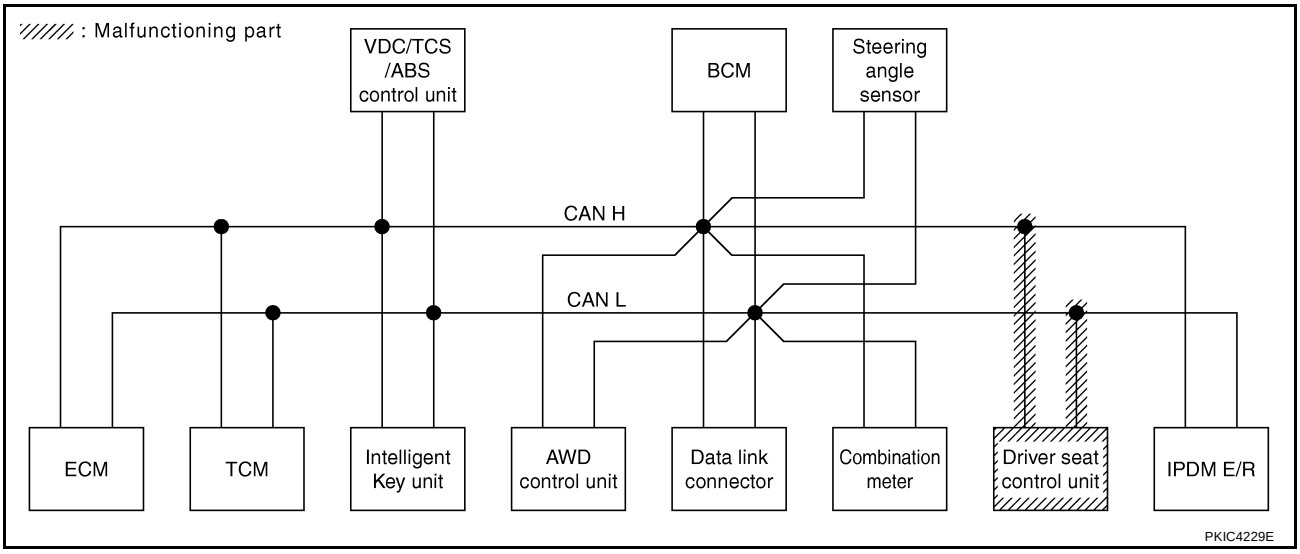
PKIC4228E

Case 13

Check driver seat control unit circuit. Refer to LAN-133, "Driver Seat Control Unit Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4353E



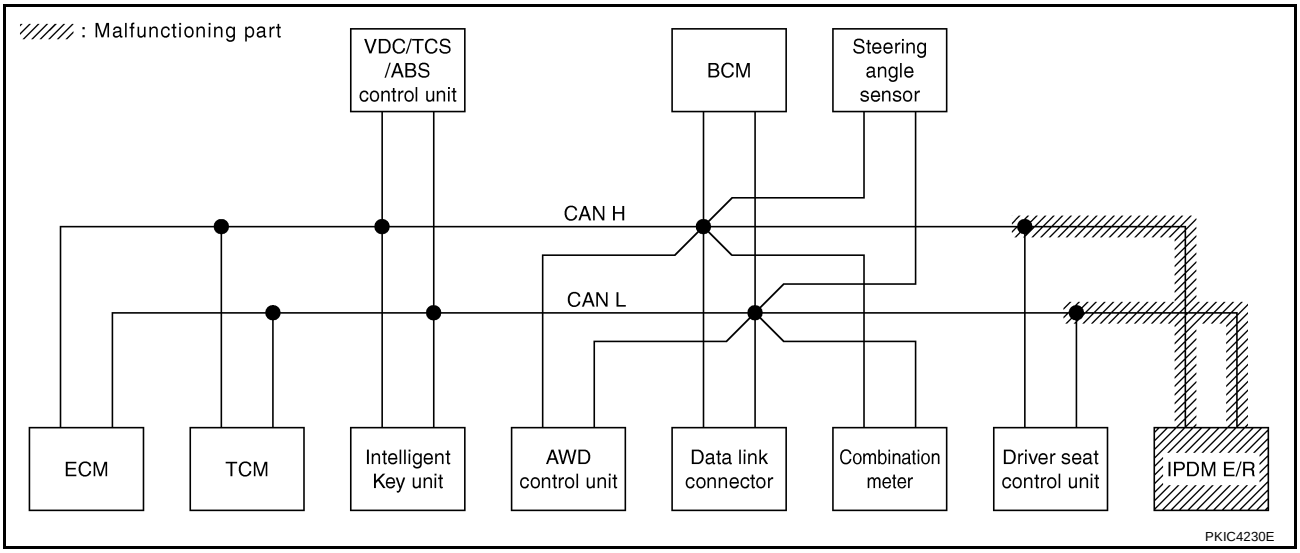
PKIC4229E

Case 14

Check IPDM E/R circuit. Refer to LAN-133, "IPDM E/R Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4354E



PKIC4230E

Case 15

Check CAN communication circuit. Refer to LAN-134, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4355E

Case 16

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
A/T	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN ✓	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4356E

Case 17

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-135, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	I-KEY	VDC/TCS /ABS	AWD/4WD	METER /M&A	BCM /SEC	STRG	IPDM E/R		
ENGINE	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
A/T	—	NG	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	—	—	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4357E

TROUBLE DIAGNOSIS FOR SYSTEM

PFP:00000

Inspection Between TCM and VDC/TCS/ABS Control Unit Circuit

NKS002EQ

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 F102
- Harness connector M72

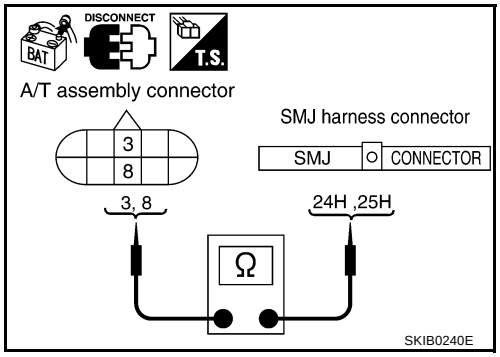
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect A/T assembly connector and harness connector F102.
2. Check continuity between A/T assembly harness connector and harness connector.

A/T assembly connector	Terminal	Harness connector	Terminal	Continuity
F42	3	F102	24H	Yes
	8		25H	Yes



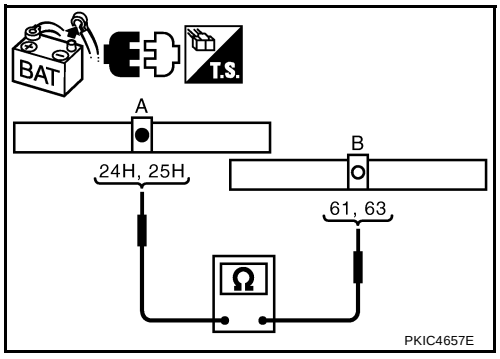
OK or NG

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

3. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between harness connector (A) and VDC/TCS/ABS control unit harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M72	24H	M93	61	Yes
	25H		63	Yes



OK or NG

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

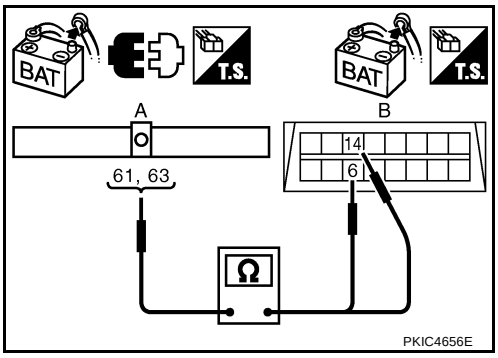
Inspection Between VDC/TCS/ABS Control Unit and Data Link Connector Circuit

NKS002ER

1. CHECK HARNESS FOR OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and VDC/TCS/ABS control unit connector.
4. Check continuity between VDC/TCS/ABS control unit harness connector (A) and data link connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M93	61	M8	6	Yes
	63		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 Driver Seat Control Unit Circuit

NKS002ES

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 M12
- Harness connector B1

OK or NG

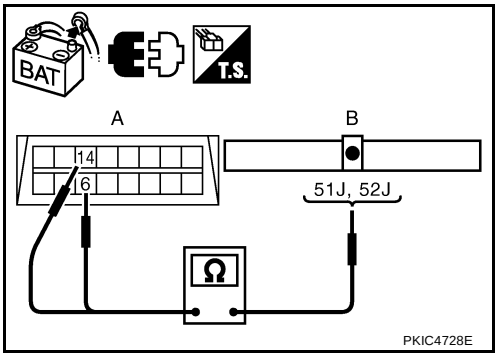
OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M12.
2. Check continuity between data link connector (A) and harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M8	6	M12	52J	Yes
	14		51J	Yes



OK or NG

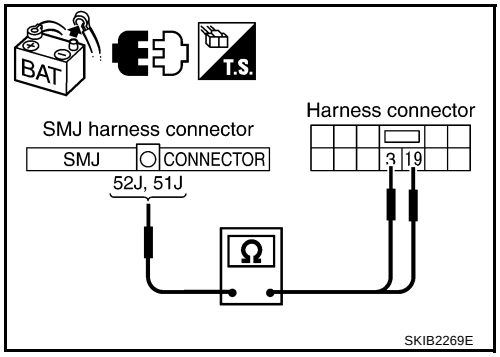
OK >> GO TO 3.

NG >> Repair harness.

3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B6.
2. Check continuity between harness connector and harness connector.

Harness connector	Terminal	Harness connector	Terminal	Continuity
B1	52J	B6	3	Yes
	51J		19	Yes



OK or NG

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

NG >> Repair harness.

ECM Circuit Inspection

NKS0012F

1. CHECK CONNECTOR

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

– M/T models
- ECM connector
- Harness connector F102
- Harness connector M72

– A/T models
- ECM connector

OK or NG

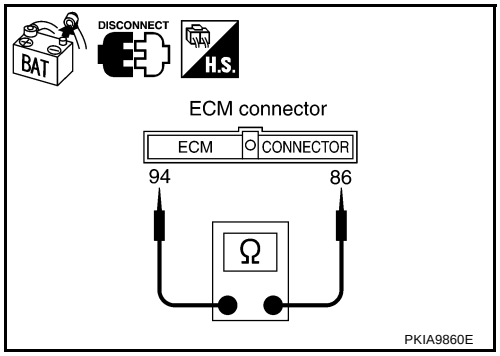
OK >> GO TO 2.

NG >> Repair terminal or connector.

2. CHECK HARNESS FOR OPEN CIRCUIT

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

ECM connector	Terminal		Resistance (Approx.)
F108	94	86	108 – 132 Ω



OK or NG

OK >> Replace ECM.

NG >> ● M/T models
– Repair harness between ECM and VDC/TCS/ABS control unit.
● A/T models
– Repair harness between ECM and A/T assembly.

TCM Circuit Inspection

NKS0012G

1. CHECK CONNECTOR

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

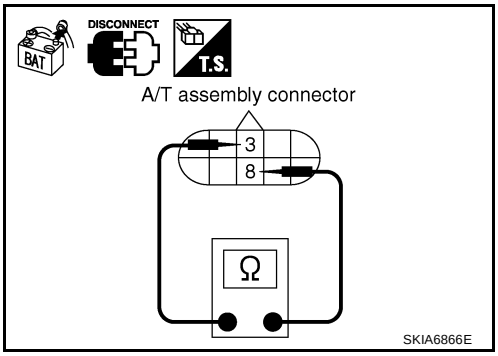
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect A/T assembly connector.
2. Check resistance between A/T assembly harness connector terminals.

A/T assembly connector	Terminal		Resistance (Approx.)
F42	3	8	54 – 66 Ω



OK or NG

OK >> Replace control valve with TCM.
NG >> Repair harness between A/T assembly and harness connector F102.

Intelligent Key Unit Circuit Inspection

NKS0012M

1. CHECK CONNECTOR

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

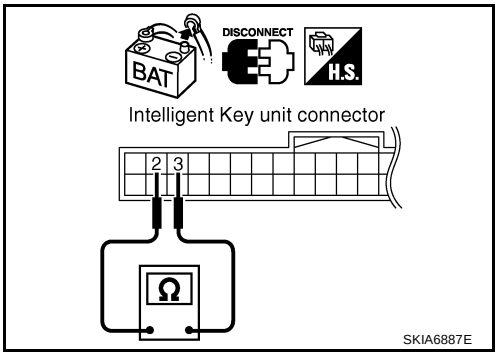
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector terminals.

Intelligent Key unit connector	Terminal		Resistance (Approx.)
M75	2	3	54 – 66 Ω



OK or NG

OK >> Replace Intelligent Key unit.
NG >> Repair harness between Intelligent Key unit and VDC/TCS/ABS control unit.

VDC/TCS/ABS Control Unit Circuit Inspection

NKS0012N

1. CHECK CONNECTOR

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

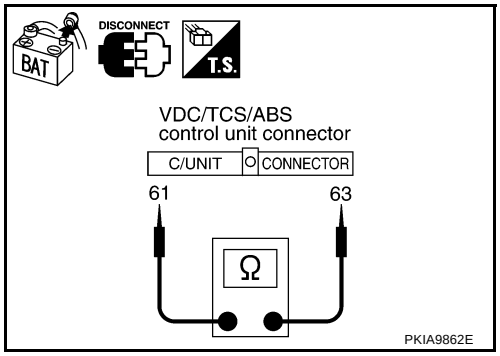
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect VDC/TCS/ABS control unit connector.
2. Check resistance between VDC/TCS/ABS control unit harness connector terminals.

VDC/TCS/ABS control unit connector	Terminal		Resistance (Approx.)
M93	61	63	54 – 66 Ω



OK or NG

OK >> Replace VDC/TCS/ABS control unit.
NG >> Repair harness between VDC/TCS/ABS control unit and data link connector.

AWD Control Unit Circuit Inspection

NKS0012H

1. CHECK CONNECTOR

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

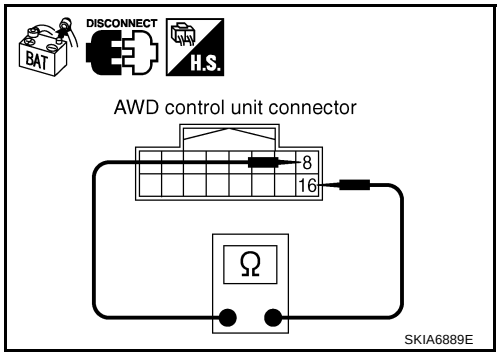
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector terminals.

AWD control unit connector	Terminal		Resistance (Approx.)
M10	8	16	54 – 66 Ω



OK or NG

OK >> Replace AWD control unit.
NG >> Repair harness between AWD control unit and data link connector.

Data Link Connector Circuit Inspection

NKS0012I

1. CHECK CONNECTOR

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

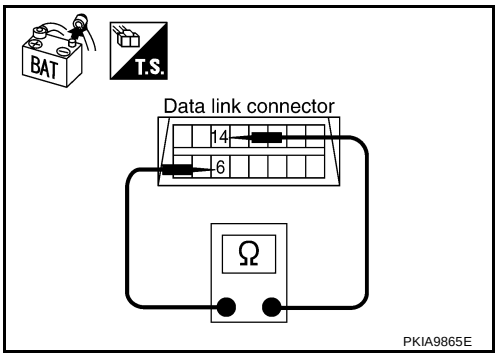
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector terminals.

Data link connector	Terminal		Resistance (Approx.)
M8	6	14	54 – 66 Ω



OK or NG

OK >> Diagnose again. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW" .
NG >> Repair harness between data link connector and combination meter.

Combination Meter Circuit Inspection

NKS0012J

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).

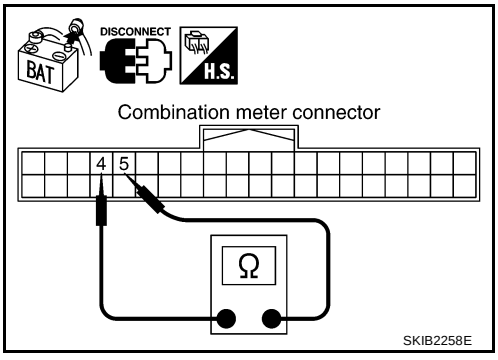
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

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

Combination meter connector	Terminal		Resistance (Approx.)
M19	4	5	54 – 66 Ω



OK or NG

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

BCM Circuit Inspection

NKS0012K

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).

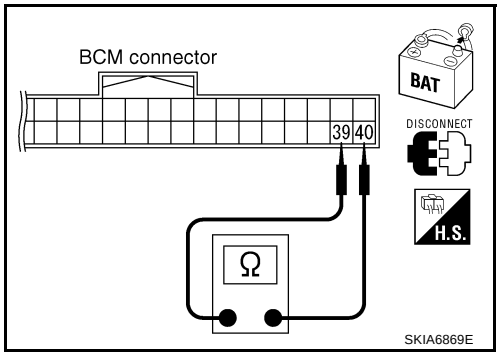
OK or NG

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.)
M1	39	40	54 – 66 Ω



OK or NG

OK >> Replace BCM. Refer to BCS-18, "Removal and Installation of BCM" .
NG >> Repair harness between BCM and data link connector.

Steering Angle Sensor Circuit Inspection

NKS0012L

1. CHECK CONNECTOR

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

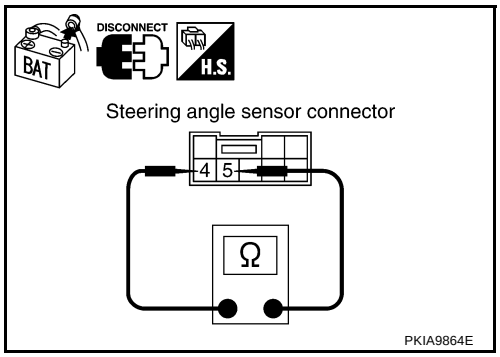
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect steering angle sensor connector.
2. Check resistance between steering angle sensor harness connector terminals.

Steering angle sensor connector	Terminal		Resistance (Approx.)
M22	4	5	54 – 66 Ω



OK or NG

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

Driver Seat Control Unit Circuit Inspection

NKS0012O

1. CHECK CONNECTOR

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

– Driver seat control unit connector
– Harness connector B6
– Harness connector B321

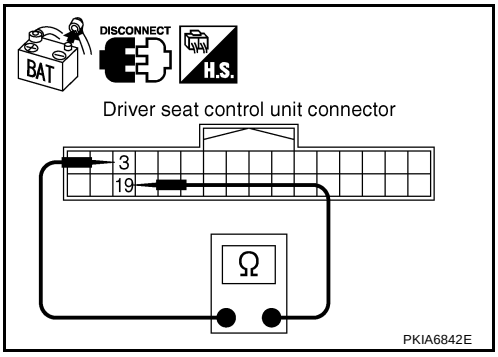
OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector terminals.

Driver seat control unit connector	Terminal		Resistance (Approx.)
B324	3	19	54 – 66 Ω



OK or NG

OK >> Replace driver seat control unit.
NG >> Repair harness between driver seat control unit and harness connector B2.

IPDM E/R Circuit Inspection

NKS0012P

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).

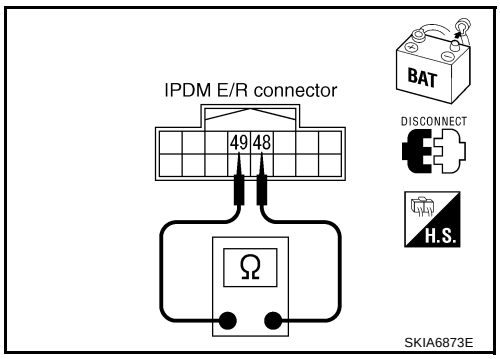
– Without automatic drive positioner models
• IPDM E/R connector
• Harness connector B2
• Harness connector E106
• Harness connector M12
• Harness connector B1
– With automatic drive positioner models
• IPDM E/R connector
• Harness connector B2
• Harness connector E106

OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

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



IPDM E/R connector	Terminal		Resistance (Approx.)
E9	48	49	108 – 132 Ω

OK or NG

OK >> Replace IPDM E/R.
NG >>
- Without automatic drive positioner models
  - Repair harness between IPDM E/R and data link connector.
- With automatic drive positioner models
  - Repair harness between IPDM E/R and harness connector B6.

CAN Communication Circuit Inspection

NKS0027D

1. CHECK CONNECTOR

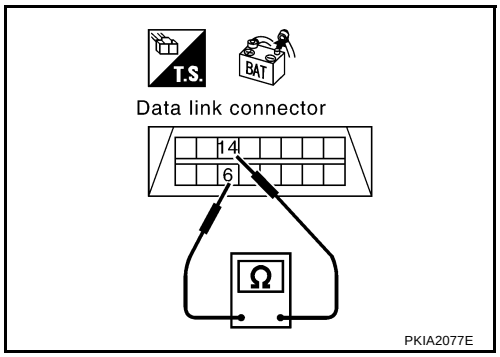
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect the harness connector for each unit on the CAN network and check terminals for deformation, disconnection, looseness or damage.

OK or NG

OK >> GO TO 2.
NG >> Repair or replace as necessary.

2. CHECK HARNESS FOR SHORT CIRCUIT

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



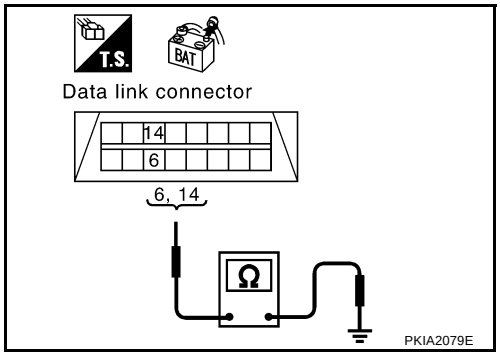
Data link connector	Terminal		Continuity
M8	6	14	No

OK or NG

OK >> GO TO 3.
NG >>
- Repair harness.
- Change harness if shielded lines are used for the harness.

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector and ground.



Data link connector	Terminal		Continuity
M8	6	Ground	No
	14		No

OK or NG

OK >> GO TO 4.
NG >>
- Repair harness.
- Change harness if shielded lines are used for the harness.

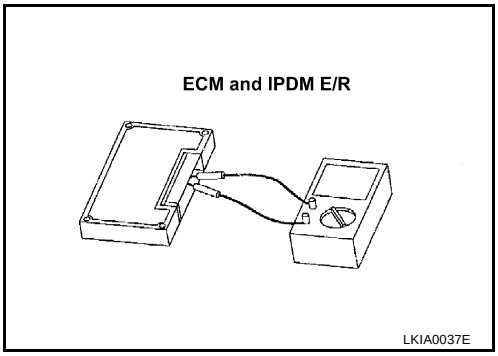
4. ECM AND IPDM E/R INTERNAL CIRCUIT INSPECTION

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

Terminal		Resistance (Approx.)
94	86	108 – 132 Ω

3. Check resistance between IPDM E/R terminals.

Terminal		Resistance (Approx.)
48	49	108 – 132 Ω



OK or NG

OK >> GO TO 5.
NG >> Replace ECM and/or IPDM E/R.

5. CHECK SYMPTOM

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

OK or NG

OK >> GO TO 6.
NG >> 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 negative battery terminal.
3. Disconnect the unit connector.
4. Connect the battery cable to the negative terminal.
5. Make sure that the symptom filled in the “Symptom” of the check sheet is reproduced. (Do not confuse it with the symptom related to removed unit.)
6. Make sure that the same symptom is reproduced.

Inspection results

Reproduced>>Install removed unit, and then check the other unit.
Not reproduced>>Replace removed unit.

IPDM E/R Ignition Relay Circuit Inspection

NKS0012R

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

- IPDM E/R power supply circuit. Refer to PG-26, "IPDM E/R Power/Ground Circuit Inspection" .
- Ignition power supply circuit. Refer to PG-10, "IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”" .