

SECTION **LAN**  
LAN SYSTEM

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

CONTENTS

**CAN**

<b>PRECAUTIONS</b> .....	<b>5</b>	MNTR" SCREEN FOR DRIVER SEAT CONTROL UNIT .....	24
Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	5	DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR AWD CONTROL UNIT ...	24
Precautions When Using CONSULT-II .....	5	DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) .....	25
CHECK POINTS FOR USING CONSULT-II .....	5	DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR IPDM E/R .....	26
Precautions for Trouble Diagnosis .....	5	DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DISPLAY CONTROL UNIT .....	27
CAN SYSTEM .....	5	DESCRIPTION OF "CANDIAG MNTR" SCREEN FOR DISPLAY UNIT .....	28
Precautions for Harness Repair .....	6	<b>CAN COMMUNICATION</b> .....	<b>29</b>
CAN SYSTEM .....	6	System Description .....	29
<b>TROUBLE DIAGNOSES WORK FLOW</b> .....	<b>7</b>	CAN Communication Unit .....	29
When Displaying CAN Communication System Errors .....	7	TYPE 1/TYPE 2/TYPE 3 .....	30
WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM .....	7	TYPE 4/TYPE 5 .....	33
WHEN A MALFUNCTION IS DETECTED EXCEPT CAN COMMUNICATION SYSTEM .....	7	TYPE 6/TYPE 7/TYPE 8 .....	36
TROUBLE DIAGNOSIS FLOW CHART .....	8	TYPE 9/TYPE 10 .....	39
Diagnosis Procedure .....	9	<b>CAN SYSTEM (TYPE 1)</b> .....	<b>43</b>
SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE) .....	9	Component Parts and Harness Connector Location..	43
ACQUISITION OF DATA BY CONSULT-II .....	10	Schematic .....	44
HOW TO USE CHECK SHEET TABLE .....	12	Wiring Diagram - CAN - .....	45
CAN Diagnostic Support Monitor .....	19	Check Sheet .....	49
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ECM .....	19	CHECK SHEET RESULTS (EXAMPLE) .....	51
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR INTELLIGENT KEY UNIT..	20	Inspection Between TCM and Data Link Connector Circuit .....	62
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR TCM .....	21	Inspection Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit) Circuit ....	62
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR LOW TIRE PRESSURE WARNING CONTROL UNIT .....	21	ECM Circuit Inspection .....	63
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR BCM .....	22	TCM Circuit Inspection .....	64
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR UNIFIED METER AND A/C AMP. ....	23	BCM Circuit Inspection .....	64
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DRIVER SEAT CONTROL UNIT .....	24	Display Unit Circuit Inspection .....	65
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR AWD CONTROL UNIT ...	24	Data Link Connector Circuit Inspection .....	65
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) .....	25	Unified Meter and A/C Amp. Circuit Inspection ....	66
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR IPDM E/R .....	26	ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	66
DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR DISPLAY CONTROL UNIT .....	27	IPDM E/R Circuit Inspection .....	67
DESCRIPTION OF "CANDIAG MNTR" SCREEN FOR DISPLAY UNIT .....	28		

LAN

CAN Communication Circuit Inspection .....	68	Circuit .....	171
IPDM E/R Ignition Relay Circuit Inspection .....	72	Inspection Between Data Link Connector and Driver	
<b>CAN SYSTEM (TYPE 2) .....</b>	<b>73</b>	Seat Control Unit Circuit .....	171
Component Parts and Harness Connector Location..	73	Inspection Between Driver Seat Control Unit and	
Schematic .....	74	ABS Actuator and Electric Unit (Control Unit) Circuit	172
Wiring Diagram - CAN - .....	75	ECM Circuit Inspection .....	173
Check Sheet .....	80	Intelligent Key Unit Circuit Inspection .....	174
CHECK SHEET RESULTS (EXAMPLE) .....	82	TCM Circuit Inspection .....	174
Inspection Between TCM and Data Link Connector		Low Tire Pressure Warning Control Unit Circuit	
Circuit .....	96	Inspection .....	175
Inspection Between Data Link Connector and Driver		BCM Circuit Inspection .....	175
Seat Control Unit Circuit .....	96	Display Unit Circuit Inspection .....	176
Inspection Between Driver Seat Control Unit and		Data Link Connector Circuit Inspection .....	176
ABS Actuator and Electric Unit (Control Unit) Circuit..	97	Unified Meter and A/C Amp. Circuit Inspection ....	177
ECM Circuit Inspection .....	98	Steering Angle Sensor Circuit Inspection .....	177
Intelligent Key Unit Circuit Inspection .....	99	Driver Seat Control Unit Circuit Inspection .....	178
TCM Circuit Inspection .....	99	ABS Actuator and Electric Unit (Control Unit) Circuit	
BCM Circuit Inspection .....	100	Inspection .....	178
Display Unit Circuit Inspection .....	100	IPDM E/R Circuit Inspection .....	179
Data Link Connector Circuit Inspection .....	101	CAN Communication Circuit Inspection .....	179
Unified Meter and A/C Amp. Circuit Inspection ...	101	IPDM E/R Ignition Relay Circuit Inspection .....	184
Driver Seat Control Unit Circuit Inspection .....	102	<b>CAN SYSTEM (TYPE 5) .....</b>	<b>185</b>
ABS Actuator and Electric Unit (Control Unit) Circuit		Component Parts and Harness Connector Location	185
Inspection .....	102	Schematic .....	186
IPDM E/R Circuit Inspection .....	103	Wiring Diagram - CAN - .....	187
CAN Communication Circuit Inspection .....	103	Check Sheet .....	192
IPDM E/R Ignition Relay Circuit Inspection .....	108	CHECK SHEET RESULTS (EXAMPLE) .....	195
<b>CAN SYSTEM (TYPE 3) .....</b>	<b>109</b>	Inspection Between TCM and Data Link Connector	
Component Parts and Harness Connector Location	109	Circuit .....	211
Schematic .....	110	Inspection Between Data Link Connector and Driver	
Wiring Diagram - CAN - .....	111	Seat Control Unit Circuit .....	211
Check Sheet .....	116	Inspection Between Driver Seat Control Unit and	
CHECK SHEET RESULTS (EXAMPLE) .....	118	ABS Actuator and Electric Unit (Control Unit) Circuit	212
Inspection Between TCM and Data Link Connector		ECM Circuit Inspection .....	213
Circuit .....	132	Intelligent Key Unit Circuit Inspection .....	214
Inspection Between Data Link Connector and Driver		TCM Circuit Inspection .....	214
Seat Control Unit Circuit .....	132	Low Tire Pressure Warning Control Unit Circuit	
Inspection Between Driver Seat Control Unit and		Inspection .....	215
ABS Actuator and Electric Unit (Control Unit) Circuit	133	BCM Circuit Inspection .....	215
ECM Circuit Inspection .....	134	Display Control Unit Circuit Inspection .....	216
Intelligent Key Unit Circuit Inspection .....	135	Data Link Connector Circuit Inspection .....	216
TCM Circuit Inspection .....	135	Unified Meter and A/C Amp. Circuit Inspection ....	217
BCM Circuit Inspection .....	136	Steering Angle Sensor Circuit Inspection .....	217
Display Control Unit Circuit Inspection .....	136	Driver Seat Control Unit Circuit Inspection .....	218
Data Link Connector Circuit Inspection .....	137	ABS Actuator and Electric Unit (Control Unit) Circuit	
Unified Meter and A/C Amp. Circuit Inspection ...	137	Inspection .....	218
Driver Seat Control Unit Circuit Inspection .....	138	IPDM E/R Circuit Inspection .....	219
ABS Actuator and Electric Unit (Control Unit) Circuit		CAN Communication Circuit Inspection .....	219
Inspection .....	138	IPDM E/R Ignition Relay Circuit Inspection .....	224
IPDM E/R Circuit Inspection .....	139	<b>CAN SYSTEM (TYPE 6) .....</b>	<b>225</b>
CAN Communication Circuit Inspection .....	139	Component Parts and Harness Connector Location	225
IPDM E/R Ignition Relay Circuit Inspection .....	144	Schematic .....	226
<b>CAN SYSTEM (TYPE 4) .....</b>	<b>145</b>	Wiring Diagram - CAN - .....	227
Component Parts and Harness Connector Location	145	Check Sheet .....	231
Schematic .....	146	CHECK SHEET RESULTS (EXAMPLE) .....	233
Wiring Diagram - CAN - .....	147	Inspection Between TCM and Data Link Connector	
Check Sheet .....	152	Circuit .....	246
CHECK SHEET RESULTS (EXAMPLE) .....	155	Inspection Between Data Link Connector and AWD	
Inspection Between TCM and Data Link Connector		Control Unit Circuit .....	246

Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit ..	248	BCM Circuit Inspection .....	328	
ECM Circuit Inspection .....	248	Display Control Unit Circuit Inspection .....	328	A
TCM Circuit Inspection .....	249	Data Link Connector Circuit Inspection .....	329	
BCM Circuit Inspection .....	249	Unified Meter and A/C Amp. Circuit Inspection ...	329	B
Display Unit Circuit Inspection .....	250	Driver Seat Control Unit Circuit Inspection .....	330	
Data Link Connector Circuit Inspection .....	250	AWD Control Unit Circuit Inspection .....	330	C
Unified Meter and A/C Amp. Circuit Inspection ...	251	ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	331	
AWD Control Unit Circuit Inspection .....	251	IPDM E/R Circuit Inspection .....	331	
ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	252	CAN Communication Circuit Inspection .....	332	D
IPDM E/R Circuit Inspection .....	252	IPDM E/R Ignition Relay Circuit Inspection .....	337	
CAN Communication Circuit Inspection .....	253	<b>CAN SYSTEM (TYPE 9) .....</b>	<b>338</b>	
IPDM E/R Ignition Relay Circuit Inspection .....	257	Component Parts and Harness Connector Location	338	E
<b>CAN SYSTEM (TYPE 7) .....</b>	<b>258</b>	Schematic .....	339	
Component Parts and Harness Connector Location	258	Wiring Diagram - CAN - .....	340	
Schematic .....	259	Check Sheet .....	345	
Wiring Diagram - CAN - .....	260	CHECK SHEET RESULTS (EXAMPLE) .....	348	F
Check Sheet .....	265	Inspection Between TCM and Data Link Connector Circuit .....	366	
CHECK SHEET RESULTS (EXAMPLE) .....	268	Inspection Between Data Link Connector and Driver Seat Control Unit Circuit .....	366	G
Inspection Between TCM and Data Link Connector Circuit .....	284	Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit .....	367	
Inspection Between Data Link Connector and Driver Seat Control Unit Circuit .....	284	Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit ..	368	H
Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit .....	285	ECM Circuit Inspection .....	368	
Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit ..	286	Intelligent Key Unit Circuit Inspection .....	369	I
ECM Circuit Inspection .....	286	TCM Circuit Inspection .....	369	
Intelligent Key Unit Circuit Inspection .....	287	Low Tire Pressure Warning Control Unit Circuit Inspection .....	370	J
TCM Circuit Inspection .....	287	BCM Circuit Inspection .....	370	
BCM Circuit Inspection .....	288	Display Unit Circuit Inspection .....	371	
Display Unit Circuit Inspection .....	288	Data Link Connector Circuit Inspection .....	371	LAN
Data Link Connector Circuit Inspection .....	289	Unified Meter and A/C Amp. Circuit Inspection ...	372	
Unified Meter and A/C Amp. Circuit Inspection ...	289	Steering Angle Sensor Circuit Inspection .....	372	
Driver Seat Control Unit Circuit Inspection .....	290	Driver Seat Control Unit Circuit Inspection .....	373	
AWD Control Unit Circuit Inspection .....	290	AWD Control Unit Circuit Inspection .....	373	
ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	291	ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	374	L
IPDM E/R Circuit Inspection .....	291	IPDM E/R Circuit Inspection .....	374	
CAN Communication Circuit Inspection .....	292	CAN Communication Circuit Inspection .....	375	M
IPDM E/R Ignition Relay Circuit Inspection .....	297	IPDM E/R Ignition Relay Circuit Inspection .....	381	
<b>CAN SYSTEM (TYPE 8) .....</b>	<b>298</b>	<b>CAN SYSTEM (TYPE 10) .....</b>	<b>382</b>	
Component Parts and Harness Connector Location	298	Component Parts and Harness Connector Location	382	
Schematic .....	299	Schematic .....	383	
Wiring Diagram - CAN - .....	300	Wiring Diagram - CAN - .....	384	
Check Sheet .....	305	Check Sheet .....	389	
CHECK SHEET RESULTS (EXAMPLE) .....	308	CHECK SHEET RESULTS (EXAMPLE) .....	392	
Inspection Between TCM and Data Link Connector Circuit .....	324	Inspection Between TCM and Data Link Connector Circuit .....	410	
Inspection Between Data Link Connector and Driver Seat Control Unit Circuit .....	324	Inspection Between Data Link Connector and Driver Seat Control Unit Circuit .....	410	
Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit .....	325	Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit .....	411	
Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit ..	326	Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit ..	412	
ECM Circuit Inspection .....	326	ECM Circuit Inspection .....	412	
Intelligent Key Unit Circuit Inspection .....	327	Intelligent Key Unit Circuit Inspection .....	413	
TCM Circuit Inspection .....	327	TCM Circuit Inspection .....	413	

---

Low Tire Pressure Warning Control Unit Circuit Inspection .....	414	Driver Seat Control Unit Circuit Inspection .....	417
BCM Circuit Inspection .....	414	AWD Control Unit Circuit Inspection .....	417
Display Control Unit Circuit Inspection .....	415	ABS Actuator and Electric Unit (Control Unit) Circuit Inspection .....	418
Data Link Connector Circuit Inspection .....	415	IPDM E/R Circuit Inspection .....	418
Unified Meter and A/C Amp. Circuit Inspection ...	416	CAN Communication Circuit Inspection .....	419
Steering Angle Sensor Circuit Inspection .....	416	IPDM E/R Ignition Relay Circuit Inspection .....	425

**PRECAUTIONS**

PFPP:00001

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

AKS007PK

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**

AKS004YM

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-diagnostic results?
  - If YES, GO TO 3.
  - If NO, GO TO 4.
3. Based on self-diagnostic 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-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .

**Precautions for Trouble Diagnosis CAN SYSTEM**

AKS004YN

- 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.

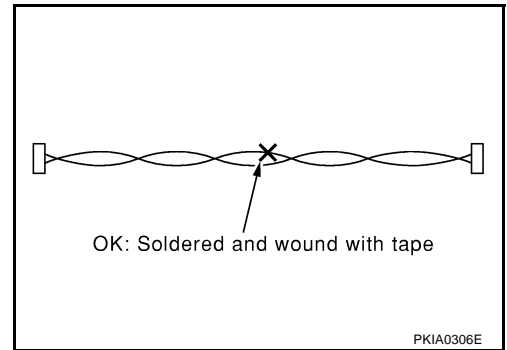
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

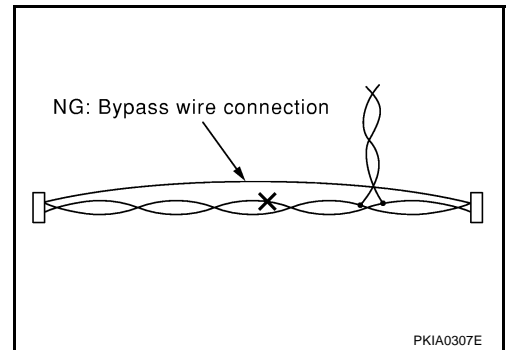
### Precautions for Harness Repair CAN SYSTEM

AKS004YO

- 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

#### WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM

AKS00CHD

- 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.

A

B

C

D

E

F

G

H

I

J

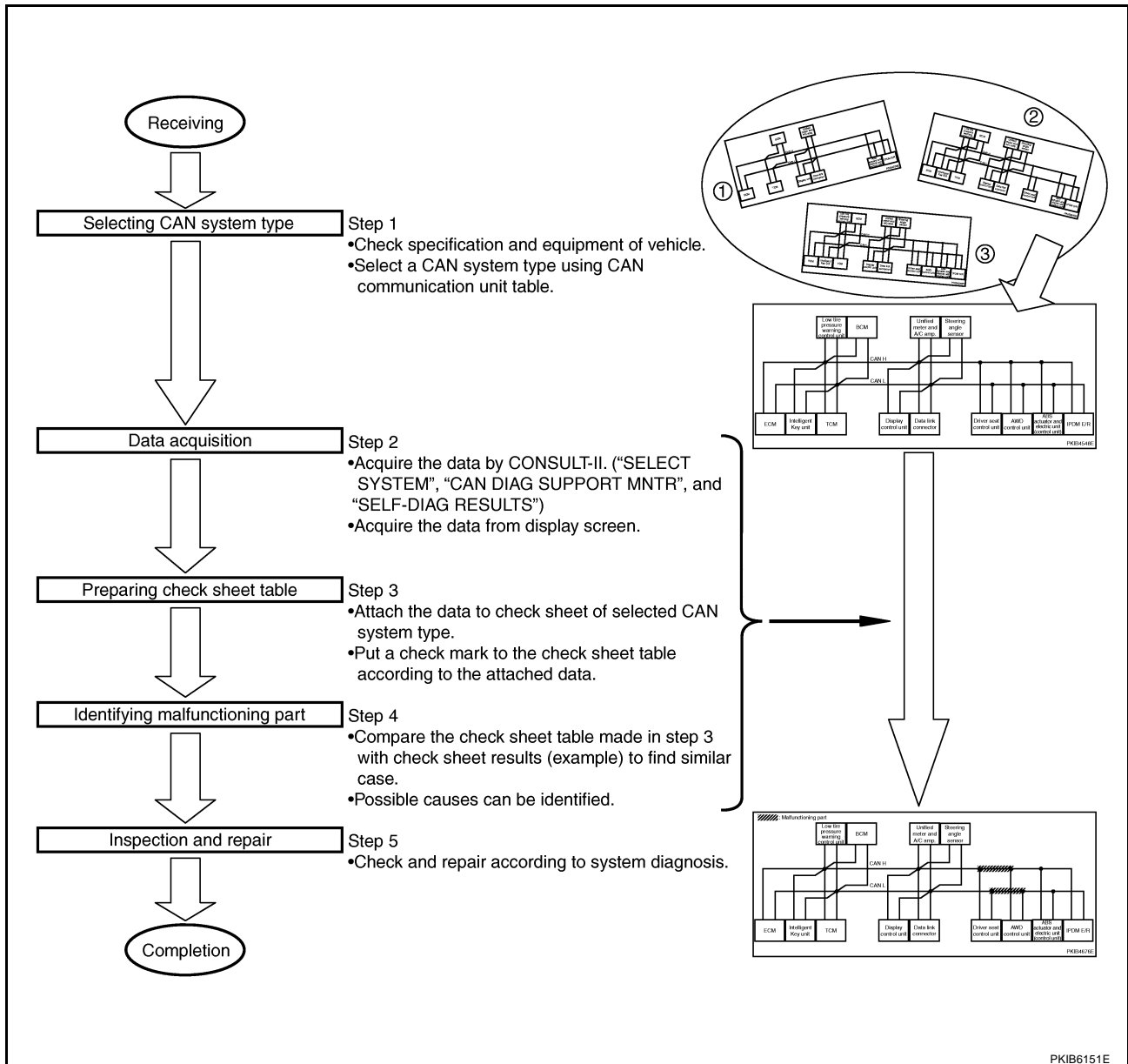
LAN

L

M

## 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-9, "SELECTING CAN SYSTEM TYPE \(HOW TO USE SPECIFICATION TABLE\)"](#) .
- Step 2: Refer to [LAN-10, "ACQUISITION OF DATA BY CONSULT-II"](#) .
- Step 3: Refer to [LAN-12, "HOW TO USE CHECK SHEET TABLE"](#) .
- Step 4: Refer to [LAN-13, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced"](#) .
- Step 5: Check and repair according to system diagnosis.



# TROUBLE DIAGNOSES WORK FLOW

[CAN]

AKS00CM6

## Diagnosis Procedure

### SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

(Example) Wagon/AWD/VQ35DE/CVT/VDC/With automatic drive positioner/With Intelligent Key system/With low tire pressure warning system/With navigation system

#### CAN Communication Unit

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

Body type	Wagon									
Axle	2WD					AWD				
Engine	VQ35DE									
Transmission	CVT									
Brake control	ABS		VDC		ABS		VDC			
Automatic drive positioner		x	x	x	x		x	x	x	x
Intelligent Key system		x	x	x	x		x	x	x	x
Low tire pressure warning system				x	x				x	x
Navigation system			x		x			x		x
CAN system type	1	2	3	4	5	6	7	8	9	10
CAN system trouble diagnosis	XX	XX	XX	XX	XX	XX	XX	XX	XX	XX

Check basic specifications of the vehicle.

→ Select "x" if it is model with automatic drive positioner.

→ Select "x" if it is model with Intelligent Key system.

→ Select "x" if it is model with low tire pressure warning system.

→ Select "x" if it is model with navigation 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.

x: Applicable

In the case of this example:  
It corresponds to type 10.

PKIB6152E

LAN

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## ACQUISITION OF DATA BY CONSULT-II

Attach the data acquired by CONSULT-II on the check sheet determined according to CAN system type. (For display control unit, transfer the data from the display screen of the vehicle to "CAN DIAG SUPPORT MONITOR Check Sheet". For display unit: Refer to [AV-102, "CAN Communication Line Check"](#) . For display control unit: Refer to [AV-188, "CAN Communication Line Check"](#) .)

Copy "SELECT SYSTEM" screen of CONSULT-II.

SELECT SYSTEM			SELECT SYSTEM		
ENGINE			INTELLIGENT KEY		
ABS			AUTO DRIVE POS.		
AIR BAG			AIR PRESSURE MONITOR		
ALL MODE AWD/4WD			TRANSMISSION		
BCM			REARVIEW CAMERA		
INTELLIGENT KEY			METER A/C AMP		
Page Down			Page Up		
BACK	LIGHT	COPY	BACK	LIGHT	COPY

AV section

Copy CAN diagnosis support monitor check sheet of CAN communication check.

Diagnosis item	Screen display		Diagnosis item	Screen display	
CANCOMM	OK	NG	CAN_CRIC_5	OK	UNKWN
CAN_CRIC_1	OK	UNKWN	CAN_CRIC_6	OK	UNKWN
CAN_CRIC_2	OK	UNKWN	CAN_CRIC_7	OK	UNKWN
CAN_CRIC_3	OK	UNKWN	CAN_CRIC_8	OK	UNKWN
CAN_CRIC_4	OK	UNKWN	CAN_CRIC_9	OK	UNKWN

Check sheet table		CAN DIAG SUPPORT MONITOR											SELF DIAG RESULTS				
SELECT SYSTEM screen	Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM EXECUTED (01000)	CAN COMM EXECUTED (01001)		
			ECM	KEY	TCM	TIRE P	TRAIL BEC	EXTER P	METER A/C AMP	IPDM/ER	ABS	IPDM/ER	IPDM/ER				
ENGINE	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
INTELLIGENT KEY	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
TRANSMISSION	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
AIR PRESSURE MONITOR	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
BCM	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
Display control unit	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
METER A/C AMP	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
AUTO DRIVE POS.	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
ALL MODE AWD/4WD	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
ABS	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN
IPDM/ER	—	NG	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN

Symptoms :

Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

Display control unit Transmission Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CRIC 5	METER/A/C AMP
CAN CRIC 1	Transmit diagnosis	CAN CRIC 6	TIRE P
CAN CRIC 2	—	BCM	IPDM/ER
CAN CRIC 3	—	ECM	—
CAN CRIC 4	—	—	—

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

PKIB4727E

PKIB6153E

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

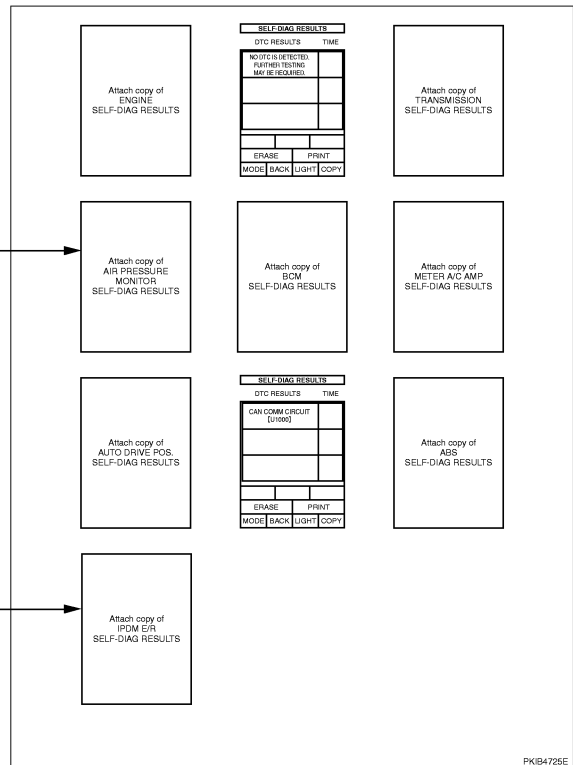
Copy "SELF-DIAG RESULTS" screen of CONSULT-II.

**SELF-DIAG RESULTS**

DTC RESULTS		TIME
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.		
ERASE		PRINT
MODE	BACK	LIGHT COPY

**SELF-DIAG RESULTS**

DTC RESULTS		TIME
CAN COMM CIRCUIT {U1000}		
ERASE		PRINT
MODE	BACK	LIGHT COPY



PKIB4725E

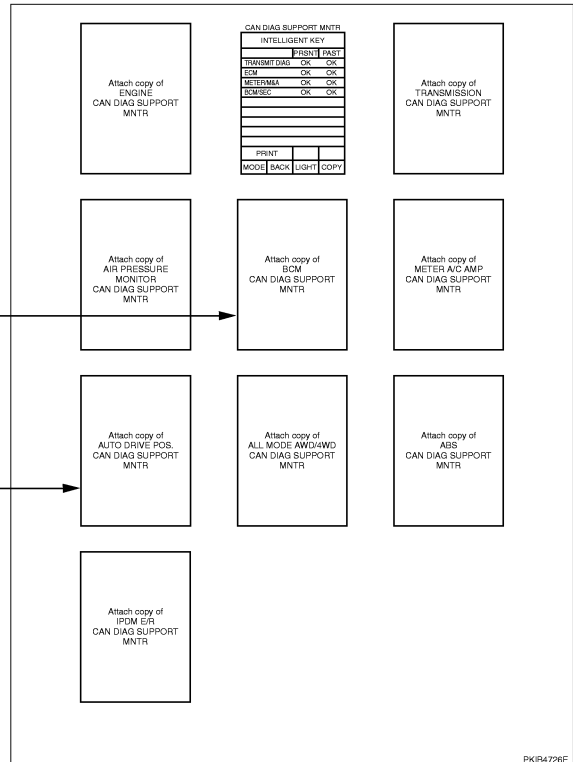
Copy "CAN DIAG SUPPORT MNTR" screen of CONSULT-II.

**CAN DIAG SUPPORT MNTR**

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

**CAN DIAG SUPPORT MNTR**

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



PKIB4726E

PKIB6154E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## HOW TO USE CHECK SHEET TABLE

Use when the initial conditions are reproduced														Use when the initial conditions are not reproduced				
Check sheet table																		
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR														SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)			CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /4WD	VDC/TCS /ABS	IPDM E/R				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)		
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—		
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—		
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—		
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—		
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—		
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—		
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		

PKIB6155E

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

**NOTE:**

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

- When the initial conditions are reproduced, refer to [LAN-13, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced"](#) .
- When the initial conditions are not reproduced, refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#) .

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## Example of Filling in Check Sheet When Initial Conditions Are Reproduced

**Check sheet table**

SELECT SYSTEM screen	Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
			ECM	I-KEY	TCM	TIRE.P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD/e4WD	VDC/TCS/ABS	IPDM E/R	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)		
ENGINE	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—

- 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 IPDM E/R because IPDM E/R is not displayed on "SELECT SYSTEM" screen.

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

**NOTE:**

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

- Confirm the unit name that "UNKWN" is displayed on the copy of "CAN DIAG SUPPORT MNTR" screen of "INTELLIGENT KEY", "TRANSMISSION", "AIR PRESSURE MONITOR" and "BCM" as well as "ENGINE". And then, put a check mark to the check sheet table.

**NOTE:**

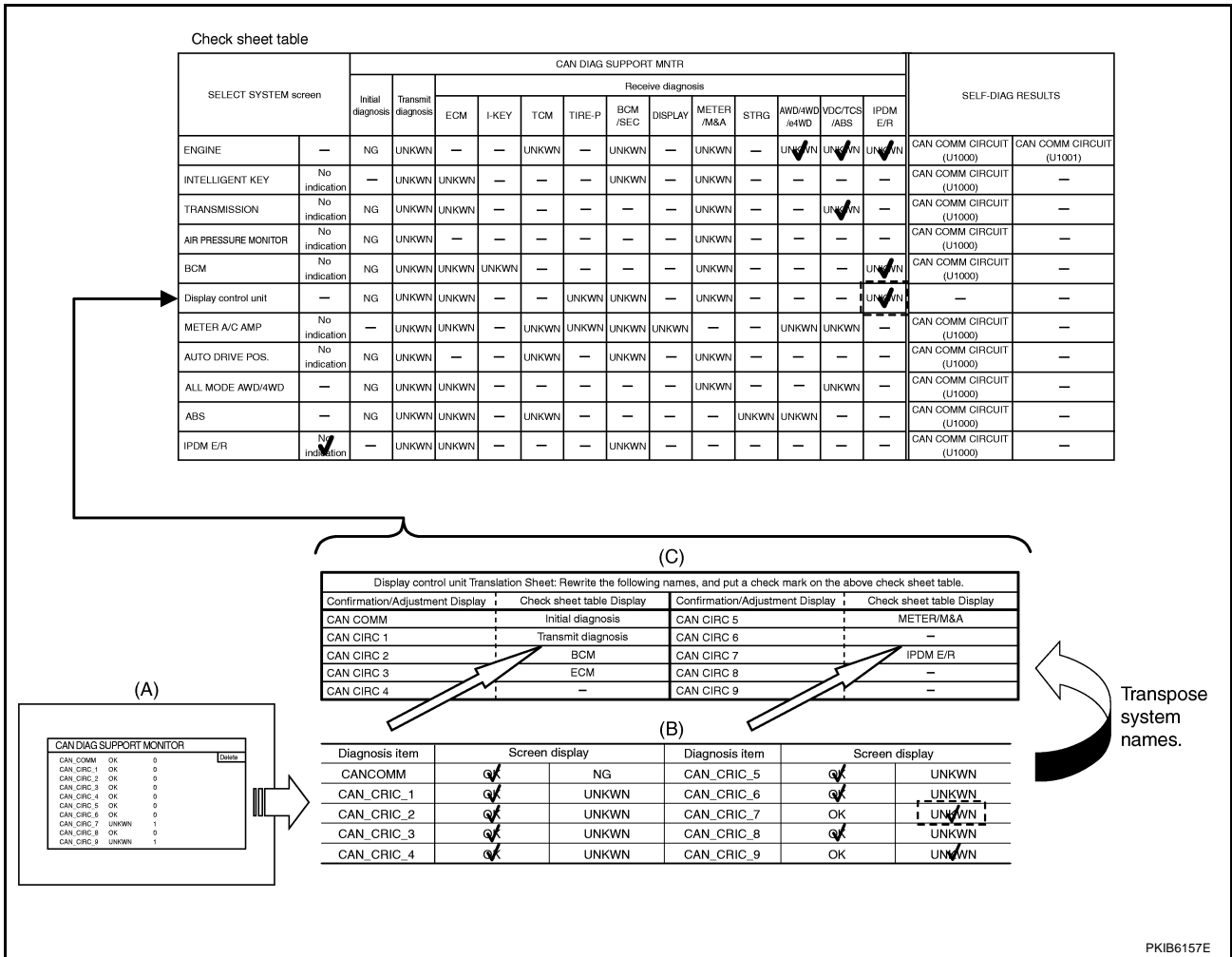
- For "INTELLIGENT KEY", "UNKWN" is not displayed. Do not put a check to it.
- For "TRANSMISSION", "UNKWN" is displayed on "VDC/TCS/ABS" and "ICC". But put a check mark to "VDC/TCS/ABS" because "UNKWN" is listed on the column of reception diagnosis of the check sheet table.
- For "AIR PRESSURE MONITOR", "UNKWN" is not displayed. Do not put a check to it.
- For "BCM", "UNKWN" is displayed on "IPDM E/R". Put a check mark to it.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# TROUBLE DIAGNOSES WORK FLOW

[CAN]



4. For display control unit, put a check mark in the following procedure.
  - a. Copy to “CAN DIAG SUPPORT MONITOR Check Sheet” (B) from the display screen (A). Refer to [AV-188. "CAN Communication Line Check"](#) .
  - b. Read “CAN DIAG SUPPORT MONITOR Check Sheet” (B) with “Display control unit Translation Sheet” (C).
  - c. Check “UNKWN” with a check mark. Put a check mark to the check sheet table.

**NOTE:**

In “CAN DIAG SUPPORT MONITOR Check Sheet” (B), check marks are put to “CAN CIRC 7” and “CAN CIRC 9”. But, in the column of the check sheet table indication in “Display control unit Translation Sheet” (C), “IPDM E/R” is listed only for “CAN CIRC 7”. Therefore, put a check mark to “IPDM E/R” because “UNKWN” is listed on the column of reception diagnosis of the check sheet table.

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J

CAN DIAG SUPPORT MNTR		
METER A/C AMP		
TRANSMIT DIAG	OK	OK
ECM	OK	OK
TCM	OK	OK
BCM/SEC	OK	OK
VDC/TCS/ABS	UNKWN	0
IPDM E/R	-	-
DISPLAY	OK	OK
I-KEY	-	-
EPS	-	-
PRINT		Scroll Down
MODE	BACK	LIGHT COPY

CAN DIAG SUPPORT MNTR		
AUTO DRIVE POS.		
INITIAL DIAG	OK	
TRANSMIT DIAG	OK	
BCM/SEC	OK	
METER/M&A	OK	
TCM	OK	
PRINT		
MODE	BACK	LIGHT COPY

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

CAN DIAG SUPPORT MNTR		
METER A/C AMP		
TRANSMIT DIAG	-	-
DISPLAY	OK	OK
I-KEY	-	-
EPS	-	-
TIRE-P	OK	OK
PRINT		Scroll Up
MODE	BACK	LIGHT COPY

CAN DIAG SUPPORT MNTR		
ABS		
INITIAL DIAG	OK	
TRANSMIT DIAG	OK	
ECM	UNKWN	
TCM	UNKWN	
METER/M&A	UNKWN	
STRG	UNKWN	
ICC	UNKWN	
AWD/4WD	OK	
PRINT		
MODE	BACK	LIGHT COPY

**Check sheet table**

SELECT SYSTEM screen	Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS			
			ECM	I-KEY	TCM	TIRE-P	BCM/SEC	DISPLAY	METER/M&A	STRG	AWD/4WD	VDC/TCS/ABS	IPDM E/R					
ENGINE	-	NG	UNKWN	-	-	UNKWN	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	-	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
AIR PRESSURE MONITOR	No indication	NG	UNKWN	-	-	-	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
Display control unit	-	NG	UNKWN	UNKWN	-	-	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	-	-
METER A/C AMP	No indication	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	-	UNKWN	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
ALL MODE AWD/4WD	-	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
ABS	No indication	-	UNKWN	UNKWN	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-	CAN COMM CIRCUIT (U1000)	-

PKIB6158E

5. Confirm the unit name that “UNKWN” is displayed on the copy of “CAN DIAG SUPPORT MNTR” screen of “METER A/C AMP”, “AUTO DRIVE POS.”, “ALL MODE AWD/4WD” and “ABS” as well as “ENGINE”. And then, put a check mark to the check sheet table.

**NOTE:**

- For “METER A/C AMP”, “UNKWN” is displayed on “VDC/TCS/ABS” and “AWD/4WD”. Put a check mark to it.
- For “AUTO DRIVE POS.”, “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 “ABS”, “UNKWN” is displayed on “ECM”, “TCM”, “METER/M&A”, “STRG” and “ICC”. But put a check mark to “ECM”, “TCM” and “STRG” because “UNKWN” is listed on the column of reception diagnosis of the check sheet table.

LAN

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

The arranged results of CAN diagnosis support monitor

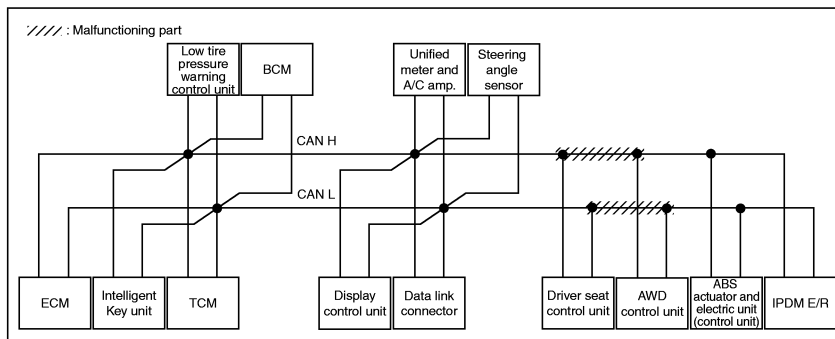
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR													SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										IPDM E/R					
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /4WD	VDC/TS /ABS						
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT [U1000]	CAN COMM CIRCUIT [U1001]
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
IPDM E/R	No indication	—	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 3  
Check harness between driver seat control unit and AWD control unit.

Check sheet results (example)

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR													SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										IPDM E/R					
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /4WD	VDC/TS /ABS						
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT [U1000]	CAN COMM CIRCUIT [U1001]
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—



PKIB6159E

## 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.

- Perform system diagnosis for possible causes identified.
- 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. [LAN-29, "CAN Communication Unit"](#) .



# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## 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	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

SYSTEM ENGINE

SELF-DIAG RESULTS

DTC RESULTS      TIME

CAN COMM CIRCUIT [U1001]      1t

SYSTEM INTELLIGENT KEY

SELF-DIAG RESULTS

DTC RESULTS      TIME

NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.

SYSTEM TRANSMISSION

SELF-DIAG RESULTS

DTC RESULTS      TIME

CAN COMM CIRCUIT [U1000]      PAST

SYSTEM AIR PRESSURE MONITOR

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 METER A/C AMP

SELF-DIAG RESULTS

DTC RESULTS      TIME

CAN COMM CIRCUIT [U1000]      1

SYSTEM AUTO DRIVE POS.

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

CAN COMM CIRCUIT [U1000]      1

SYSTEM ABS

SELF-DIAG RESULTS

DTC RESULTS      TIME

CAN COMM CIRCUIT [U1000]      1

SYSTEM IPDM E/R

SELF-DIAG RESULTS

DTC RESULTS      TIME

CAN COMM CIRCUIT [U1000]      PAST

PKIB6160E

- 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 "INTELLIGENT KEY", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
- For "TRANSMISSION", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.
- For "AIR PRESSURE MONITOR", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
- For "BCM", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
- For "METER A/C AMP", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.
- For "AUTO DRIVE POS.", "NO DTC IS DETECTED" is displayed. Do not put a check mark to it.
- For "ALL MODE AWD/4WD", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.
- For "ABS", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.
- For "IPDM E/R", "CAN COMM CIRCUIT [U1000]" is displayed. Put a check mark to it.

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

Check sheet table

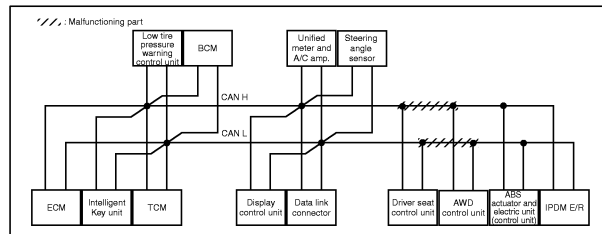
SELECT SYSTEM screen	Initial diagnosis	Trouble diagnosis	CAN DIAG SUPPORT MNTR													SELF-DIAG RESULTS			
			ECM	I-KEY	TCM	TIRE P	BCM /SEC	DISPL	METER /MMA	STRG	AWD/AC /HWD	VDC/CS /ABS	IPDM /E/R						
ENGINE	—	NG	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	CAN COMM CIRCUIT [U1000]	CAN COMM CIRCUIT [U1000]
INTELLIGENT KEY	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
TRANSMISSION	No indication	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AIR PRESSURE MONITOR	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
BCM	No indication	NG	UNKNW	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
Display control unit	—	NG	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—
METER/AC AMP	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AUTO DRIVE POS.	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ALL MODE AWD/HWD	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ABS	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
IPDM E/R	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—

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

### Case 3

Check harness between driver seat control unit and AWD control unit.

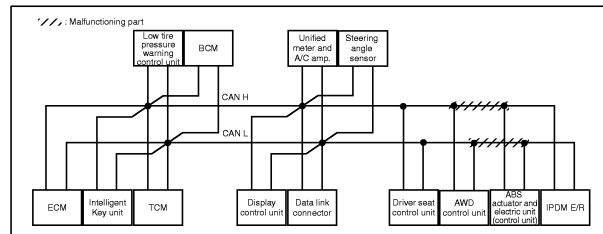
SELECT SYSTEM screen	Initial diagnosis	Trouble diagnosis	CAN DIAG SUPPORT MNTR													SELF-DIAG RESULTS			
			ECM	I-KEY	TCM	TIRE P	BCM /SEC	DISPL	METER /MMA	STRG	AWD/AC /HWD	VDC/CS /ABS	IPDM /E/R						
ENGINE	—	NG	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	CAN COMM CIRCUIT [U1000]	CAN COMM CIRCUIT [U1000]
INTELLIGENT KEY	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
TRANSMISSION	No indication	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AIR PRESSURE MONITOR	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
BCM	No indication	NG	UNKNW	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
Display control unit	—	NG	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—
METER/AC AMP	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AUTO DRIVE POS.	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ALL MODE AWD/HWD	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ABS	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
IPDM E/R	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—



### Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit).

SELECT SYSTEM screen	Initial diagnosis	Trouble diagnosis	CAN DIAG SUPPORT MNTR													SELF-DIAG RESULTS			
			ECM	I-KEY	TCM	TIRE P	BCM /SEC	DISPL	METER /MMA	STRG	AWD/AC /HWD	VDC/CS /ABS	IPDM /E/R						
ENGINE	—	NG	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	UNKNW	—	—	CAN COMM CIRCUIT [U1000]	CAN COMM CIRCUIT [U1000]
INTELLIGENT KEY	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
TRANSMISSION	No indication	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AIR PRESSURE MONITOR	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
BCM	No indication	NG	UNKNW	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
Display control unit	—	NG	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—
METER/AC AMP	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	UNKNW	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
AUTO DRIVE POS.	No indication	NG	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ALL MODE AWD/HWD	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
ABS	—	NG	UNKNW	UNKNW	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—
IPDM E/R	No indication	—	UNKNW	UNKNW	—	—	—	—	UNKNW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT [U1000]	—



PKIB6161E

### 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.

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

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

AKS00CHF

## CAN Diagnostic Support Monitor

### DESCRIPTION OF "CAN DIAG SUPPORT MNTR" SCREEN FOR ECM

(Example)	CAN DIAG SUPPORT MNTR	CAN DIAG SUPPORT MNTR																																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">ENGINE</th></tr> <tr><td></td><td style="text-align: center;">PRSNT</td></tr> <tr><td>INITIAL DIAG</td><td style="text-align: center;">OK</td></tr> <tr><td>TRANSMIT DIAG</td><td style="text-align: center;">OK</td></tr> <tr><td>TCM</td><td style="text-align: center;">OK</td></tr> <tr><td>VDC/TCS/ABS</td><td style="text-align: center;">OK</td></tr> <tr><td>METER/M&amp;A</td><td style="text-align: center;">OK</td></tr> <tr><td>ICC</td><td style="text-align: center;">UNKWN</td></tr> <tr><td>BCM/SEC</td><td style="text-align: center;">OK</td></tr> <tr><td>IPDM E/R</td><td style="text-align: center;">OK</td></tr> <tr><td>AWD/4WD/e4WD</td><td style="text-align: center;">OK</td></tr> <tr><td>PRINT</td><td style="text-align: center;">Scroll Down</td></tr> <tr><td>MODE</td><td>BACK LIGHT COPY</td></tr> </table>	ENGINE			PRSNT	INITIAL DIAG	OK	TRANSMIT DIAG	OK	TCM	OK	VDC/TCS/ABS	OK	METER/M&A	OK	ICC	UNKWN	BCM/SEC	OK	IPDM E/R	OK	AWD/4WD/e4WD	OK	PRINT	Scroll Down	MODE	BACK LIGHT COPY	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2">ENGINE</th></tr> <tr><td></td><td style="text-align: center;">PRSNT</td></tr> <tr><td>TRANSMIT DIAG</td><td style="text-align: center;">OK</td></tr> <tr><td>TCM</td><td style="text-align: center;">OK</td></tr> <tr><td>VDC/TCS/ABS</td><td style="text-align: center;">OK</td></tr> <tr><td>METER/M&amp;A</td><td style="text-align: center;">OK</td></tr> <tr><td>ICC</td><td style="text-align: center;">UNKWN</td></tr> <tr><td>BCM/SEC</td><td style="text-align: center;">OK</td></tr> <tr><td>IPDM E/R</td><td style="text-align: center;">OK</td></tr> <tr><td>AWD/4WD/e4WD</td><td style="text-align: center;">OK</td></tr> <tr><td>EPS</td><td style="text-align: center;">UNKWN</td></tr> <tr><td>PRINT</td><td style="text-align: center;">Scroll Up</td></tr> <tr><td>MODE</td><td>BACK LIGHT COPY</td></tr> </table>	ENGINE			PRSNT	TRANSMIT DIAG	OK	TCM	OK	VDC/TCS/ABS	OK	METER/M&A	OK	ICC	UNKWN	BCM/SEC	OK	IPDM E/R	OK	AWD/4WD/e4WD	OK	EPS	UNKWN	PRINT	Scroll Up	MODE
ENGINE																																																					
	PRSNT																																																				
INITIAL DIAG	OK																																																				
TRANSMIT DIAG	OK																																																				
TCM	OK																																																				
VDC/TCS/ABS	OK																																																				
METER/M&A	OK																																																				
ICC	UNKWN																																																				
BCM/SEC	OK																																																				
IPDM E/R	OK																																																				
AWD/4WD/e4WD	OK																																																				
PRINT	Scroll Down																																																				
MODE	BACK LIGHT COPY																																																				
ENGINE																																																					
	PRSNT																																																				
TRANSMIT DIAG	OK																																																				
TCM	OK																																																				
VDC/TCS/ABS	OK																																																				
METER/M&A	OK																																																				
ICC	UNKWN																																																				
BCM/SEC	OK																																																				
IPDM E/R	OK																																																				
AWD/4WD/e4WD	OK																																																				
EPS	UNKWN																																																				
PRINT	Scroll Up																																																				
MODE	BACK LIGHT COPY																																																				
	PKIB6070E																																																				

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

#### Display Results (Present)

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

# TROUBLE DIAGNOSES WORK FLOW

**[CAN]**

## 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

PKIB6071E

“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 unified meter and A/C amp.	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 finds malfunction in the past even if it is normal or there is a malfunction at present. Also, displays when diagnosis is not performed. It increase like 0→1→2...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. Keep this condition until resetting it.
- –: Undiagnosed

# TROUBLE DIAGNOSES WORK FLOW

**[CAN]**

## DESCRIPTION OF “CAN DIAG SUPPORT MNTR” SCREEN FOR TCM

(Example)

CAN DIAG SUPPORT MNTR			
TRANSMISSION			
		PRSN	
INITIAL DIAG		OK	
TRANSMIT DIAG		OK	
ECM		OK	
VDC/TCS/ABS		OK	
METER/M&A		OK	
ICC		UNKWN	
PRINT			
MODE	BACK	LIGHT	COPY

PKIB6072E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
TRANSMISSION	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	ECM	Make sure of normal reception from ECM.	OK/UNKWN
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN
	ICC	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 LOW TIRE PRESSURE WARNING CONTROL UNIT

(Example)

CAN DIAG SUPPORT MNTR			
AIR PRESSURE MONITOR			
		PRSN	
INITIAL DIAG		OK	
TRANSMIT DIAG		OK	
METER/M&A		OK	
PRINT			
MODE	BACK	LIGHT	COPY

PKIB6073E

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present
AIR PRESSURE MONITOR	INITIAL DIAG	Make sure that microcomputer in ECU works normally.	OK/NG
	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN
	METER/M&A	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWN

### Display Results (Present)

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## 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

PKIB6074E

“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 unified meter and A/C amp.	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.

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

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

(Example)	CAN DIAG SUPPORT MNTR	CAN DIAG SUPPORT MNTR																																																																								
	METER A/C AMP	METER A/C AMP																																																																								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">PRSNT</td> <td style="text-align: center;">PAST</td> </tr> <tr> <td>TRANSMIT DIAG</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>ECM</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>TCM</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>BCM/SEC</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>VDC/TCS/ABS</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>IPDM E/R</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>DISPLAY</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>I-KEY</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>EPS</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>PRINT</td> <td style="text-align: center;">-</td> <td style="text-align: center;">Scroll Down</td> </tr> <tr> <td>MODE</td> <td style="text-align: center;">BACK</td> <td style="text-align: center;">LIGHT COPY</td> </tr> </table>		PRSNT	PAST	TRANSMIT DIAG	OK	OK	ECM	OK	OK	TCM	OK	OK	BCM/SEC	OK	OK	VDC/TCS/ABS	OK	OK	IPDM E/R	-	-	DISPLAY	OK	OK	I-KEY	-	-	EPS	-	-	PRINT	-	Scroll Down	MODE	BACK	LIGHT COPY	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">PRSNT</td> <td style="text-align: center;">PAST</td> </tr> <tr> <td>IPDM E/R</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>DISPLAY</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>I-KEY</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>EPS</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>AWD/4WD</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>e4WD</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>ICC</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>LANE KEEP</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>TIRE-P</td> <td style="text-align: center;">OK</td> <td style="text-align: center;">OK</td> </tr> <tr> <td>PRINT</td> <td style="text-align: center;">-</td> <td style="text-align: center;">Scroll Up</td> </tr> <tr> <td>MODE</td> <td style="text-align: center;">BACK</td> <td style="text-align: center;">LIGHT COPY</td> </tr> </table>		PRSNT	PAST	IPDM E/R	-	-	DISPLAY	OK	OK	I-KEY	-	-	EPS	-	-	AWD/4WD	OK	OK	e4WD	-	-	ICC	-	-	LANE KEEP	-	-	TIRE-P	OK	OK	PRINT	-	Scroll Up	MODE	BACK	LIGHT COPY
	PRSNT	PAST																																																																								
TRANSMIT DIAG	OK	OK																																																																								
ECM	OK	OK																																																																								
TCM	OK	OK																																																																								
BCM/SEC	OK	OK																																																																								
VDC/TCS/ABS	OK	OK																																																																								
IPDM E/R	-	-																																																																								
DISPLAY	OK	OK																																																																								
I-KEY	-	-																																																																								
EPS	-	-																																																																								
PRINT	-	Scroll Down																																																																								
MODE	BACK	LIGHT COPY																																																																								
	PRSNT	PAST																																																																								
IPDM E/R	-	-																																																																								
DISPLAY	OK	OK																																																																								
I-KEY	-	-																																																																								
EPS	-	-																																																																								
AWD/4WD	OK	OK																																																																								
e4WD	-	-																																																																								
ICC	-	-																																																																								
LANE KEEP	-	-																																																																								
TIRE-P	OK	OK																																																																								
PRINT	-	Scroll Up																																																																								
MODE	BACK	LIGHT COPY																																																																								
		PKIB6075E																																																																								

“SELECT SYSTEM” screen	“CAN DIAG SUPPORT MNTR” screen	Description	Present	Past
METER A/C AMP	TRANSMIT DIAG	Make sure of normal transmission.	OK/UNKWN/-	OK/0/1 – 39/-
	ECM	Make sure of normal reception from ECM.	OK/UNKWN/-	
	TCM	Make sure of normal reception from TCM.	OK/UNKWN/-	
	BCM/SEC	Make sure of normal reception from BCM.	OK/UNKWN/-	
	VDC/TCS/ABS	Make sure of normal reception from ABS actuator and electric unit (control unit).	OK/UNKWN/-	
	IPDM E/R	IPDM E/R is not diagnosed.	-	
	DISPLAY	Make sure of normal reception from display control unit (with navigation system models).	OK/UNKWN/-	
		Make sure of normal reception from display unit (without navigation system models).	OK/UNKWN/-	
	I-KEY	I-KEY is not diagnosed.	-	
	EPS	EPS is not diagnosed.	-	
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN/-	
	e4WD	e4WD is not diagnosed.	-	
	ICC	ICC is not diagnosed.	-	
LANE KEEP	LANE KEEP is not diagnosed.	-		
TIRE-P	Make sure of normal reception from low tire pressure warning 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 finds malfunction in the past even if it is normal or there is a malfunction at present. Also, displays when diagnosis is not performed. It increase like 0→1→2...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. Keep this condition until resetting it.
- -: Undiagnosed

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

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

(Example)

CAN DIAG SUPPORT MNTR			
AUTO DRIVE POS.			
		PRSNT	
INITIAL DIAG	OK		
TRANSMIT DIAG	OK		
BCM/SEC	OK		
METER/M&A	OK		
TCM	OK		
PRINT			
MODE	BACK	LIGHT	COPY

PKIB6076E

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

### Display Results (Present)

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

## 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

PKIB6077E

"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 ABS actuator and electric unit (control unit). (VDC models)		OK/UNKWN
		VDC/TCS/ABS is not diagnosed.(ABS models)		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 unified meter and A/C amp.	OK/UNKWN	

### Display Results (Present)

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



# TROUBLE DIAGNOSES WORK FLOW

[CAN]

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

### ABS models

(Example)

CAN DIAG SUPPORT MNTR			
ABS			
		PRSNT	
INITIAL DIAG	OK		
TRANSMIT DIAG	OK		
ECM	OK		
PRINT			
MODE	BACK	LIGHT	COPY

PKIA8949E

“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

### Display Results (Present)

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

### VDC models

(Example)

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

PKIB6078E

“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	METER/M&A is not diagnosed.	UNKWN
	STRG	Make sure of normal reception from steering angle sensor.	OK/UNKWN
	ICC	ICC is not diagnosed.	UNKWN
	AWD/4WD	Make sure of normal reception from AWD control unit.	OK/UNKWN

### Display Results (Present)

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

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## 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

PKIB6079E

“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 finds malfunction in the past even if it is normal or there is a malfunction at present. Also, displays when diagnosis is not performed. It increase like 0→1→2...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. Keep this condition until resetting it.
- –: Undiagnosed

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

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

(Example)

CAN DIAG SUPPORT MONITOR			
CAN_COMM	OK	0	Delete
CAN_CIRC_1	OK	0	
CAN_CIRC_2	OK	0	
CAN_CIRC_3	OK	0	
CAN_CIRC_4	OK	0	
CAN_CIRC_5	OK	0	
CAN_CIRC_6	OK	0	
CAN_CIRC_7	OK	0	
CAN_CIRC_8	OK	0	
CAN_CIRC_9	UNKWN	0	

PKIB6080E

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

### Display Results (Present)

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

### Display Results: Error Counter (Reference)

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

# TROUBLE DIAGNOSES WORK FLOW

[CAN]

## DESCRIPTION OF "CAN DIAG MNTR" SCREEN FOR DISPLAY UNIT

(Example)

```

CAN DIAG MNTR
  CANCOMM OK
  CAN1     OK
  CAN2     OK
    
```

SKIB2447E

Unit name	Diagnosis item	Description	"CAN DIAG MNTR" screen
Display unit	CAN COMM	Make sure that microcomputer in ECU works normally.	OK/NG
	CAN 1	Make sure of normal transmission.	OK/UNKWVN
	CAN 2	Make sure of normal reception from BCM.	OK/UNKWVN
	CAN 3	Make sure of normal reception from ECM.	OK/UNKWVN
	CAN 4	CAN 4 is not diagnosed.	OK
	CAN 5	Make sure of normal reception from unified meter and A/C amp.	OK/UNKWVN
	CAN 6	Make sure of normal reception from low tire pressure warning control unit.	OK/UNKWVN
	CAN 7	Make sure of normal reception from IPDM E/R.	OK/UNKWVN
	CAN 8	CAN 8 is not diagnosed.	OK
CAN 9	CAN 9 is not diagnosed.	UNKWVN	

### Display Results (Present)

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

## CAN COMMUNICATION

PFP:23710

### System Description

AKS004YP

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

### CAN Communication Unit

AKS00ASC

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

Body type	Wagon									
Axle	2WD					AWD				
Engine	VQ35DE									
Transmission	CVT									
Brake control	ABS			VDC		ABS			VDC	
Automatic drive positioner		×	×	×	×		×	×	×	×
Intelligent Key system		×	×	×	×		×	×	×	×
Low tire pressure warning system				×	×				×	×
Navigation system			×		×			×		×
CAN system type	1	2	3	4	5	6	7	8	9	10
CAN system trouble diagnosis	<a href="#">LAN-43</a>	<a href="#">LAN-73</a>	<a href="#">LAN-109</a>	<a href="#">LAN-145</a>	<a href="#">LAN-185</a>	<a href="#">LAN-225</a>	<a href="#">LAN-258</a>	<a href="#">LAN-298</a>	<a href="#">LAN-338</a>	<a href="#">LAN-382</a>

×: Applicable

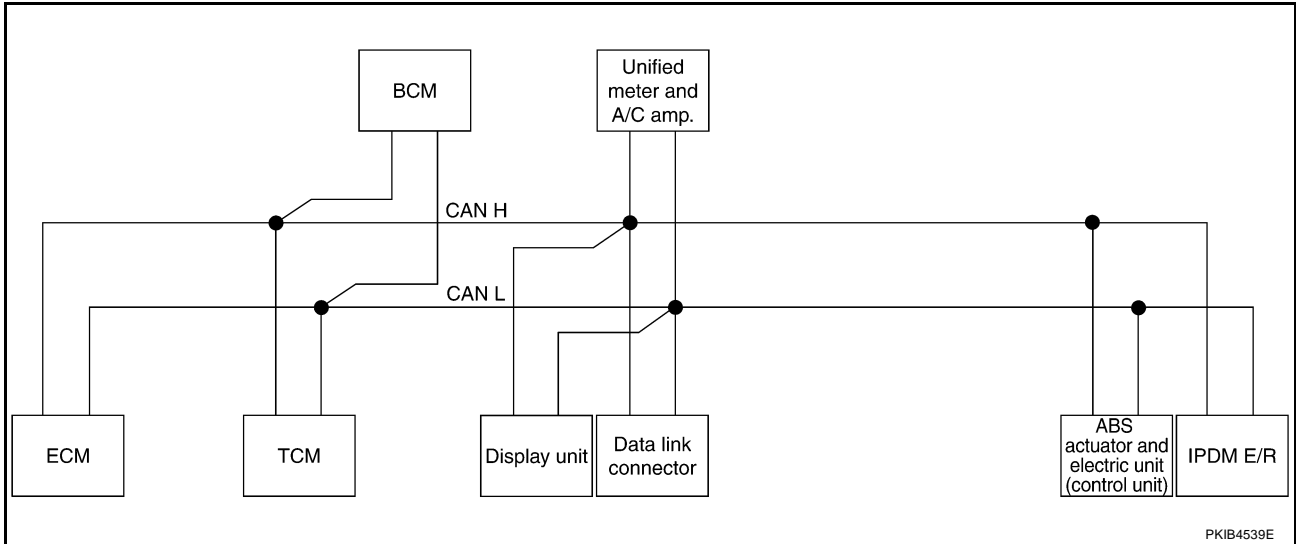
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

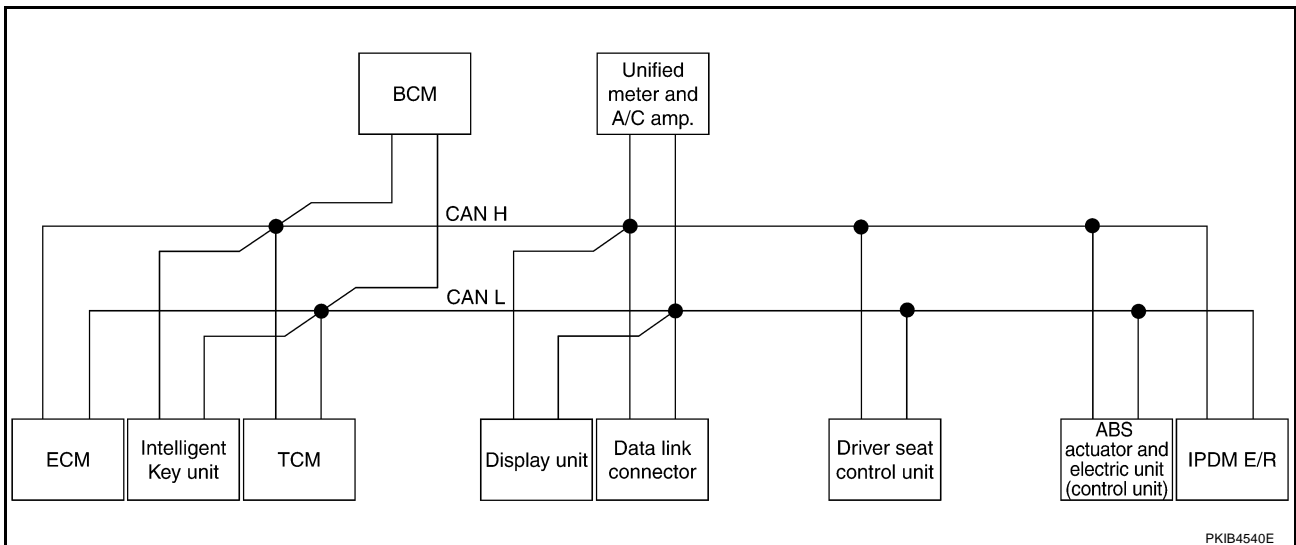
## TYPE 1/TYPE 2/TYPE 3

### System Diagram

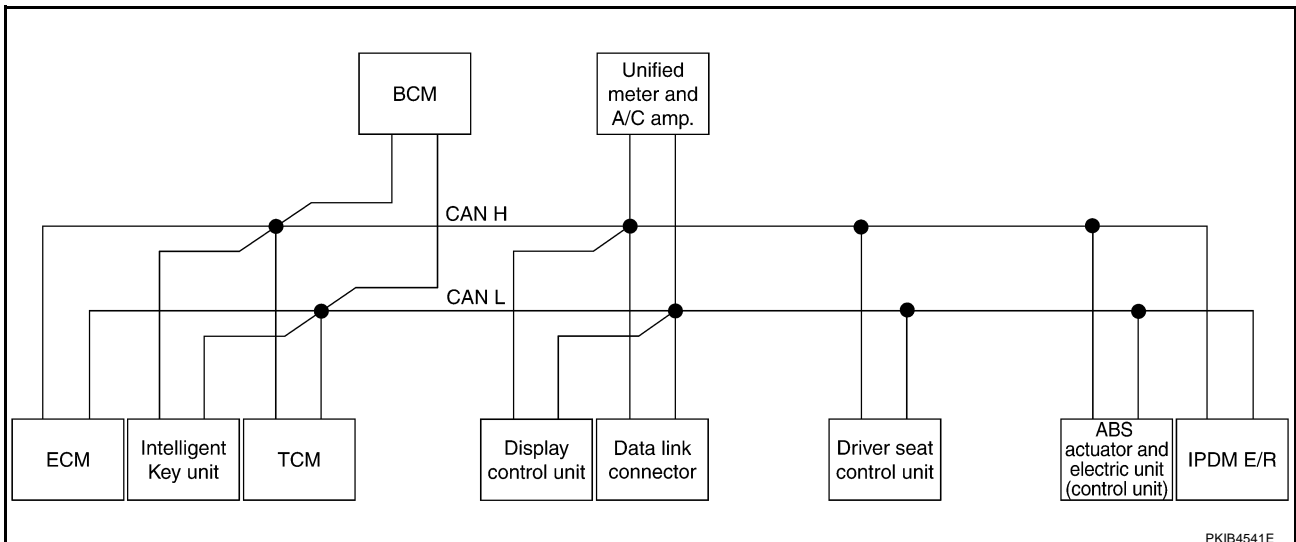
- Type1



- Type2



- Type3



# CAN COMMUNICATION

[CAN]

## Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	Intelligent Key unit	TCM	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (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			
Closed throttle position signal	T		R							
Cooling fan speed request signal	T									R
Engine and CVT integrated control signal	T		R							
	R		T							
Engine coolant temperature signal	T						R			
Engine speed signal	T	R	R			R	R			
Engine status signal	T			R						
Fuel consumption monitor signal	T						R			
					R	R	T			
Malfunction indicator lamp signal	T						R			
Wide open throttle position signal	T		R							
Door lock/unlock request signal		T		R						
Hazard request signal		T		R						
Hazard warning lamp request signal		T		R						
Ignition knob switch signal		T		R						
Panic alarm request signal		T		R						
Power window open request signal		T		R						
Starter permission signal		T		R						
CVT self-diagnosis signal	R		T							
Input shaft revolution signal	R		T							
Output shaft revolution signal	R		T							
CVT position indicator signal			T				R			
Manual mode indicator signal			T				R			
P range signal			T					R		
Second position indicator signal			T				R			
Door lock/unlock status signal		R		T						
Door switch signal		R		T	R	R	R	R		R
A/C switch signal	R			T						
Blower fan motor switch signal	R			T						
Buzzer output signal				T			R			
Front fog lights request signal				T						R
Front wiper request signal				T						R
High beam request signal				T			R			R

A

B

C

D

E

F

G

H

I

J

LAN

L

M

# CAN COMMUNICATION

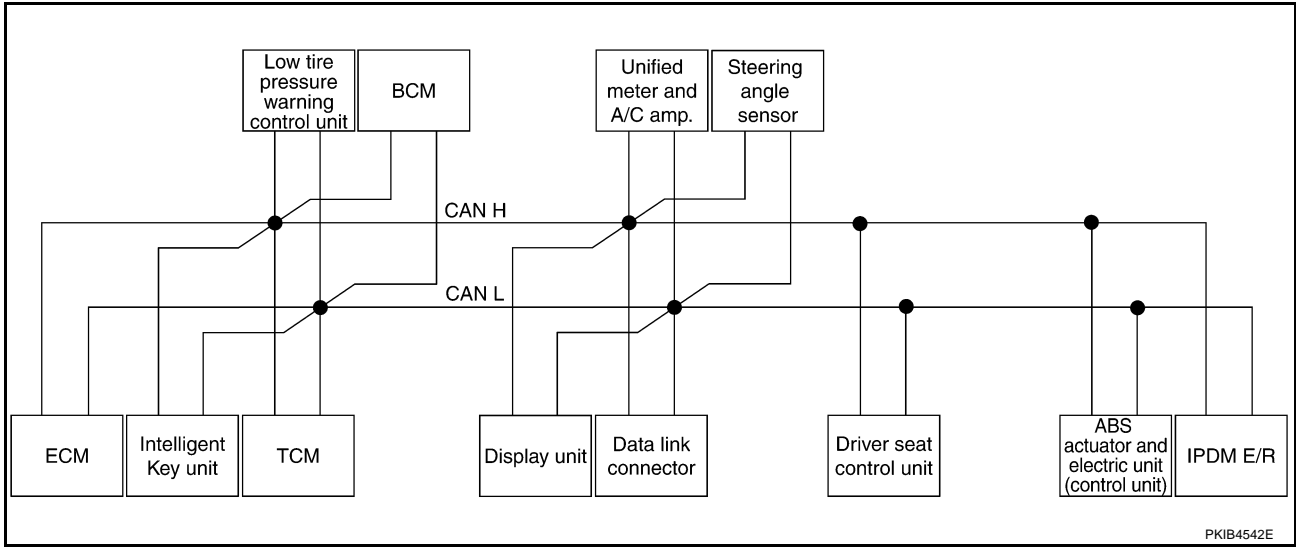
[CAN]

Signals	ECM	Intelligent Key unit	TCM	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Horn chirp signal				T						R
Ignition switch signal				T				R		R
Key fob door unlock signal				T				R		
Key fob ID signal				T				R		
Key switch signal				T				R		
Low beam request signal				T						R
Oil pressure switch signal				T			R			
				R						T
Position lights request signal				T			R			R
Rear window defogger switch signal				T						R
Sleep request 1 signal				T			R			
Sleep request 2 signal				T						R
System setting signal				R	T	T		R		
				T	R	R		T		
Theft warning horn request signal				T						R
Turn indicator signal				T			R			
A/C switch/indicator signal					T	T	R			
					R	R	T			
Distance to empty signal					R	R	T			
Fuel level low warning signal					R	R	T			
Vehicle speed signal			R				R		T	
	R	R		R		R	T	R		
Seat belt buckle switch 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			
Second position signal			R				T			
Stop lamp switch signal			R				T			
Fuel level sensor signal	R						T			
ABS warning lamp signal							R		T	
Brake warning lamp signal							R		T	
ABS operation signal			R						T	
Rear window defogger control signal	R				R	R				T
Front wiper stop position signal				R						T
High beam status signal	R									T
Low beam status signal	R									T

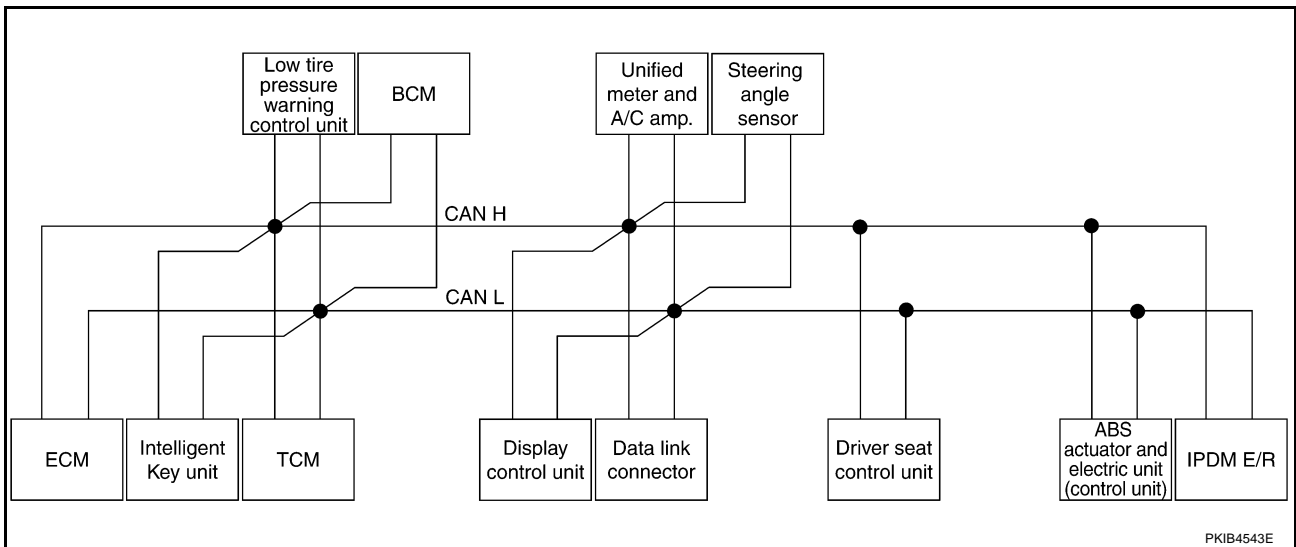


## TYPE 4/TYPE 5 System Diagram

- Type4



- Type5



## Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
A/C compressor request signal	T											R
Accelerator pedal position signal	T		R								R	
ASCD CRUISE lamp signal	T							R				
ASCD SET lamp signal	T							R				
Closed throttle position signal	T		R									
Cooling fan speed request signal	T											R

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# CAN COMMUNICATION

[CAN]

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine and CVT integrated control signal	T		R									
	R		T									
Engine coolant temperature signal	T							R				
Engine speed signal	T	R	R				R	R			R	
Engine status signal	T				R							
Fuel consumption monitor signal	T							R				
						R	R	T				
Malfunction indicator lamp signal	T							R				
Wide open throttle position signal	T		R									
Door lock/unlock request signal		T			R							
Hazard request signal		T			R							
Hazard warning lamp request signal		T			R							
Ignition knob switch signal		T			R							
Panic alarm request signal		T			R							
Power window open request signal		T			R							
Starter permission signal		T			R							
CVT self-diagnosis signal	R		T									
Input shaft revolution signal	R		T									
Output shaft revolution signal	R		T									
CVT position indicator signal			T					R			R	
Manual mode indicator signal			T					R				
P range signal			T							R	R	
Second position indicator signal			T					R			R	
Tire pressure data signal				T		R	R					
Tire pressure signal				T				R				
Door lock/unlock status signal		R			T							
Door switch signal		R			T	R	R	R		R		R
A/C switch signal	R				T							
Blower fan motor switch signal	R				T							
Buzzer output signal					T			R				
Front fog lights request signal					T							R
Front wiper request signal					T							R
High beam request signal					T			R				R
Horn chirp signal					T							R
Ignition switch signal					T					R		R
Key fob door unlock signal					T					R		

# CAN COMMUNICATION

[CAN]

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Key fob ID signal					T					R		
Key switch signal					T					R		
Low beam request signal					T							R
Oil pressure switch signal					T			R				
					R							T
Position lights request signal					T			R				R
Rear window defogger switch signal					T							R
Sleep request 1 signal					T			R				
Sleep request 2 signal					T							R
System setting signal					R	T	T			R		
					T	R	R			T		
Theft warning horn request signal					T							R
Turn indicator signal					T			R				
A/C switch/indicator signal						T	T	R				
						R	R	T				
Distance to empty signal						R	R	T				
Fuel level low warning signal						R	R	T				
Vehicle speed signal			R					R			T	
	R	R		R	R		R	T		R		
Seat belt buckle switch 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				
Second position signal			R					T				
Stop lamp switch signal			R					T				
Fuel level sensor signal	R							T				
Steering angle sensor signal									T		R	
ABS warning lamp signal								R			T	
Brake warning lamp signal								R			T	
SLIP indicator lamp signal								R			T	
VDC OFF indicator lamp signal								R			T	
VDC operation signal			R								T	
Rear window defogger control signal	R					R	R					T
Front wiper stop position signal					R							T
High beam status signal	R											T
Low beam status signal	R											T

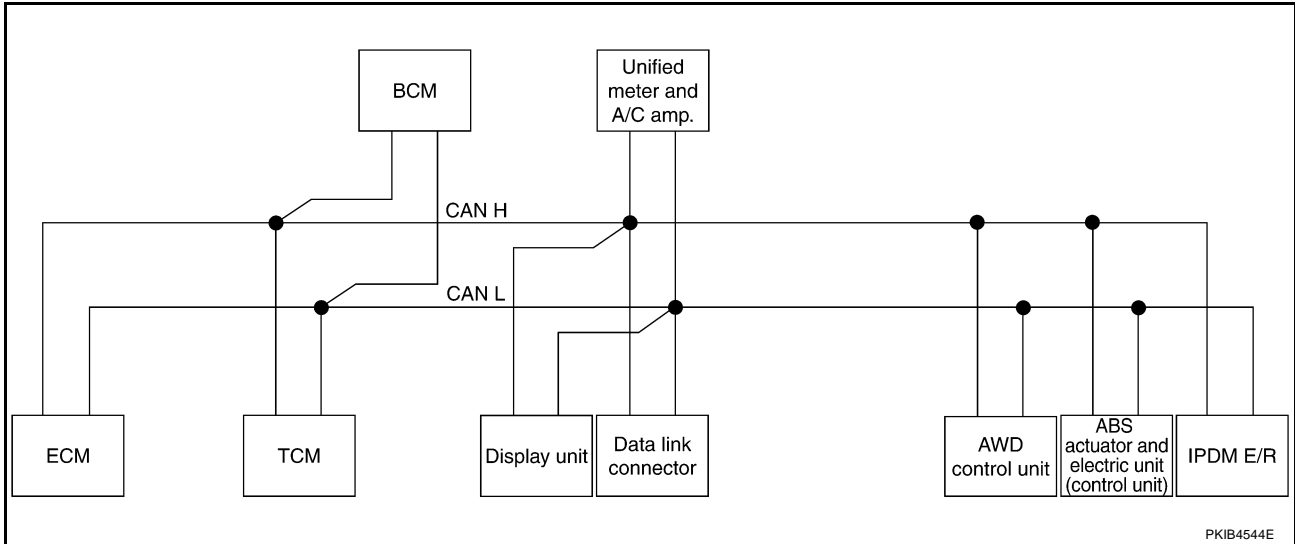
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

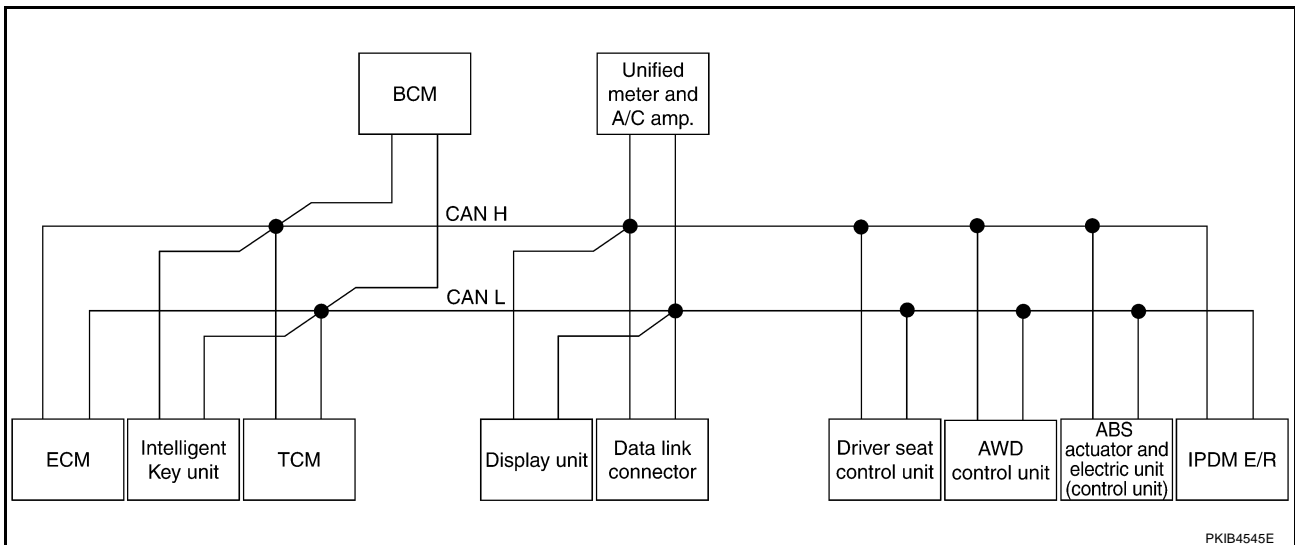
## TYPE 6/TYPE 7/TYPE 8

### System Diagram

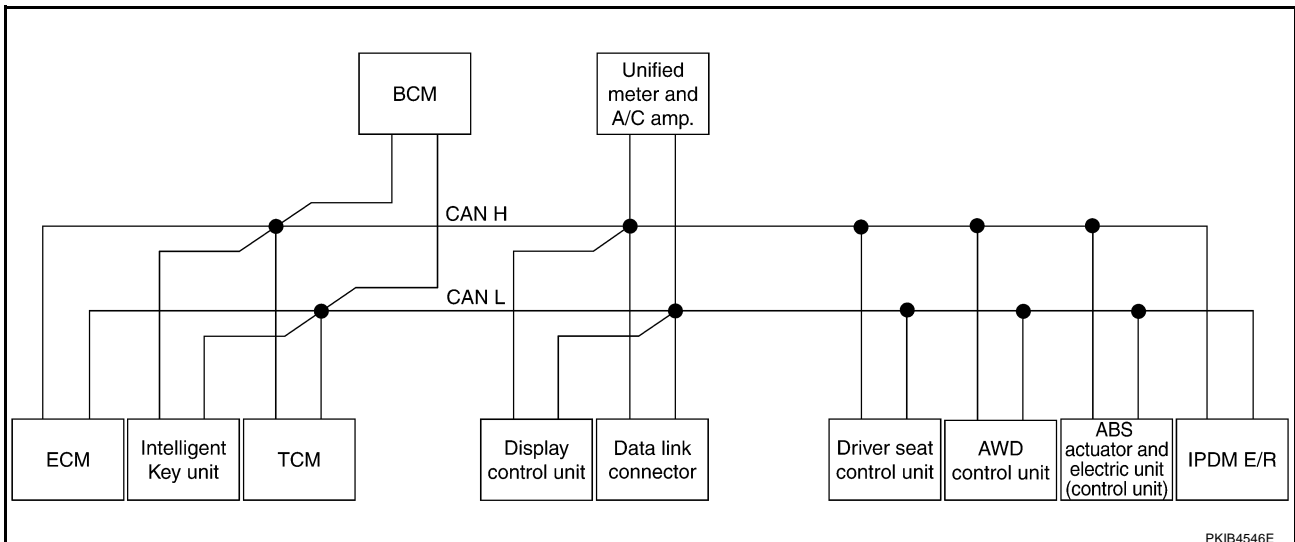
- Type6



- Type7



- Type8



# CAN COMMUNICATION

[CAN]

## Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	Intelligent Key unit	TCM	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPDM E/R
A/C compressor request signal	T										R
Accelerator pedal position signal	T		R						R		
ASCD CRUISE lamp signal	T					R					
ASCD SET lamp signal	T					R					
Closed throttle position signal	T		R								
Cooling fan speed request signal	T										R
Engine and CVT integrated control signal	T		R								
	R		T								
Engine coolant temperature signal	T					R					
Engine speed signal	T	R	R			R	R		R		
Engine status signal	T			R							
Fuel consumption monitor signal	T					R					
					R	R	T				
Malfunction indicator lamp signal	T					R					
Wide open throttle position signal	T		R								
Door lock/unlock request signal		T		R							
Hazard request signal		T		R							
Hazard warning lamp request signal		T		R							
Ignition knob switch signal		T		R							
Panic alarm request signal		T		R							
Power window open request signal		T		R							
Starter permission signal		T		R							
CVT self-diagnosis signal	R		T								
Input shaft revolution signal	R		T								
Output shaft revolution signal	R		T								
CVT position indicator signal			T			R					
Manual mode indicator signal			T			R					
P range signal			T					R			
Second position indicator signal			T			R					
Door lock/unlock status signal		R		T							
Door switch signal		R		T	R	R	R	R			R
A/C switch signal	R			T							
Blower fan motor switch signal	R			T							
Buzzer output signal				T		R					
Front fog lights request signal				T							R

# CAN COMMUNICATION

[CAN]

Signals	ECM	Intelligent Key unit	TCM	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Front wiper request signal				T							R
High beam request signal				T			R				R
Horn chirp signal				T							R
Ignition switch signal				T				R			R
Key fob door unlock signal				T				R			
Key fob ID signal				T				R			
Key switch signal				T				R			
Low beam request signal				T							R
Oil pressure switch signal				T			R				
				R							T
Position lights request signal				T			R				R
Rear window defogger switch signal				T							R
Sleep request 1 signal				T			R				
Sleep request 2 signal				T							R
System setting signal				R	T	T		R			
				T	R	R		T			
Theft warning horn request signal				T							R
Turn indicator signal				T			R				
A/C switch/indicator signal					T	T	R				
					R	R	T				
Distance to empty signal					R	R	T				
Fuel level low warning signal					R	R	T				
Vehicle speed signal			R				R		R	T	
	R	R		R		R	T	R			
Seat belt buckle switch 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				
Second position signal			R				T				
Stop lamp switch signal									R	T	
			R				T				
Fuel level sensor signal	R						T				
AWD lock switch signal							T		R		
Parking brake switch signal							T		R		
AWD lock indicator lamp signal							R		T		
AWD warning lamp signal							R		T		

# CAN COMMUNICATION

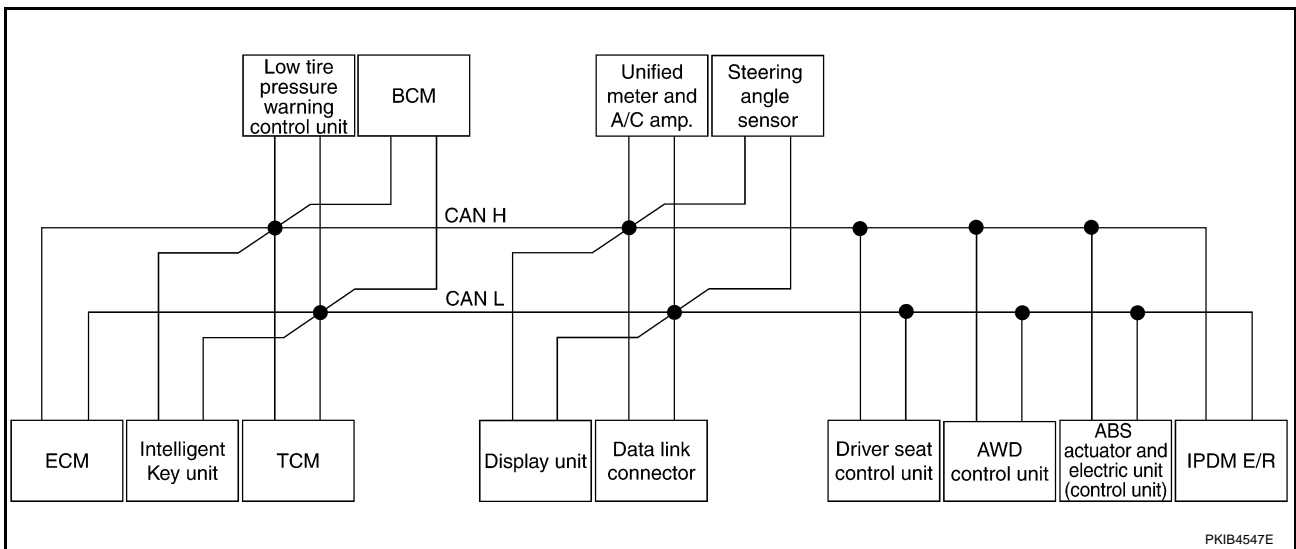
[CAN]

Signals	ECM	Intelligent Key unit	TCM	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ABS warning lamp signal							R			T	
Brake warning lamp signal							R			T	
ABS operation signal			R							T	
Rear window defogger control signal	R				R	R					T
Front wiper stop position signal				R							T
High beam status signal	R										T
Low beam status signal	R										T

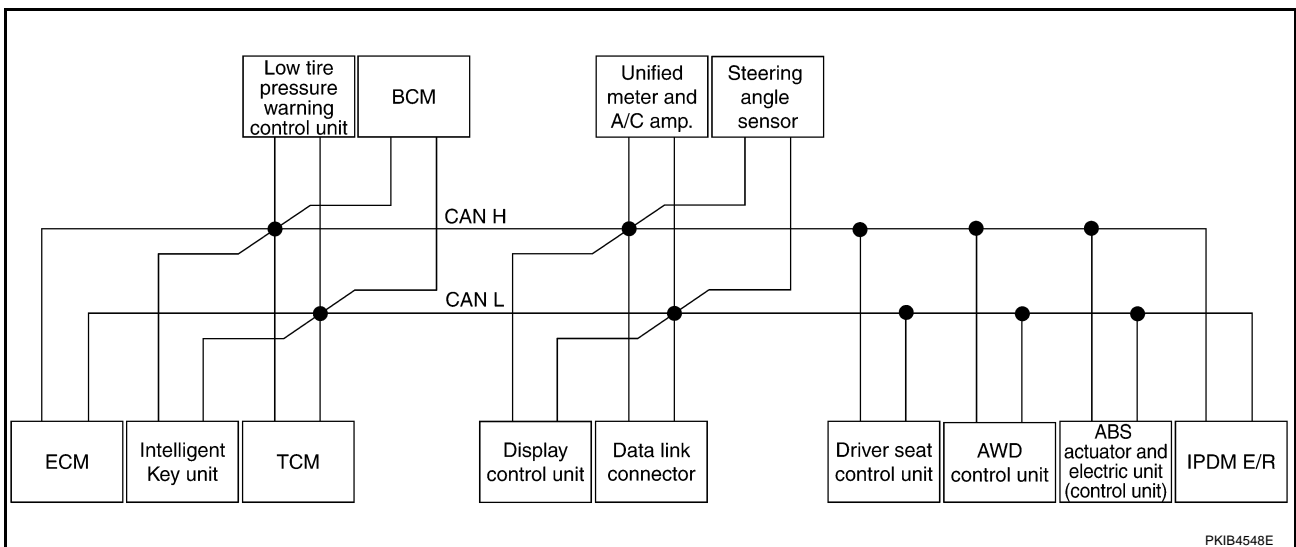
## TYPE 9/TYPE 10

### System Diagram

- Type9



- Type10



# CAN COMMUNICATION

[CAN]

## Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPD M E/R
A/C compressor request signal	T												R
Accelerator pedal position signal	T		R								R	R	
ASCD CRUISE lamp signal	T							R					
ASCD SET lamp signal	T							R					
Closed throttle position signal	T		R										
Cooling fan speed request signal	T												R
Engine and CVT integrated control signal	T		R										
	R		T										
Engine coolant temperature signal	T							R					
Engine speed signal	T	R	R				R	R			R	R	
Engine status signal	T				R								
Fuel consumption monitor signal	T							R					
						R	R	T					
Malfunction indicator lamp signal	T							R					
Wide open throttle position signal	T		R										
Door lock/unlock request signal		T			R								
Hazard request signal		T			R								
Hazard warning lamp request signal		T			R								
Ignition knob switch signal		T			R								
Panic alarm request signal		T			R								
Power window open request signal		T			R								
Starter permission signal		T			R								
CVT self-diagnosis signal	R		T										
Input shaft revolution signal	R		T										
Output shaft revolution signal	R		T										
CVT position indicator signal			T					R				R	
Manual mode indicator signal			T					R					
P range signal			T							R		R	
Second position indicator signal			T					R				R	
Tire pressure data signal				T		R	R						
Tire pressure signal				T				R					
Door lock/unlock status signal		R			T								
Door switch signal		R			T	R	R	R		R			R
A/C switch signal	R				T								
Blower fan motor switch signal	R				T								
Buzzer output signal					T			R					



# CAN COMMUNICATION

[CAN]

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPD ME/R
Front fog lights request signal					T								R
Front wiper request signal					T								R
High beam request signal					T			R					R
Horn chirp signal					T								R
Ignition switch signal					T					R			R
Key fob door unlock signal					T					R			
Key fob ID signal					T					R			
Key switch signal					T					R			
Low beam request signal					T								R
Oil pressure switch signal					T			R					
					R								T
Position lights request signal					T			R					R
Rear window defogger switch signal					T								R
Sleep request 1 signal					T			R					
Sleep request 2 signal					T								R
System setting signal					R	T	T			R			
					T	R	R			T			
Theft warning horn request signal					T								R
Turn indicator signal					T			R					
A/C switch/indicator signal						T	T	R					
						R	R	T					
Distance to empty signal						R	R	T					
Fuel level low warning signal						R	R	T					
Vehicle speed signal			R					R			R	T	
	R	R		R	R		R	T		R			
Seat belt buckle switch 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					
Second position signal			R					T					
Stop lamp switch signal											R	T	
			R					T					
Fuel level sensor signal	R							T					
AWD lock switch signal								T			R		
Parking brake switch signal								T			R		
Steering angle sensor signal									T			R	
AWD lock indicator lamp signal								R			T		

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

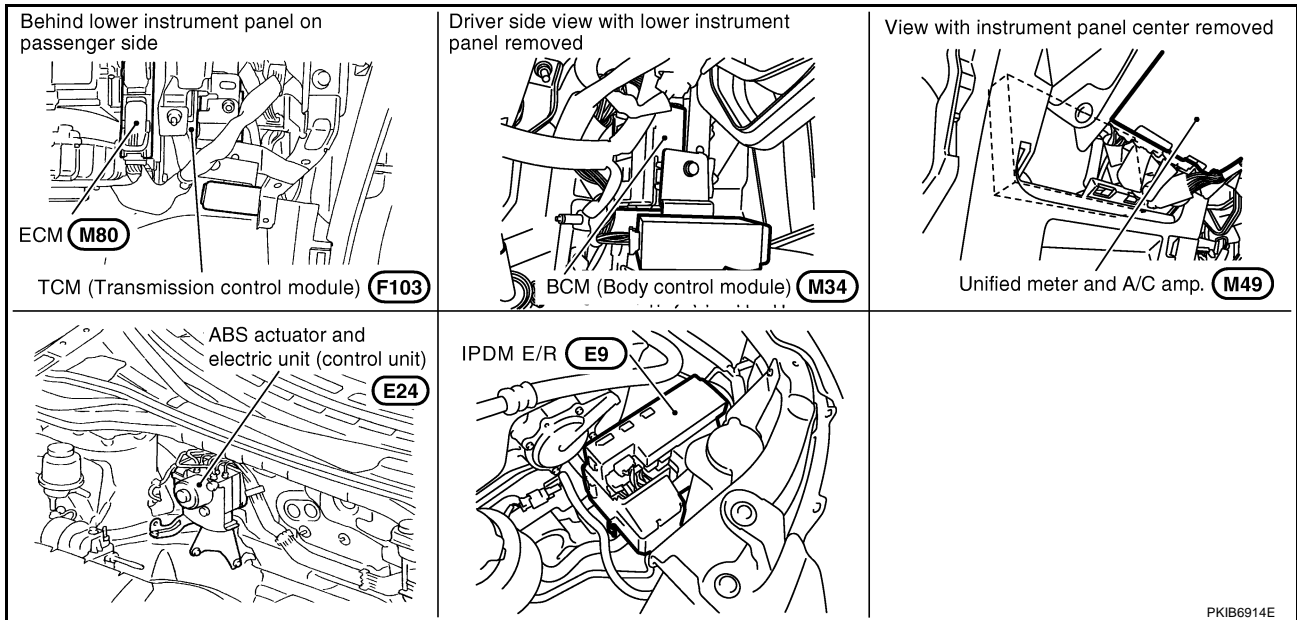
# CAN COMMUNICATION

[CAN]

Signals	ECM	Intelligent Key unit	TCM	Low tire pressure warning control unit	BCM	Display unit	Display control unit	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	AWD control unit	ABS actuator and electric unit (control unit)	IPD M E/R
AWD warning lamp signal								R			T		
ABS warning lamp signal								R				T	
Brake warning lamp signal								R				T	
SLIP indicator lamp signal								R				T	
VDC OFF indicator lamp signal								R				T	
VDC operation signal			R									T	
Rear window defogger control signal	R					R	R						T
Front wiper stop position signal					R								T
High beam status signal	R												T
Low beam status signal	R												T

## CAN SYSTEM (TYPE 1)

### Component Parts and Harness Connector Location



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

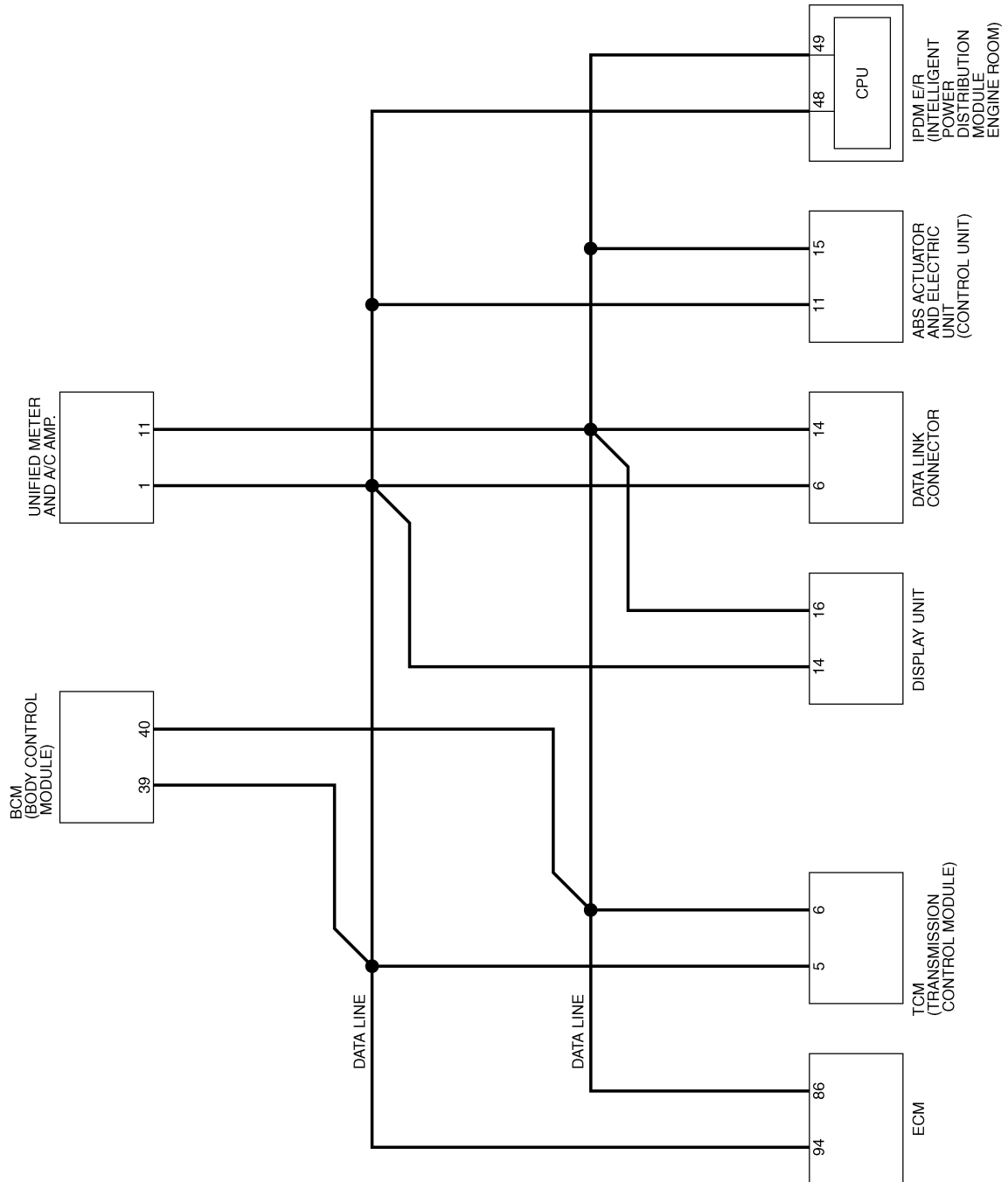
LAN

# CAN SYSTEM (TYPE 1)

[CAN]

## Schematic

AKS0069A



TKWB0821E

# CAN SYSTEM (TYPE 1)

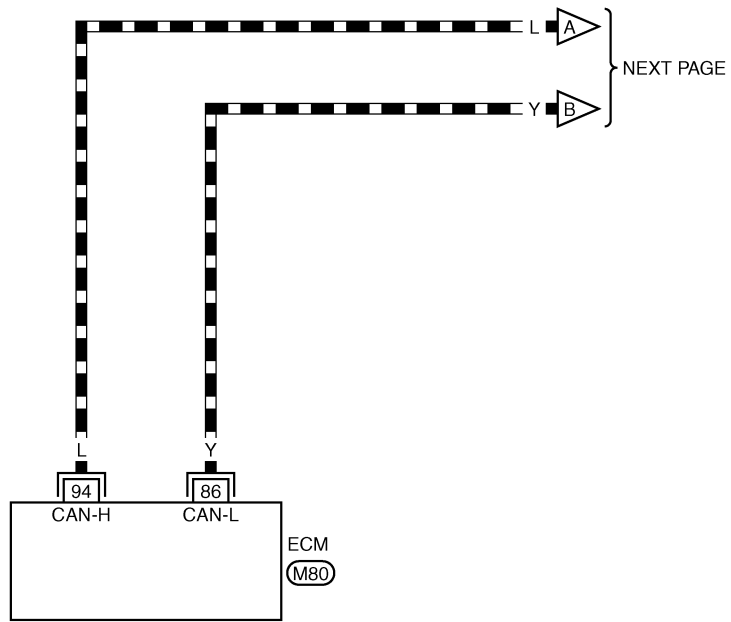
[CAN]

## Wiring Diagram - CAN -

AKS0068U

### LAN-CAN-01

▬ : DATA LINE



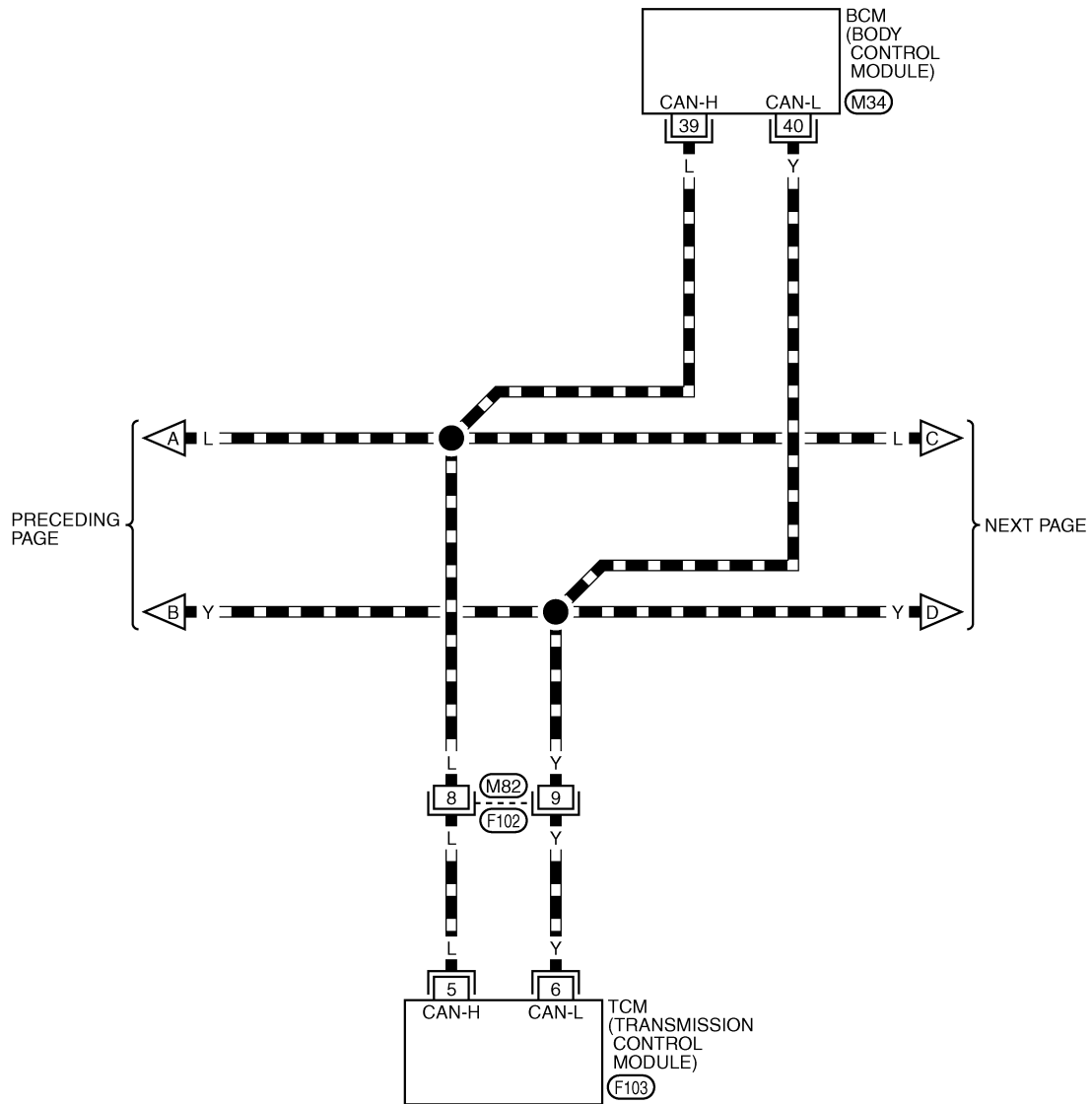
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

TKWB0822E

## LAN-CAN-02

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102)	W

REFER TO THE FOLLOWING.  
 (M34), (F103) -ELECTRICAL  
 UNITS

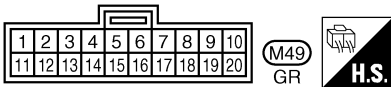
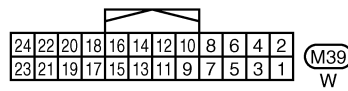
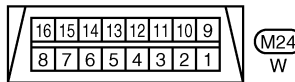
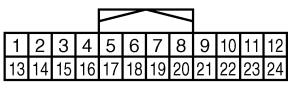
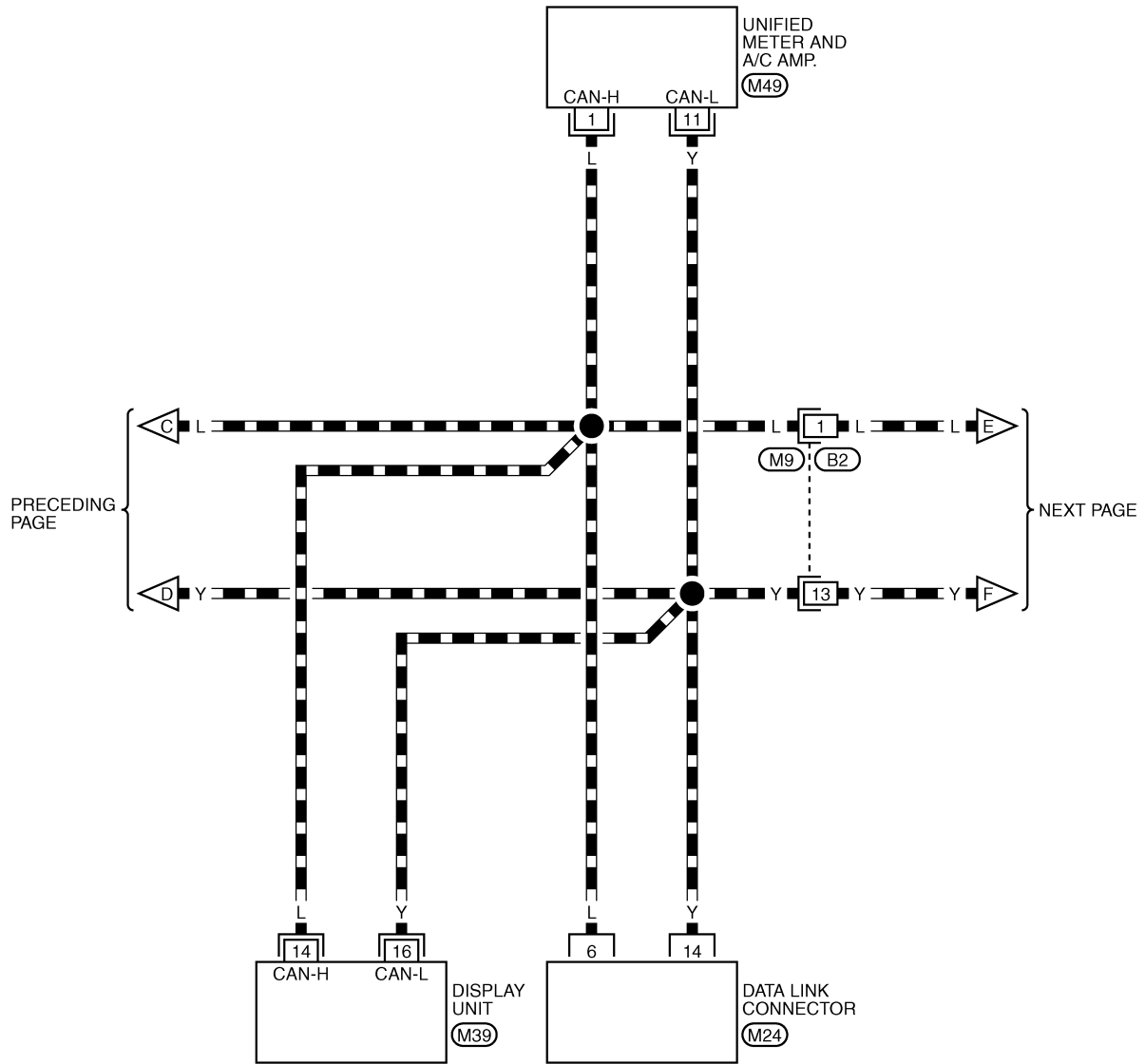
TKWB0823E

# CAN SYSTEM (TYPE 1)

[CAN]

LAN-CAN-03

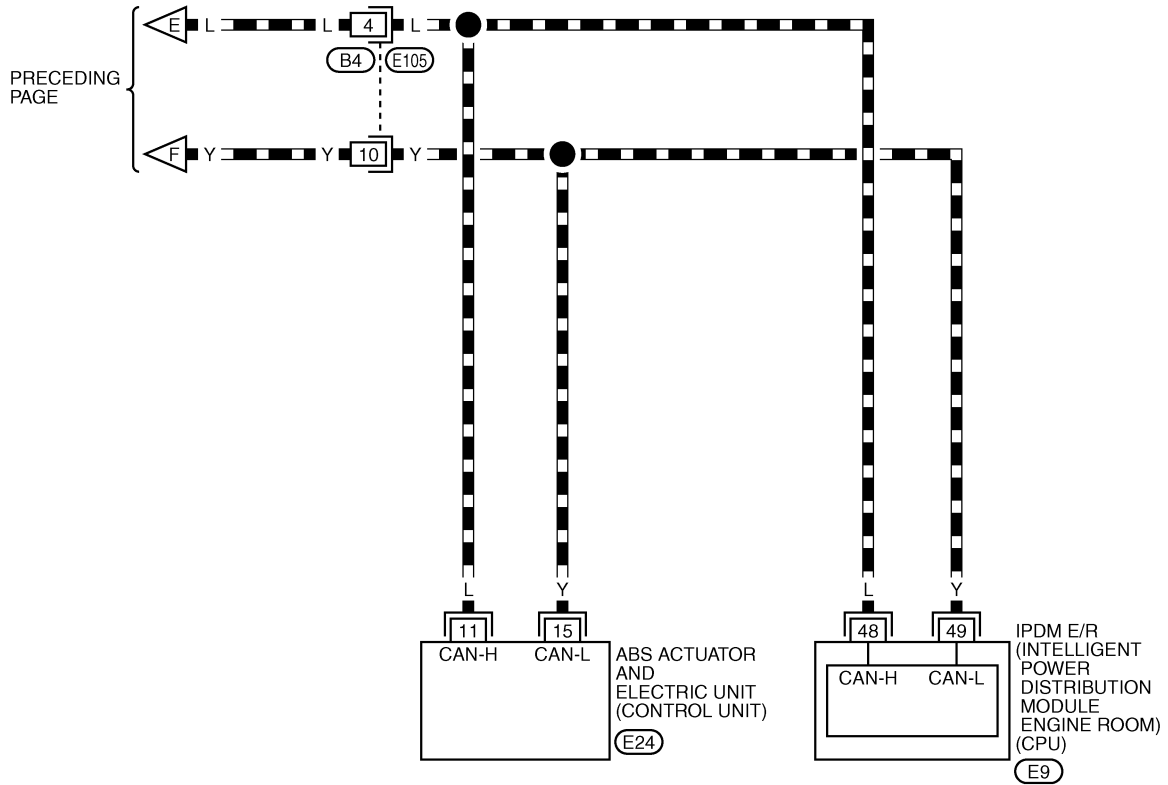
▬ : DATA LINE



TKWB0824E

## LAN-CAN-04

▬ : DATA LINE



52	51	50	49	48	47	46	45
60	59	58	57	56	55	54	53

(E9)  
W



1	2	3	4	5	6
7	8	9	10	11	12

(E105)  
W

REFER TO THE FOLLOWING.

(E24) -ELECTRICAL UNITS

TKWB0825E



# CAN SYSTEM (TYPE 1)

[CAN]

AKS00CHG

## Check Sheet

### NOTE:

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Check sheet table

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

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.

Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	—
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4710E

# CAN SYSTEM (TYPE 1)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIA8345E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

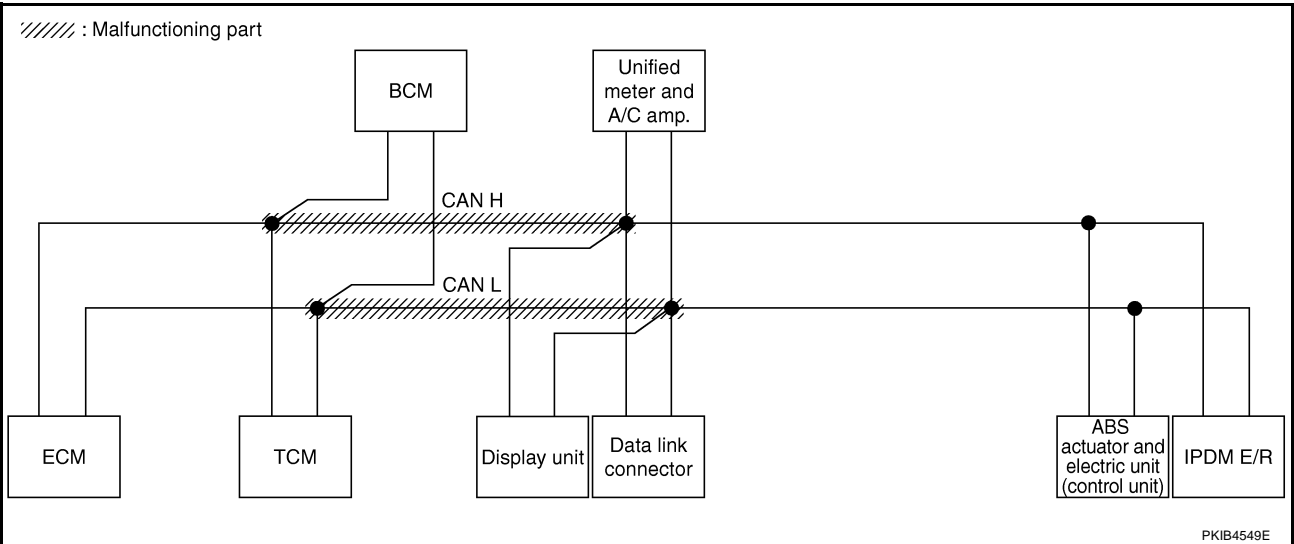
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-62. "Inspection Between TCM and Data Link Connector Circuit"](#).

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

PKIB4734E



PKIB4549E

# CAN SYSTEM (TYPE 1)

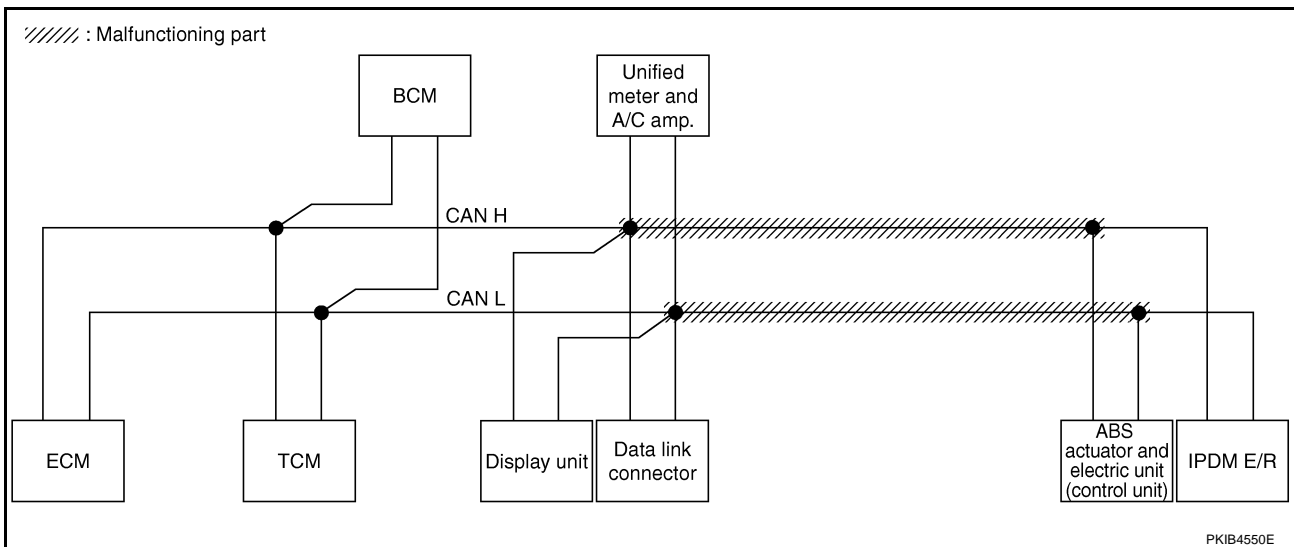
[CAN]

## Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to [LAN-62](#), "[Inspection Between Data Link Connector and ABS Actuator and Electric Unit \(Control Unit\) Circuit](#)".

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						IPDM E/R		
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS			
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—

PKIB4735E



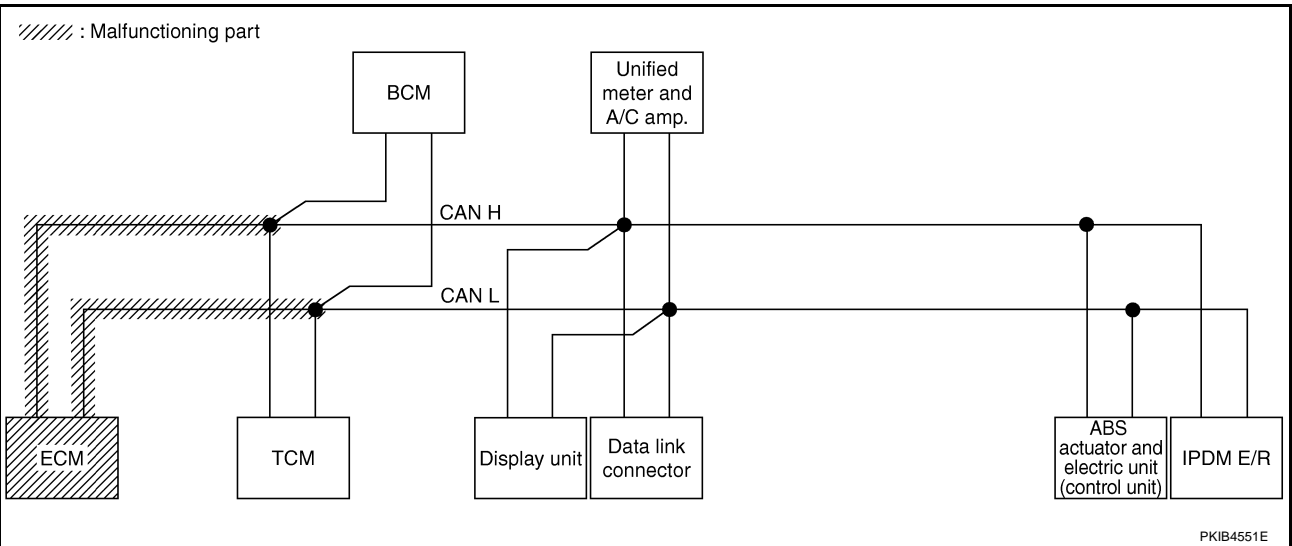
PKIB4550E

## Case 3

Check ECM circuit. Refer to [LAN-63, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						METER /M&A			VDC/TCS /ABS	IPDM E/R
				ECM	TCM	BCM /SEC	DISPLAY							
ENGINE	—	NG	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓		
TRANSMISSION	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	UNKW <del>N</del>	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U100) ✓	—		
BCM	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U1000) ✓	—		
Display unit	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—		
METER A/C AMP	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U100) ✓	—		
ABS	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—		
IPDM E/R	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—		

PKIB4736E



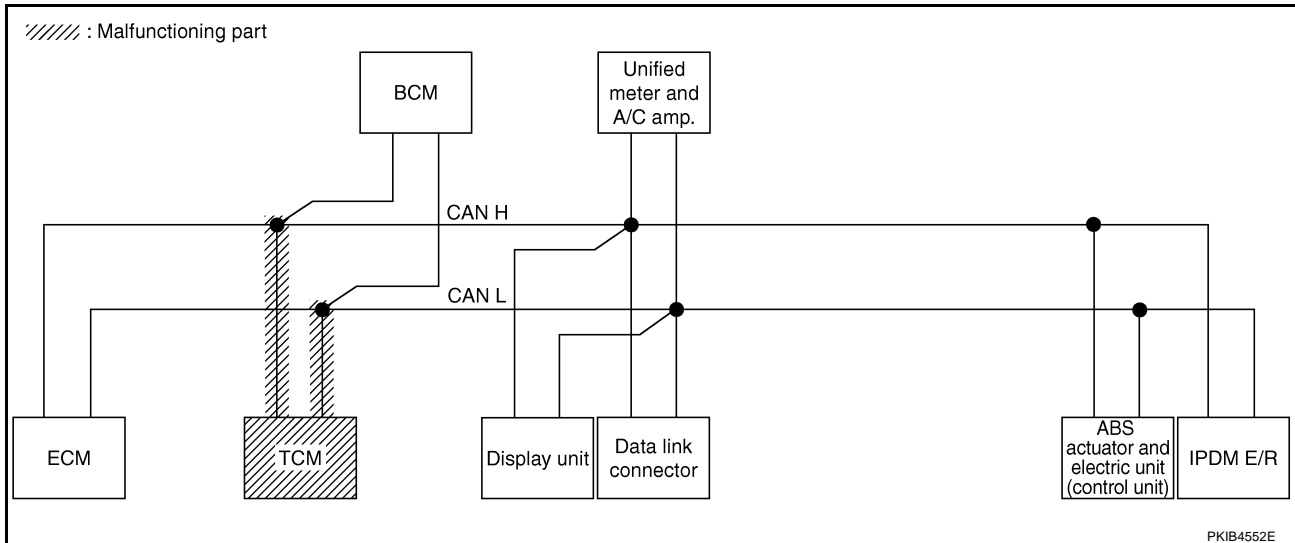
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## Case 4

Check TCM circuit. Refer to [LAN-64, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN ✓	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4737E



PKIB4552E

# CAN SYSTEM (TYPE 1)

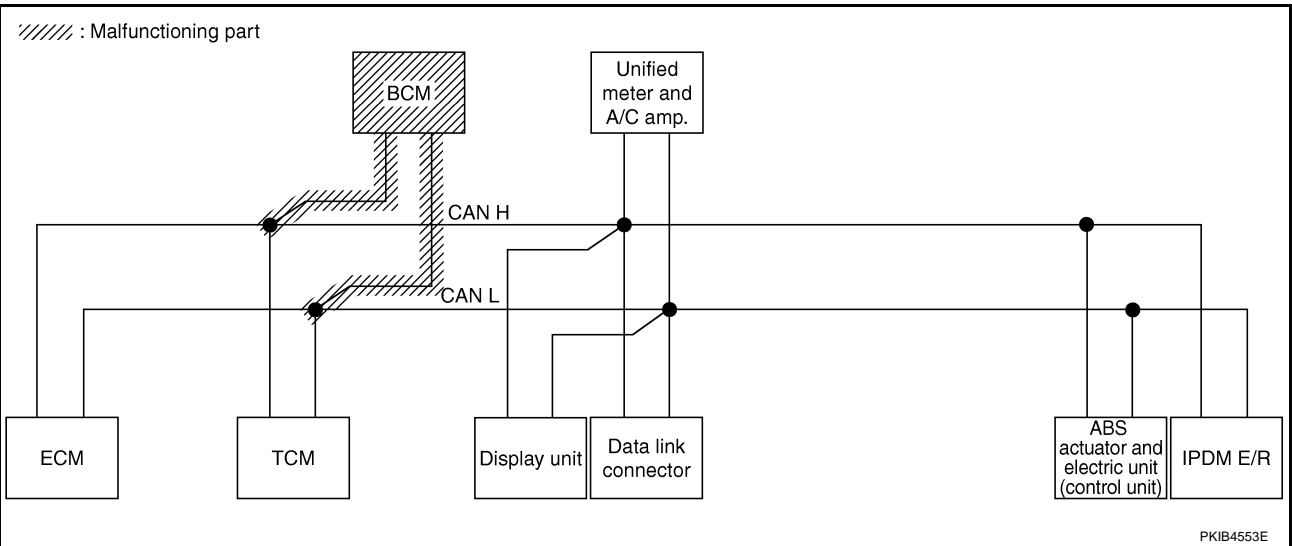
[CAN]

## Case 5

Check BCM circuit. Refer to [LAN-64, "BCM Circuit Inspection"](#) .

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

PKIB4738E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 1)

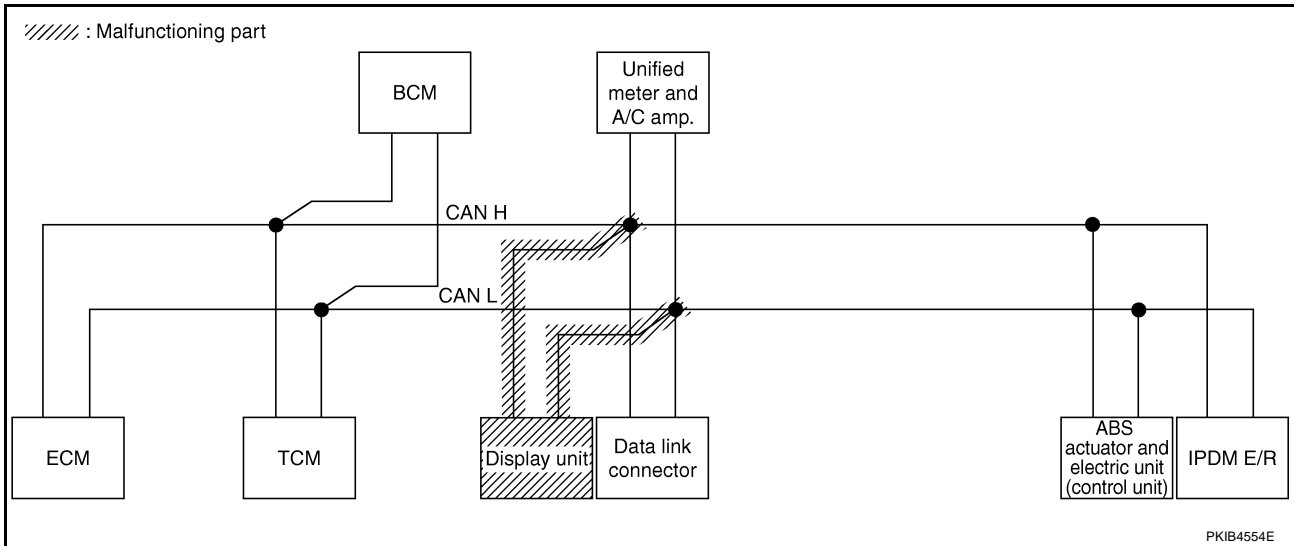
[CAN]

## Case 6

Check display unit circuit. Refer to [LAN-65, "Display Unit Circuit Inspection"](#) .

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

PKIB4739E



PKIB4554E



# CAN SYSTEM (TYPE 1)

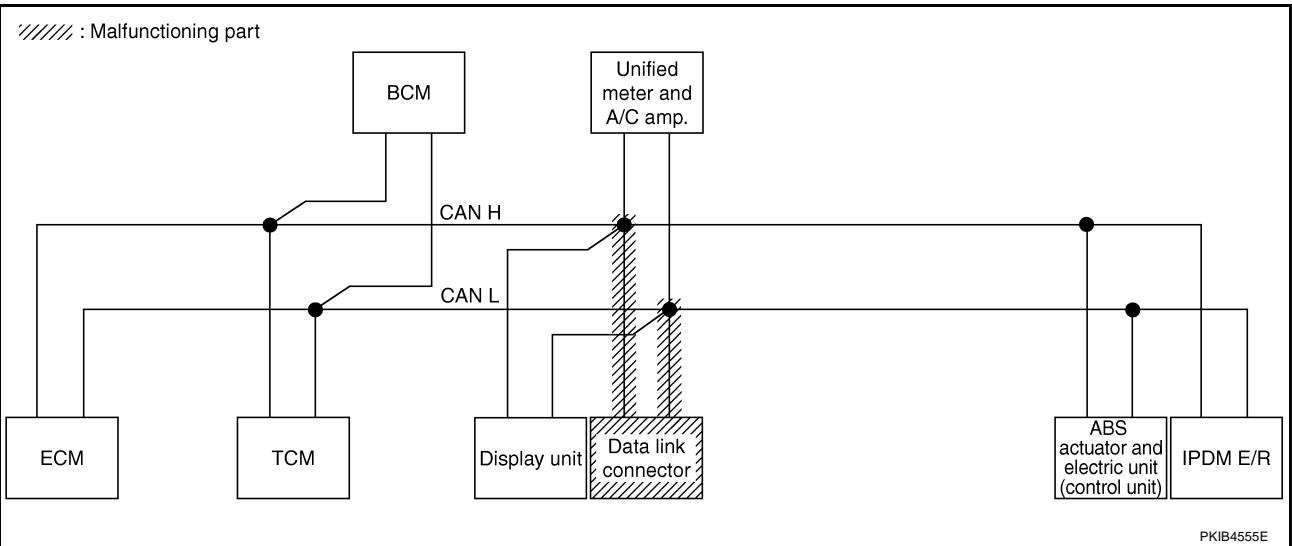
[CAN]

## Case 7

Check data link connector circuit. Refer to [LAN-65, "Data Link Connector Circuit Inspection"](#) .

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

PKIB4740E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 1)

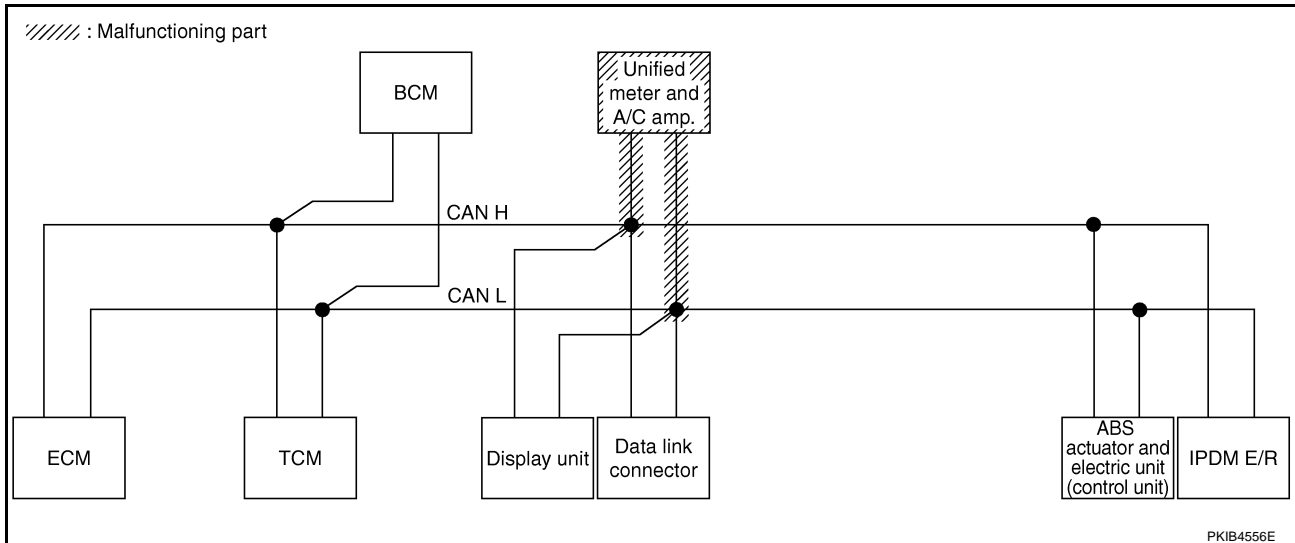
[CAN]

## Case 8

Check unified meter and A/C amp. circuit. Refer to [LAN-66, "Unified Meter and A/C Amp. Circuit Inspection"](#) .

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

PKIB4741E



PKIB4556E

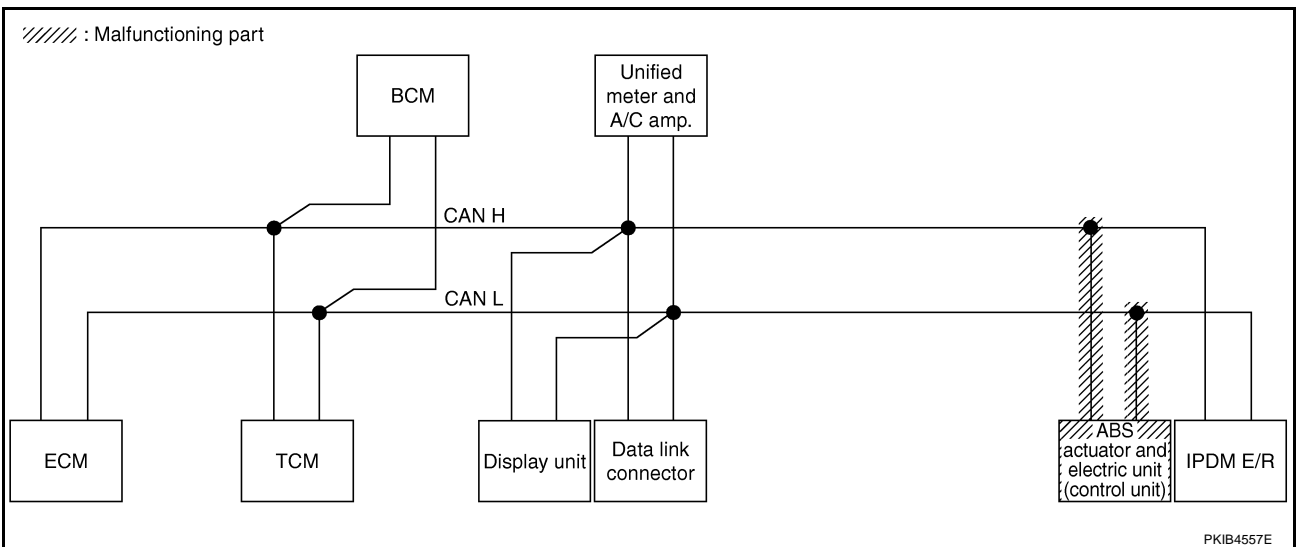
## Case 9

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-66, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

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

PKIB4742E



# CAN SYSTEM (TYPE 1)

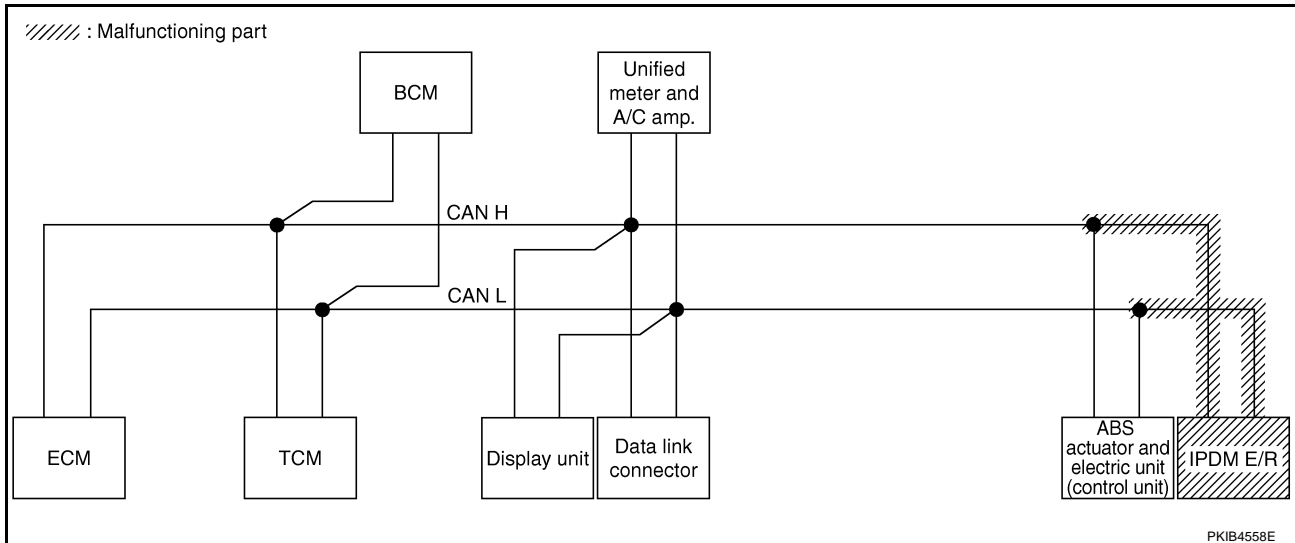
[CAN]

## Case 10

Check IPDM E/R circuit. Refer to [LAN-67, "IPDM E/R Circuit Inspection"](#) .

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

PKIB4743E



PKIB4558E

# CAN SYSTEM (TYPE 1)

[CAN]

## Case 11

Check CAN communication circuit. Refer to [LAN-68, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
BCM	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	—
Display unit	—	NG	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
ABS	—	NG ✓	UNKWN ✓	UNKWN ✓	—	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—

PKIB4744E

## Case 12

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-72, "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	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN ✓	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	UNKWN ✓	—	CAN COMM CIRCUIT (U100) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4745E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 13

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-72, "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	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKW	—	UNKW	UNKW	—	UNKW	—	UNKW	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKW	—	—	—	—	—	UNKW	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKW	UNKW	—	—	—	UNKW	—	UNKW	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKW	UNKW	—	UNKW	—	UNKW	—	UNKW	—	—
METER A/C AMP	No indication	—	UNKW	UNKW	UNKW	UNKW	UNKW	—	UNKW	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKW	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKW	UNKW	—	UNKW	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4746E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CLR

### 1. CHECK HARNESS FOR OPEN CIRCUIT

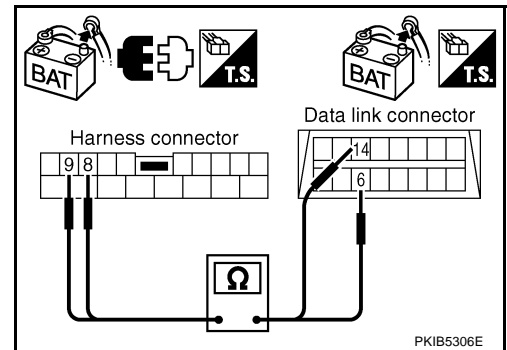
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



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

AKS00CLS

### 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 M9
  - Harness connector B2
  - Harness connector B4
  - Harness connector E105

#### OK or NG

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

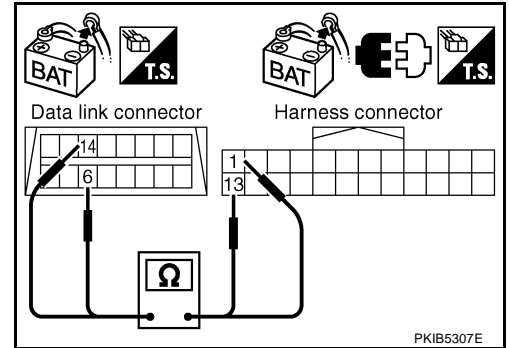
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



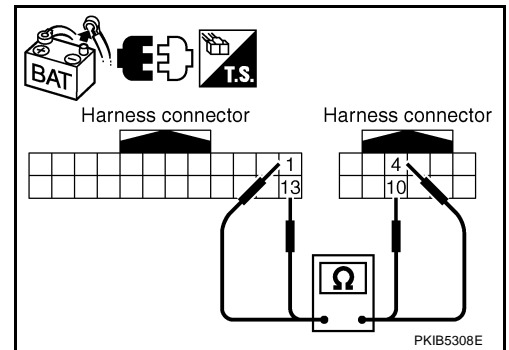
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> GO TO 4.  
 NG >> Repair harness.



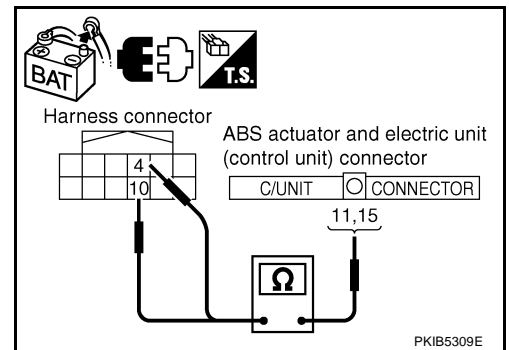
## 4. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**4 (L) - 11 (L) : Continuity should exist.**  
**10 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## ECM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

AKS00CLU

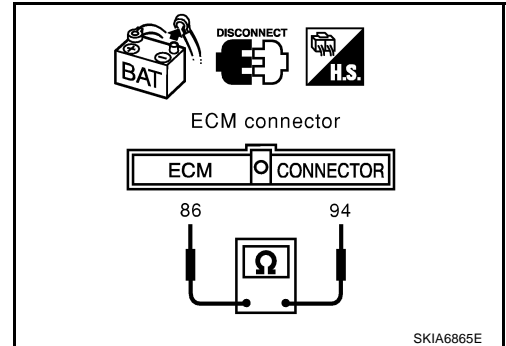
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

### OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



AKS00CLV

## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

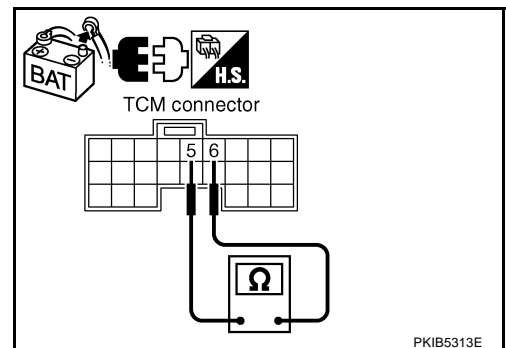
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM and BCM.



AKS00CLW

## BCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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



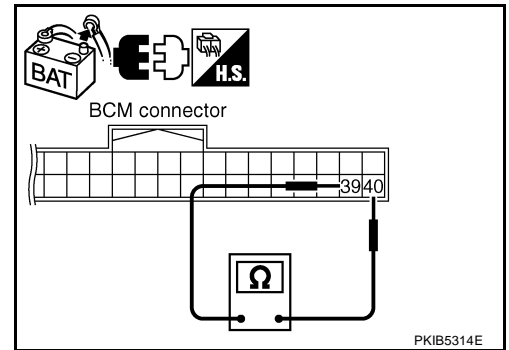
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#).
- NG >> Repair harness between BCM and harness connector M82.



AKS00CLX

## Display Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

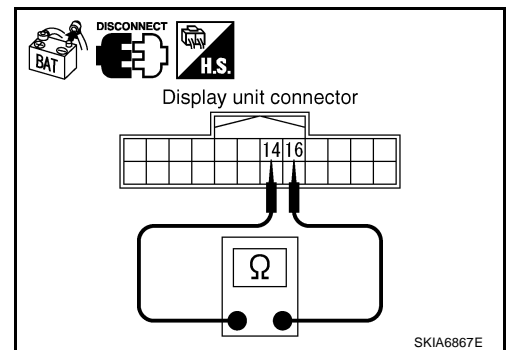
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace display unit.
- NG >> Repair harness between display unit and data link connector.



AKS00CLY

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

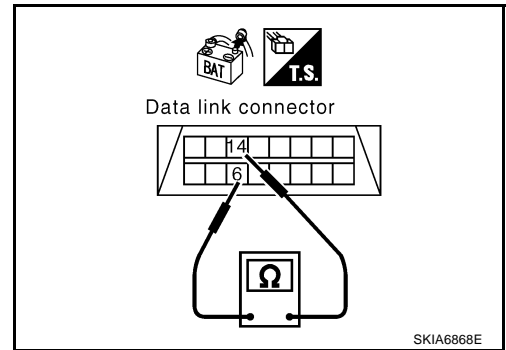
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness between data link connector and unified meter and A/C amp.



## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

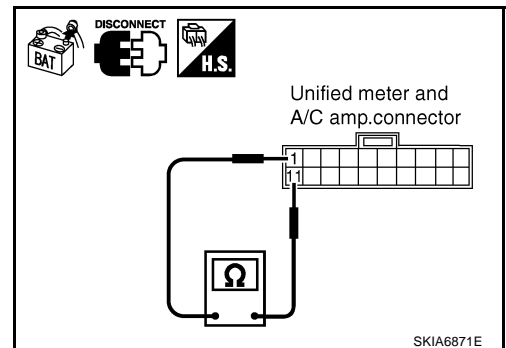
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.
- NG >> Repair harness between unified meter and A/C amp. and data link connector.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

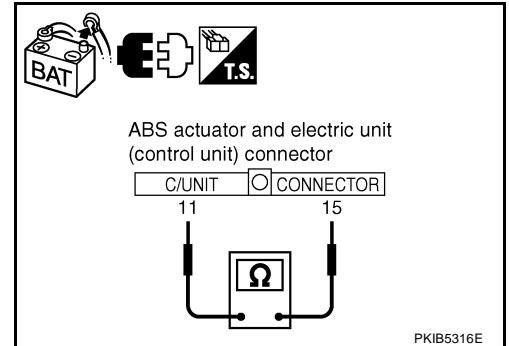
1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y)**

**: Approx. 54 - 66Ω**

### OK or NG

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



AKS00CM1

## IPDM E/R Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of IPDM E/R 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

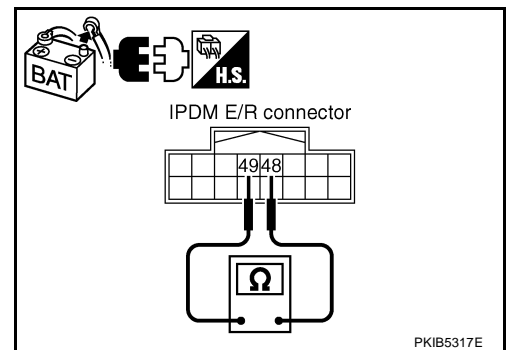
1. Disconnect IPDM E/R connector.
2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

**48 (L) - 49 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

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



PKIB5317E

## CAN Communication Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

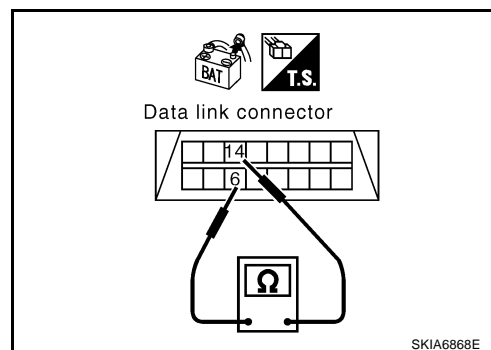
### 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Harness connector M82
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

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

#### OK or NG

- OK >> GO TO 3.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between data link connector and ECM
  - Harness between data link connector and harness connector M82
  - Harness between data link connector and BCM
  - Harness between data link connector and display unit
  - Harness between data link connector and unified meter and A/C amp.
  - Harness between data link connector and harness connector M9



## 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

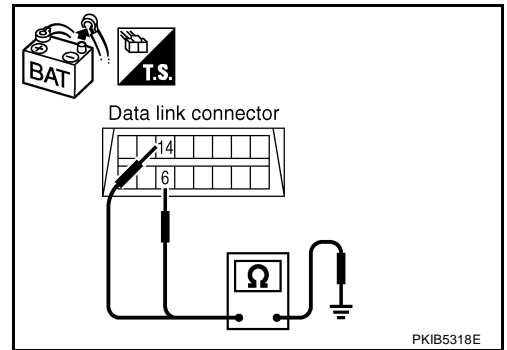
**14 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



## 4. CHECK HARNESS FOR SHORT CIRCUIT

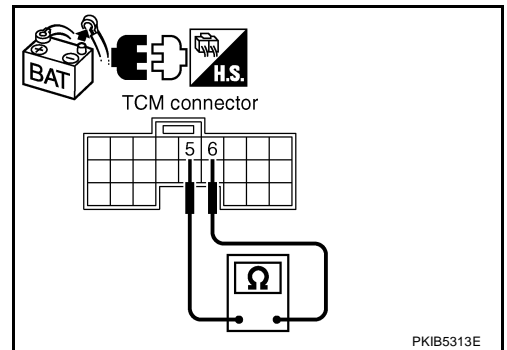
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



## 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

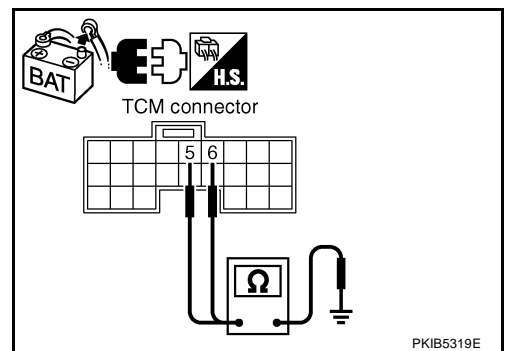
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## 6. CHECK HARNESS FOR SHORT CIRCUIT

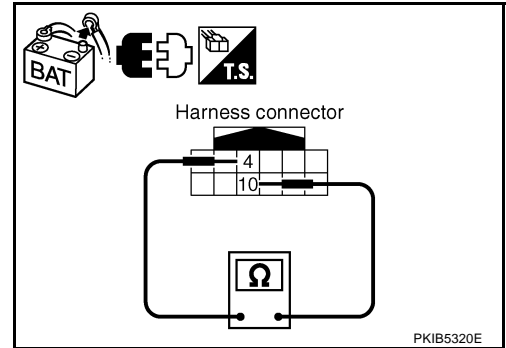
1. Disconnect harness connector B4.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 7.

NG >> Repair harness between harness connector B2 and harness connector B4.



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

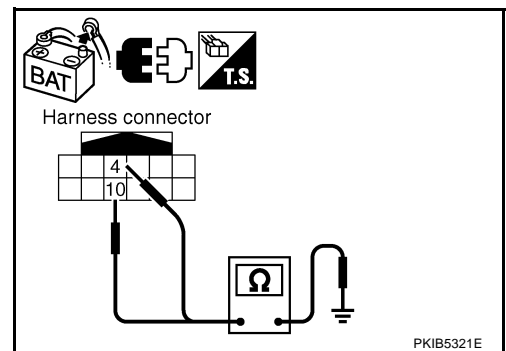
**4 (L) - Ground : Continuity should not exist.**

**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

NG >> Repair harness between harness connector B2 and harness connector B4.



## 8. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

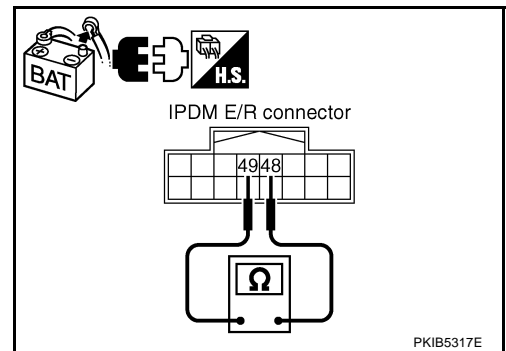
**48 (L) - 49 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 9. CHECK HARNESS FOR SHORT CIRCUIT

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

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

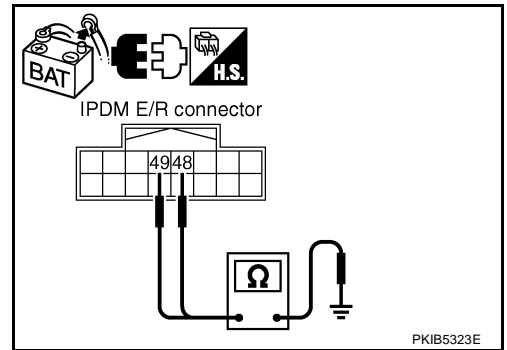
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 10.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 10. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86 : Approx. 108 – 132 Ω**

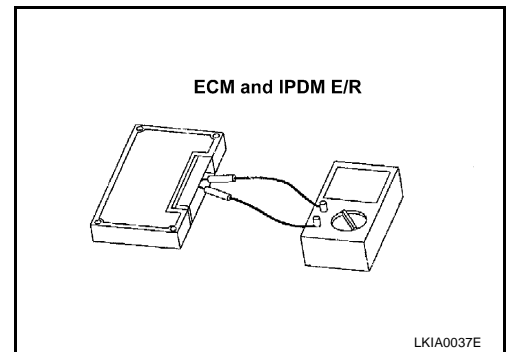
3. Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 11.

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



## 11. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 12.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

---

## 12. CHECK UNIT REPRODUCIBILITY

---

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

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

### Check results

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

Not reproduced>>Replace removed unit.

### **IPDM E/R Ignition Relay Circuit Inspection**

AKS00CM3

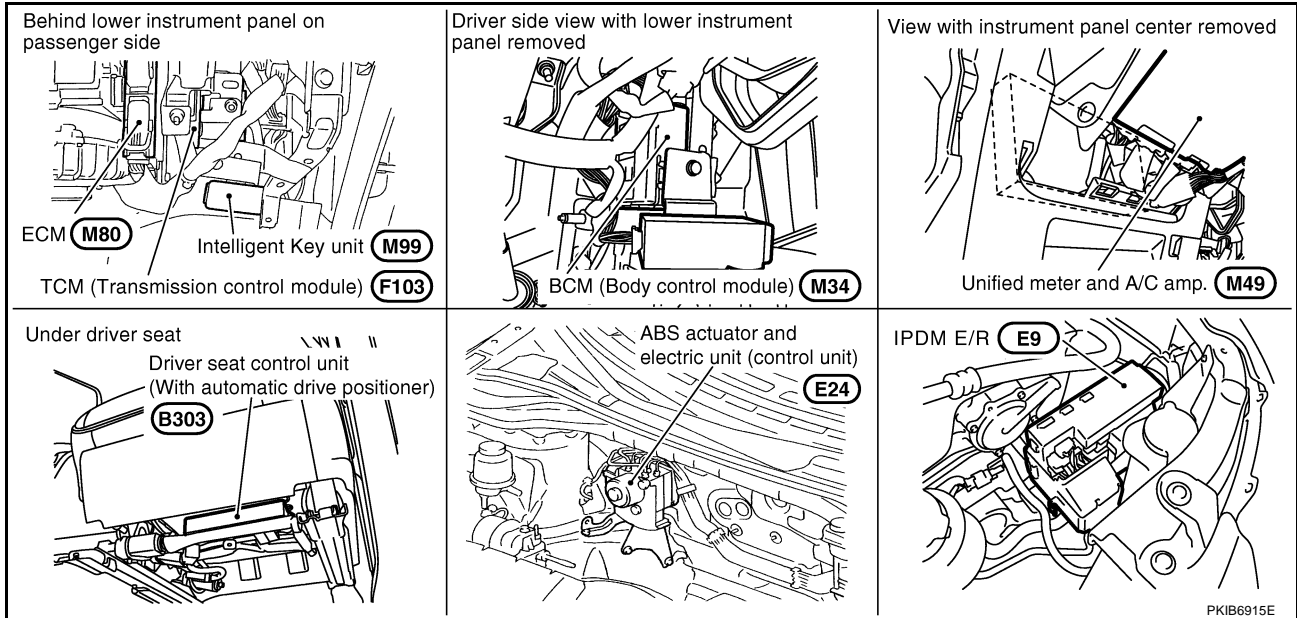
Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to [PG-27, "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" "](#) .



## CAN SYSTEM (TYPE 2)

### Component Parts and Harness Connector Location



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

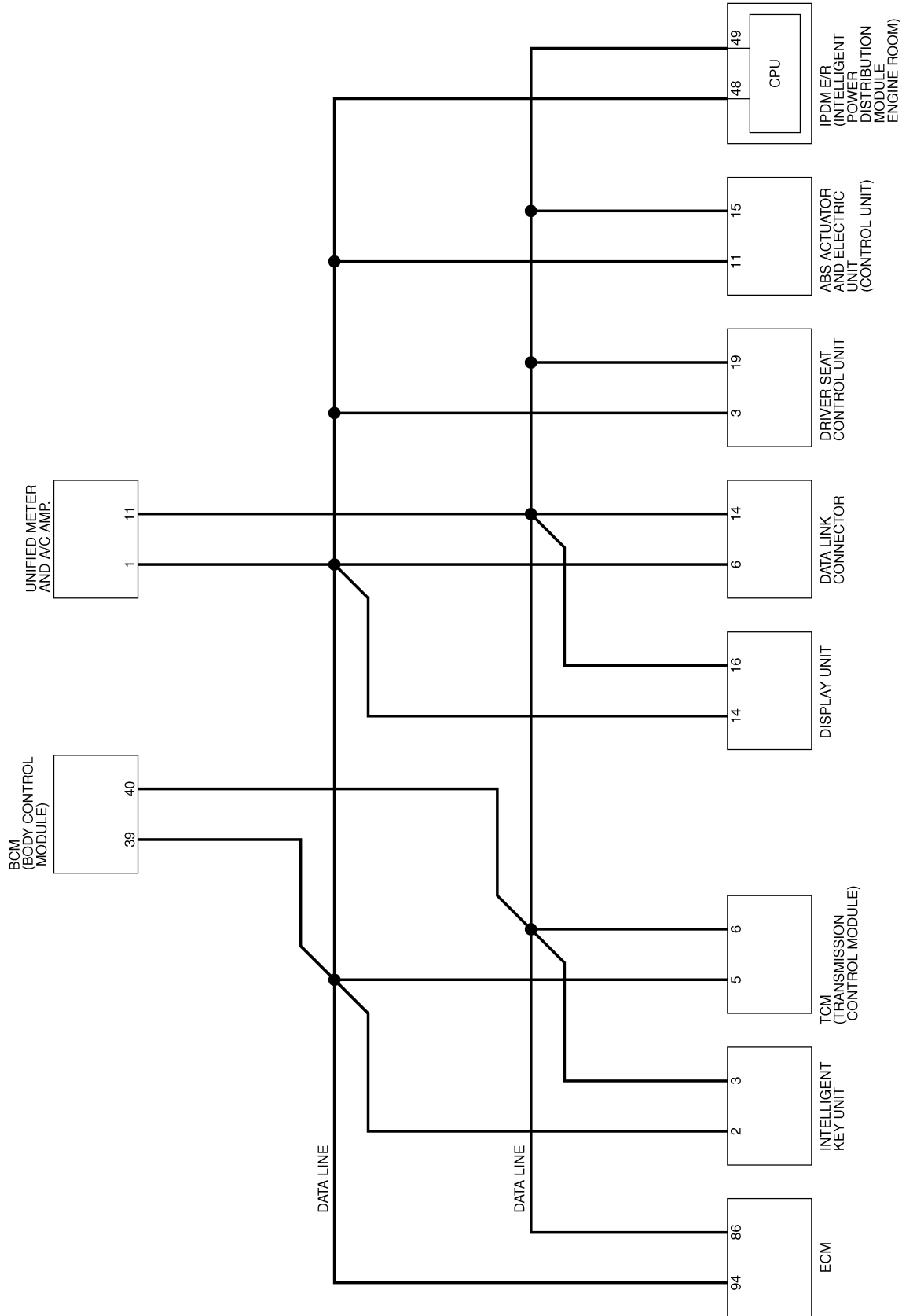
LAN

# CAN SYSTEM (TYPE 2)

[CAN]

AKS00A4M

## Schematic



TKWB0826E

# CAN SYSTEM (TYPE 2)

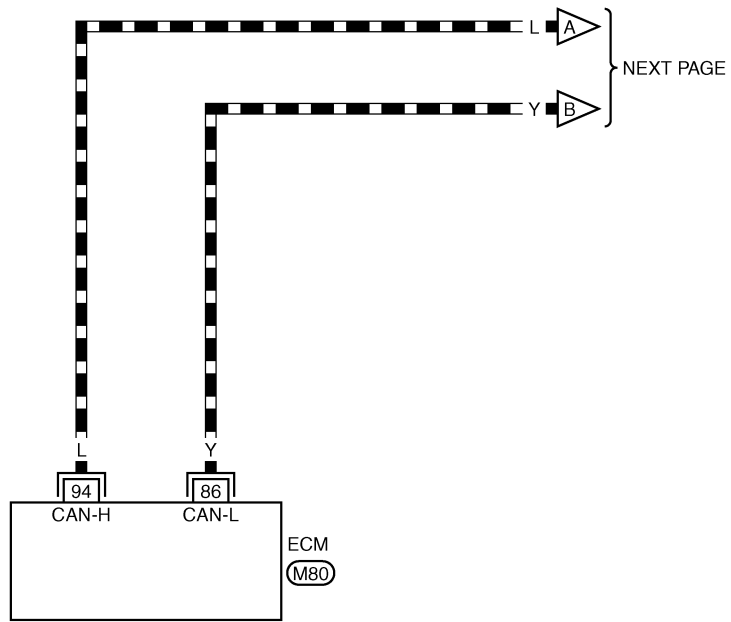
[CAN]

## Wiring Diagram - CAN -

AKS00A4N

### LAN-CAN-05

DATA LINE



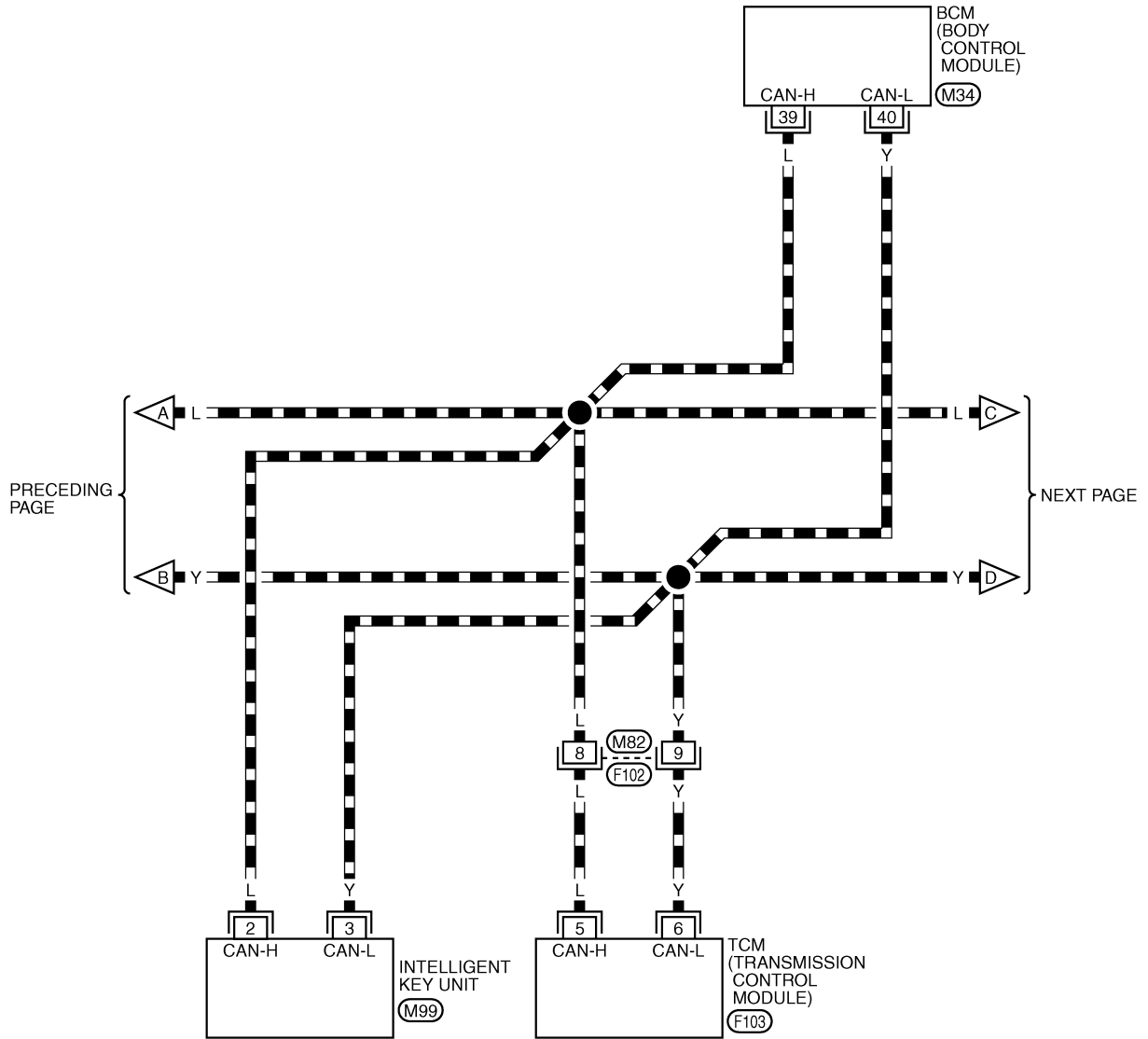
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
M80 -ELECTRICAL UNITS

TKWB0827E

## LAN-CAN-06

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102)	W

REFER TO THE FOLLOWING.

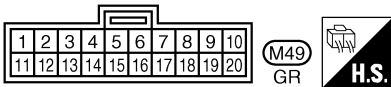
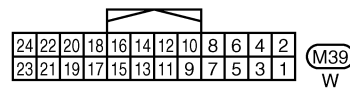
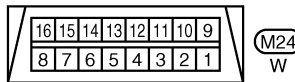
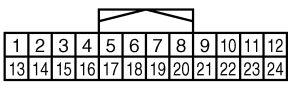
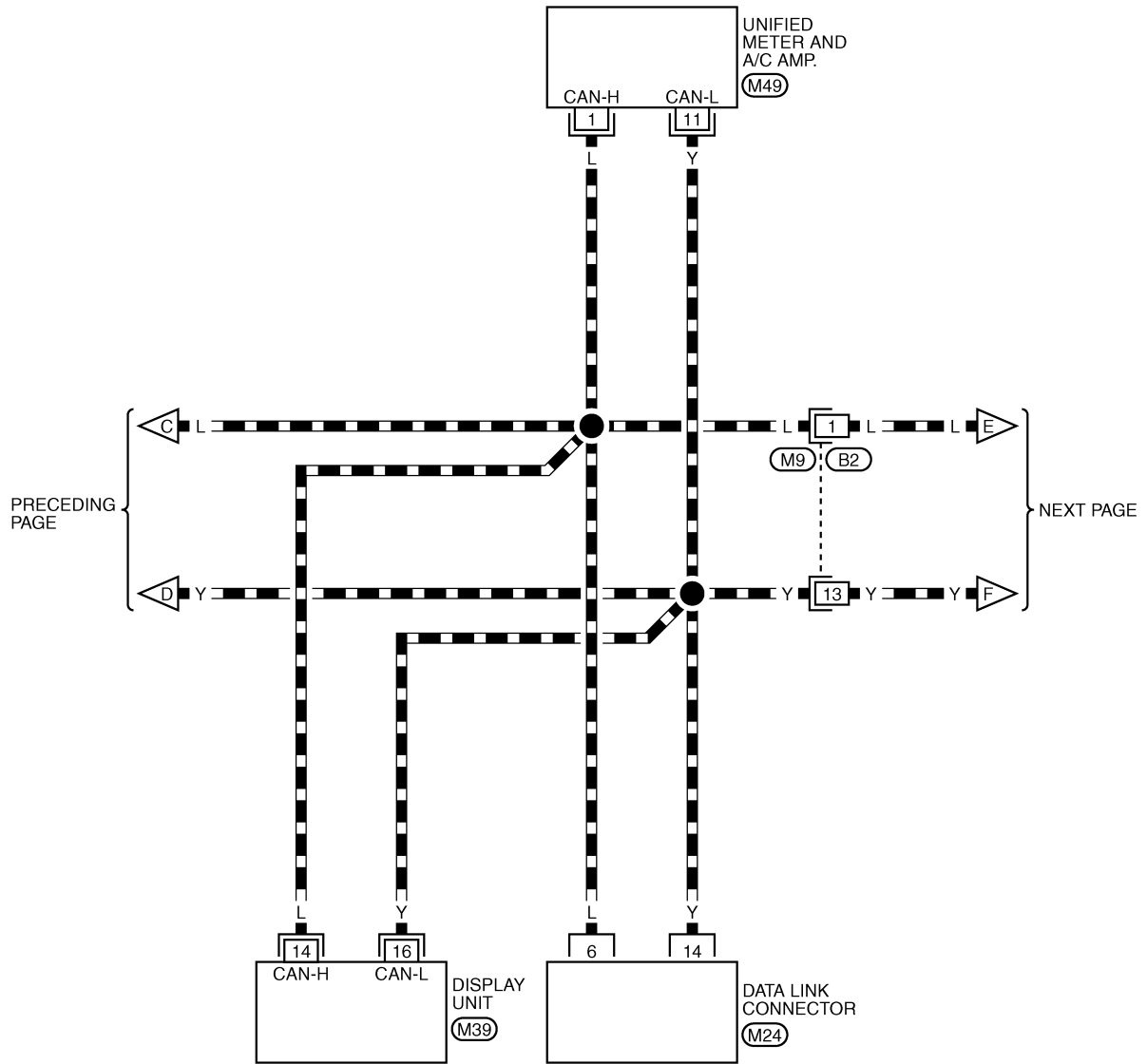
(M34), (M99), (F103)  
-ELECTRICAL UNITS

# CAN SYSTEM (TYPE 2)

[CAN]

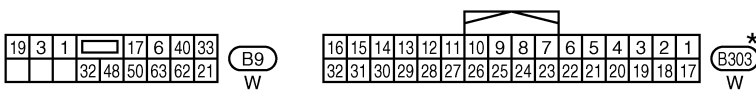
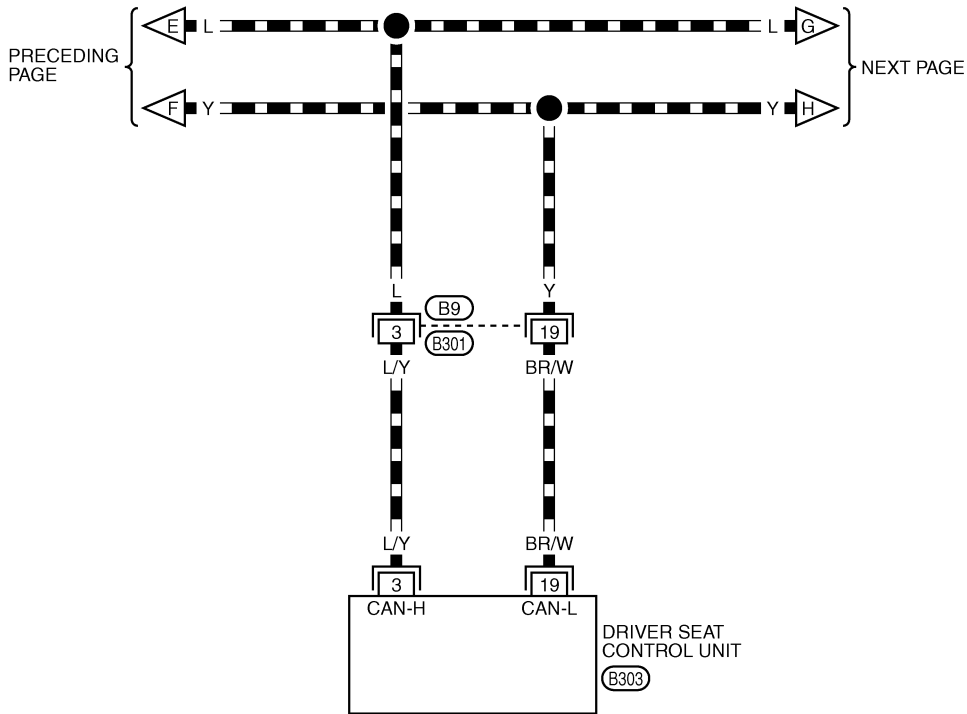
LAN-CAN-07

▬ : DATA LINE



TKWB0829E

▬ : DATA LINE



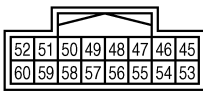
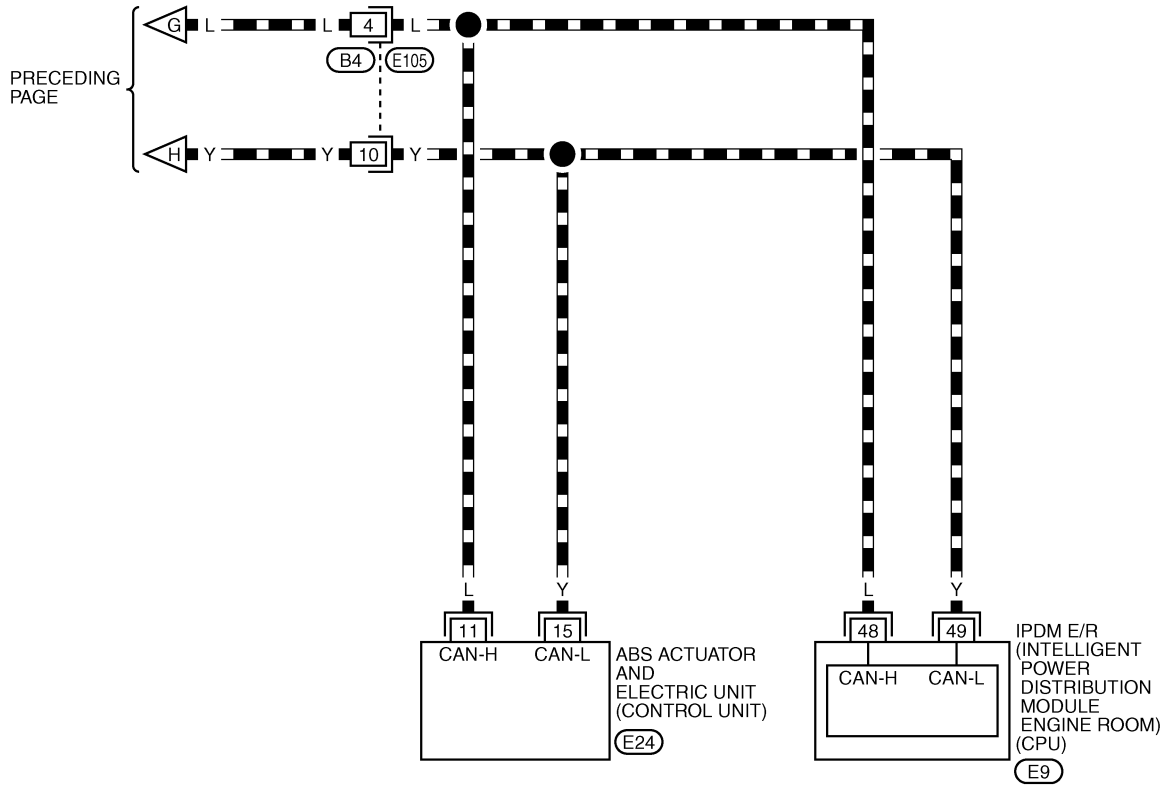
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

# CAN SYSTEM (TYPE 2)

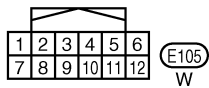
[CAN]

LAN-CAN-09

▬ : DATA LINE



E9  
W



E105  
W

REFER TO THE FOLLOWING.

E24 -ELECTRICAL UNITS

TKWB0831E

# CAN SYSTEM (TYPE 2)

[CAN]

AKS00A40

## Check Sheet

**NOTE:**

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

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

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	—
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4711E



# CAN SYSTEM (TYPE 2)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4712E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

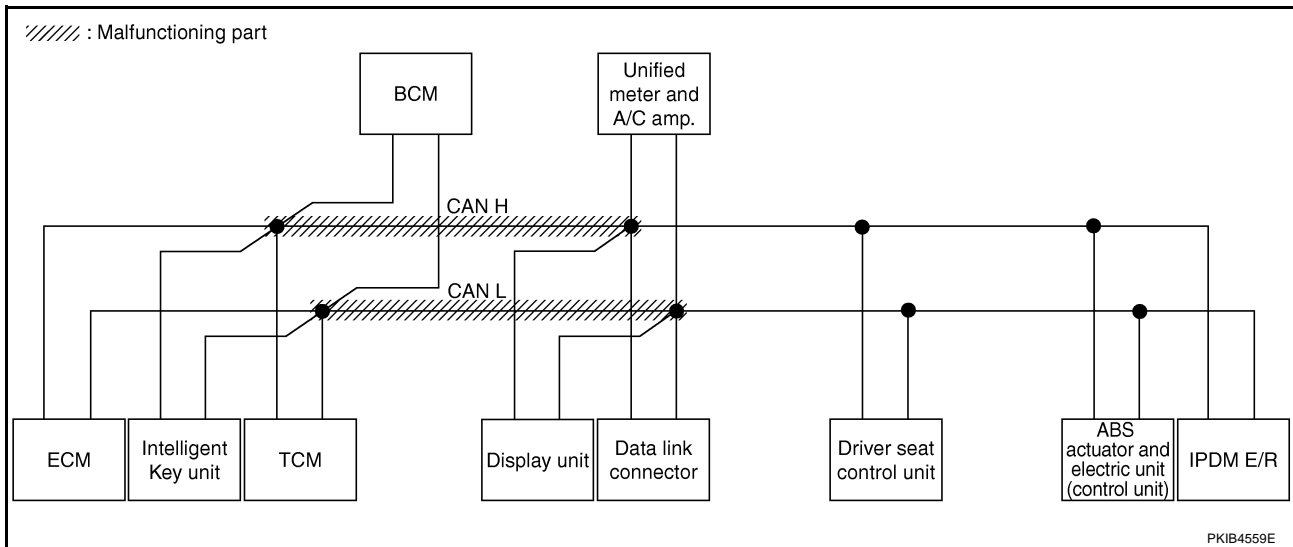
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-96, "Inspection Between TCM and Data Link Connector Circuit"](#).

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

PKIB4747E



# CAN SYSTEM (TYPE 2)

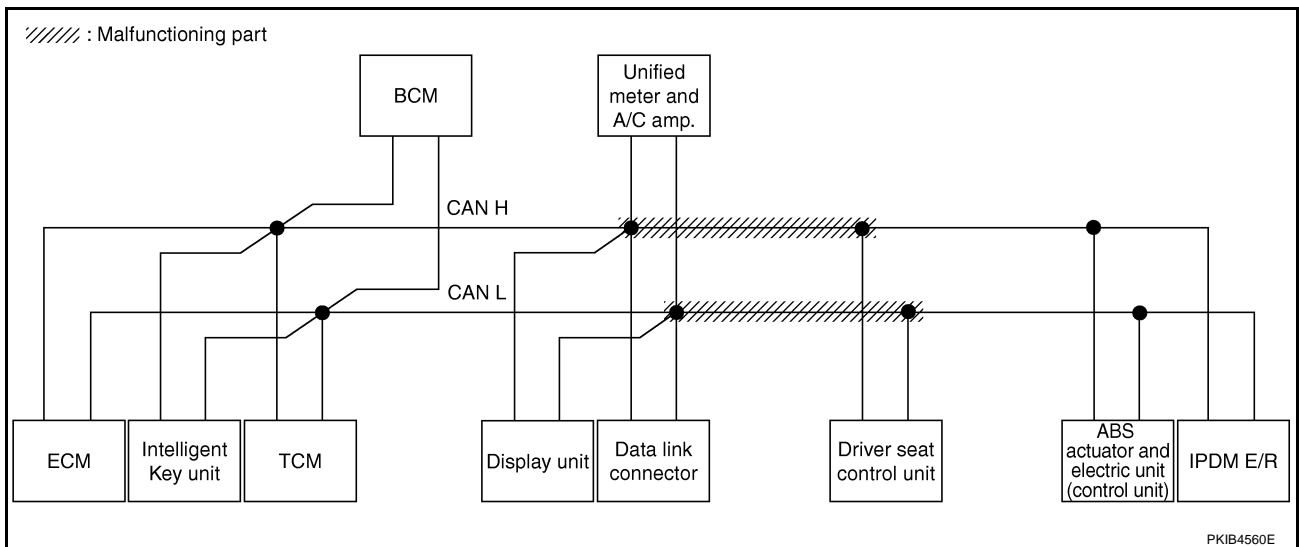
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-96, "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										IPDM E/R	
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS					
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U000)	—

PKIB4748E



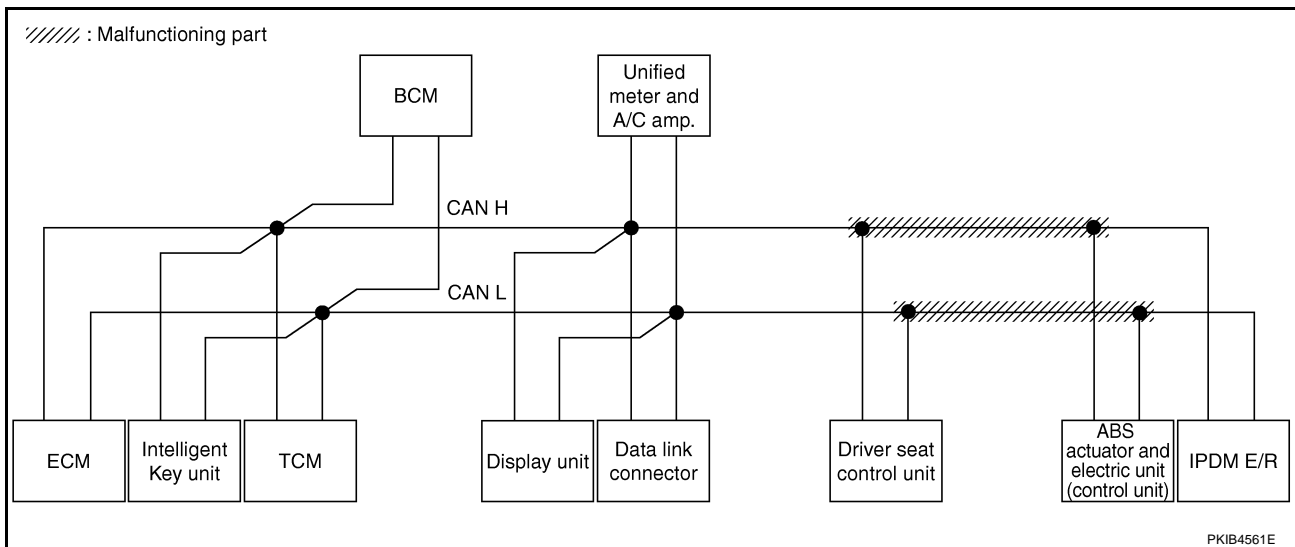
PKIB4560E

### Case 3

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-97, "Inspection Between Driver Seat Control Unit and ABS Actuator and Electric Unit \(Control Unit\) Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—

PKIB4749E



# CAN SYSTEM (TYPE 2)

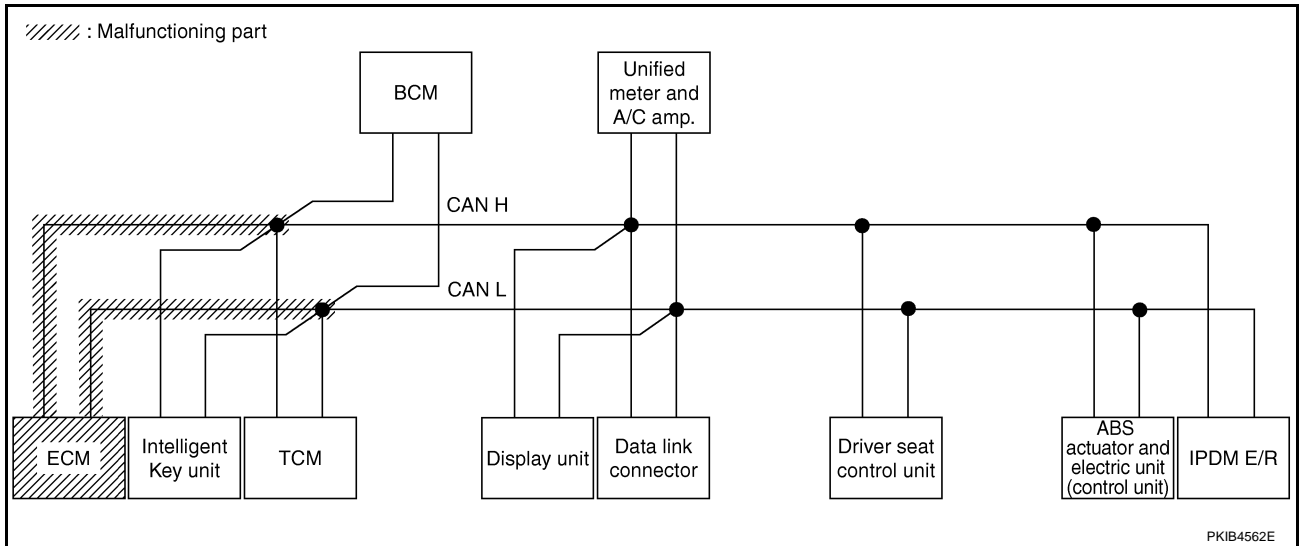
[CAN]

## Case 4

Check ECM circuit. Refer to [LAN-98, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4750E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 2)

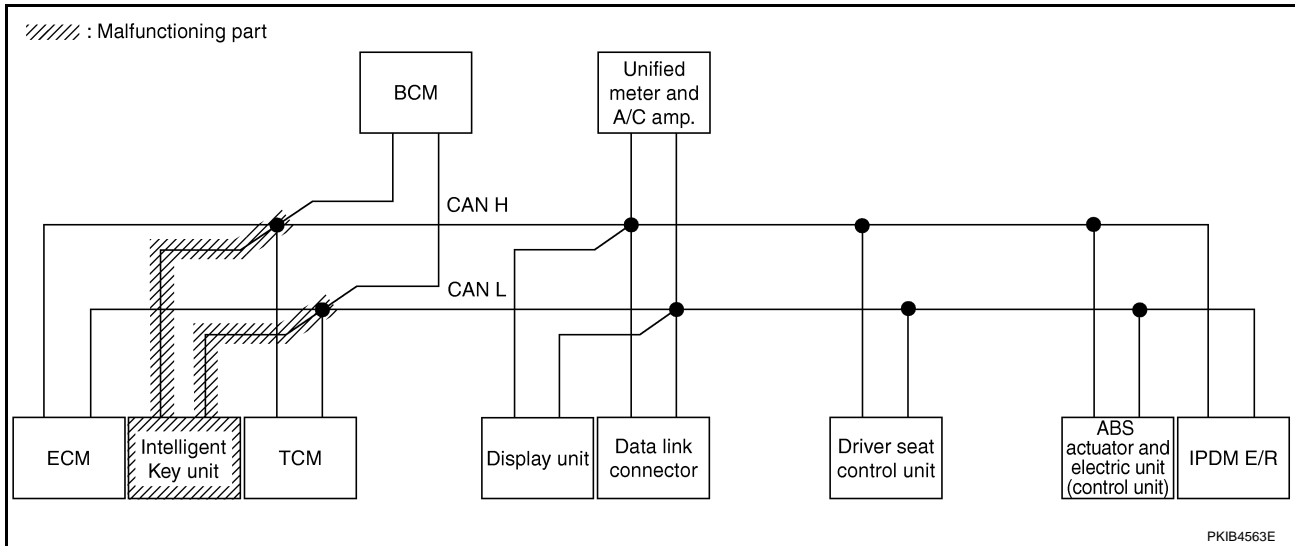
[CAN]

## Case 5

Check Intelligent Key unit circuit. Refer to [LAN-99, "Intelligent Key Unit Circuit Inspection"](#) .

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

PKIB4751E



# CAN SYSTEM (TYPE 2)

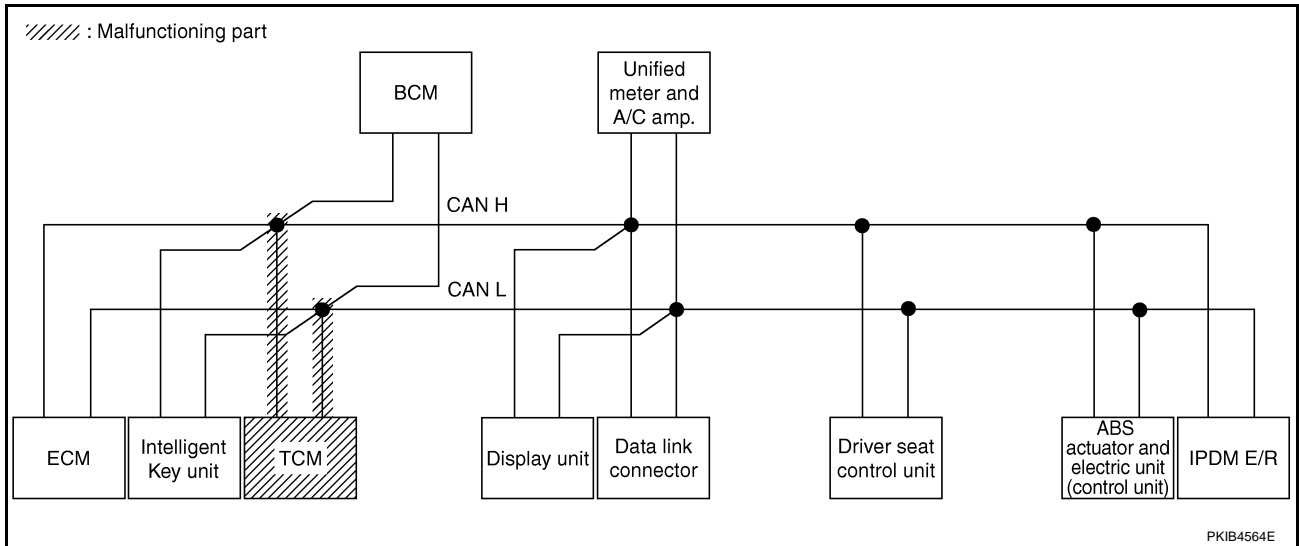
[CAN]

## Case 6

Check TCM circuit. Refer to [LAN-99, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4752E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 2)

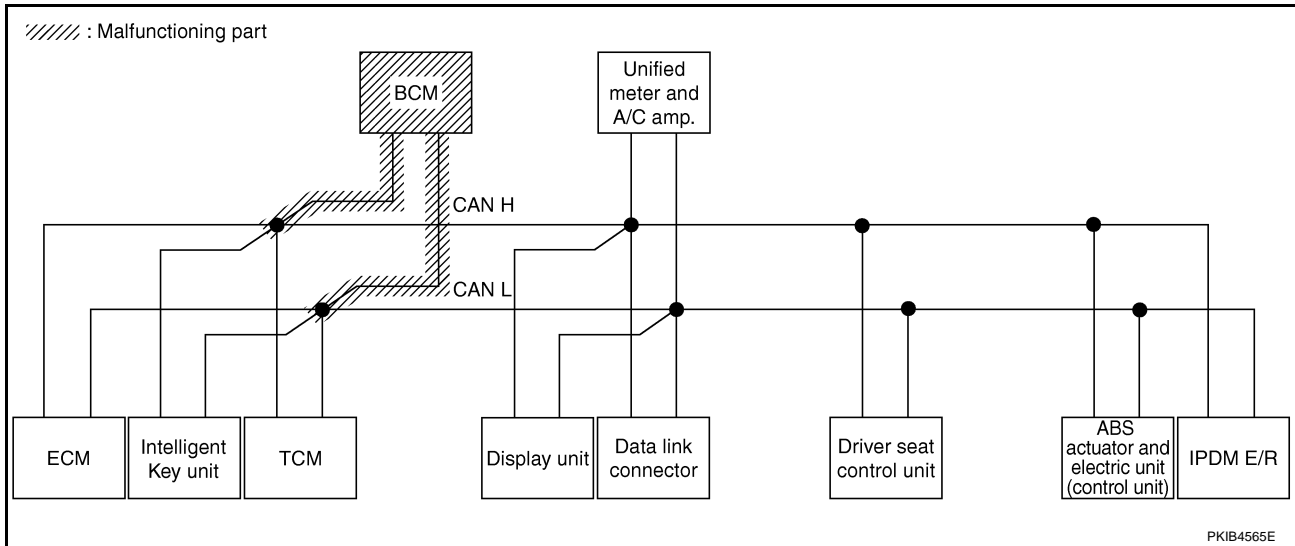
[CAN]

## Case 7

Check BCM circuit. Refer to [LAN-100, "BCM Circuit Inspection"](#) .

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

PKIB4753E





# CAN SYSTEM (TYPE 2)

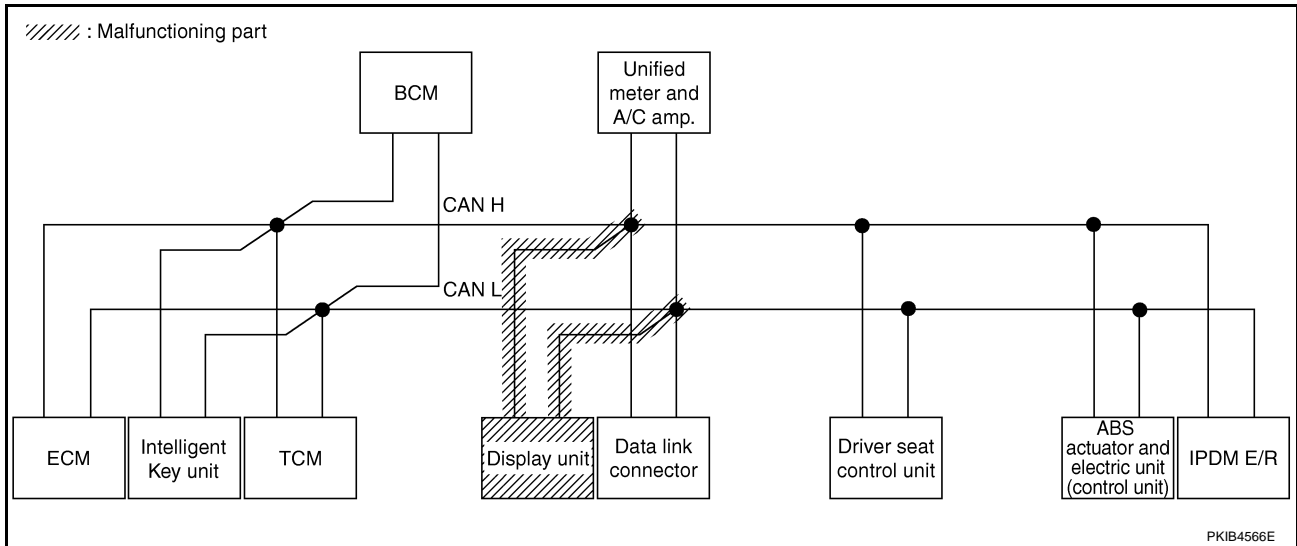
[CAN]

## Case 8

Check display unit circuit. Refer to [LAN-100, "Display Unit Circuit Inspection"](#) .

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

PKIB4754E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 2)

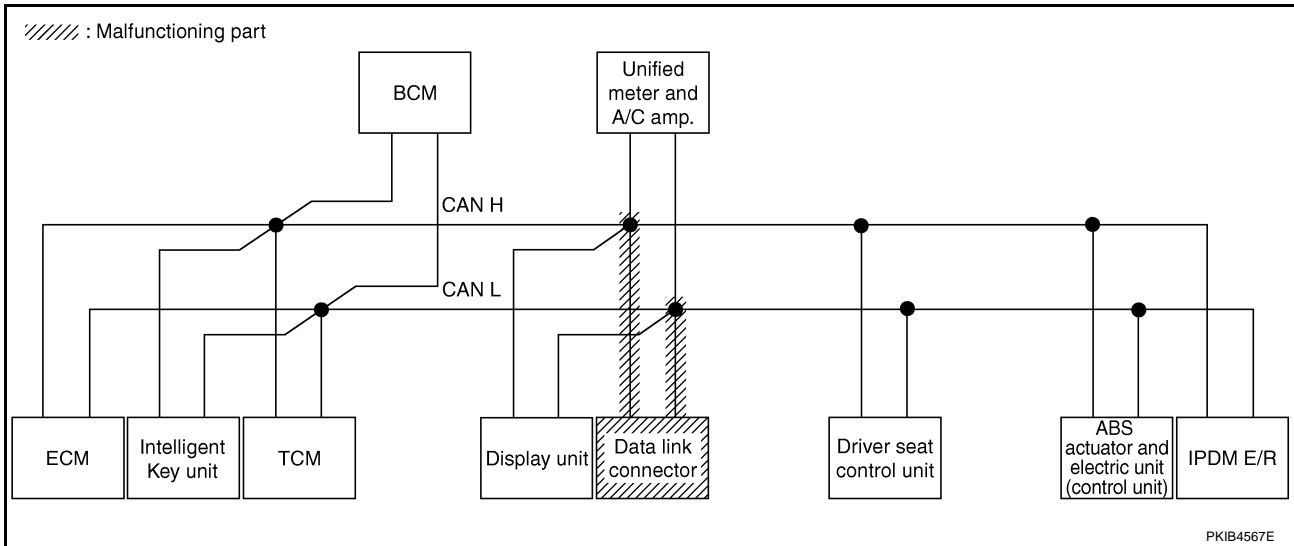
[CAN]

## Case 9

Check data link connector circuit. Refer to [LAN-101, "Data Link Connector Circuit Inspection"](#) .

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

PKIB4755E



# CAN SYSTEM (TYPE 2)

[CAN]

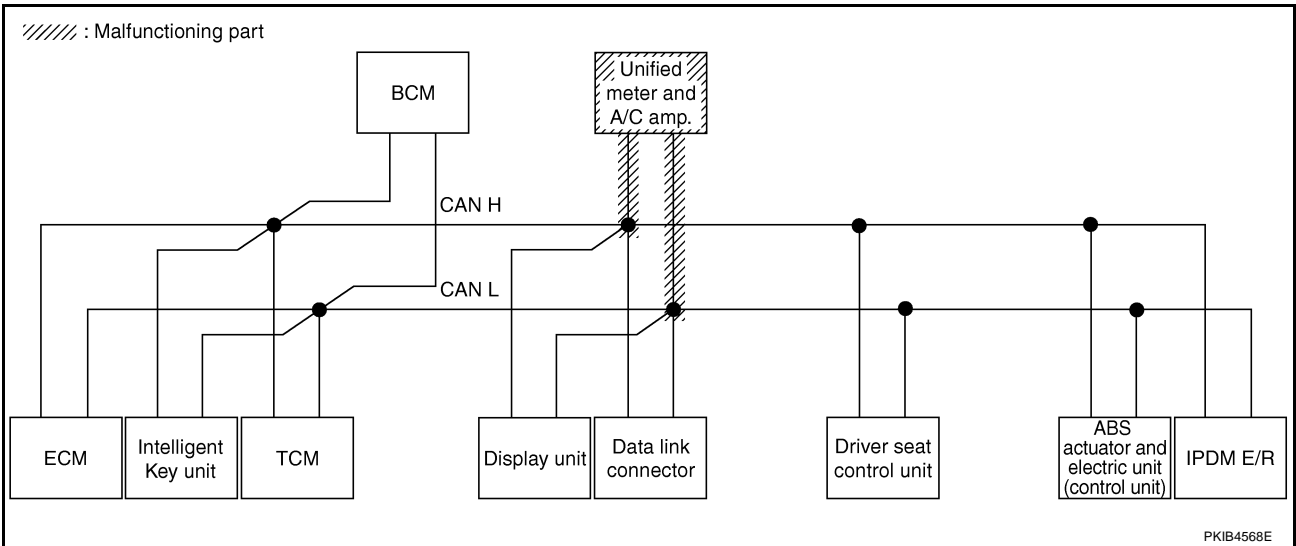
## Case 10

Check unified meter and A/C amp. circuit. Refer to [LAN-101, "Unified Meter and A/C Amp. Circuit Inspection"](#).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

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

PKIB4756E



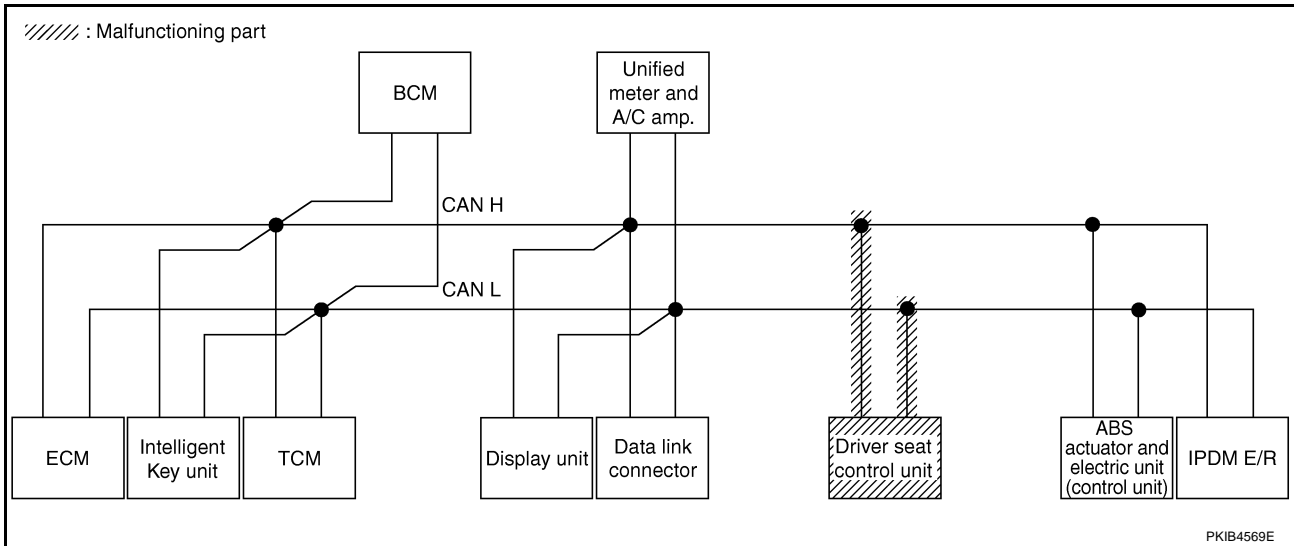
LAN

## Case 11

Check driver seat control unit circuit. Refer to [LAN-102, "Driver Seat Control Unit Circuit Inspection"](#) .

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

PKIB4757E



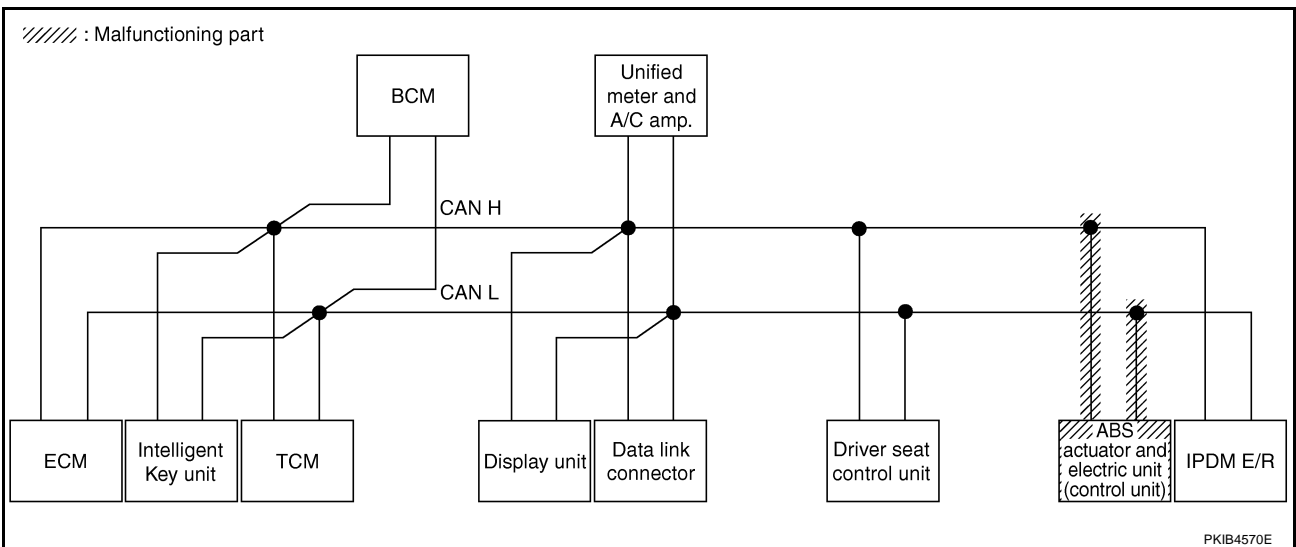
## Case 12

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-102, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

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

PKIB4758E



# CAN SYSTEM (TYPE 2)

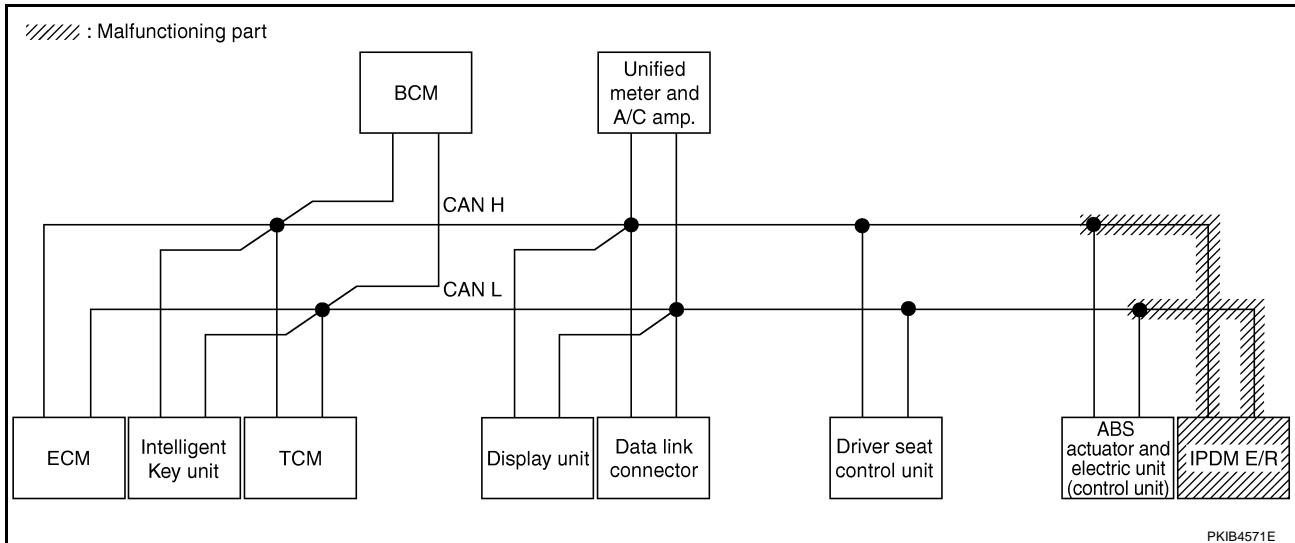
[CAN]

## Case 13

Check IPDM E/R circuit. Refer to [LAN-103, "IPDM E/R Circuit Inspection"](#) .

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

PKIB4759E



# CAN SYSTEM (TYPE 2)

[CAN]

## Case 14

Check CAN communication circuit. Refer to [LAN-103, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	✓	—	—	✓	✓	—	✓	—	✓	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	✓	✓	—	—	✓	—	✓	—	✓	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	✓	✓	✓	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4760E

## Case 15

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-108, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	UNKWN	—	✓	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4761E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 16

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-108, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

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

PKIB4762E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CLC

### 1. CHECK HARNESS FOR OPEN CIRCUIT

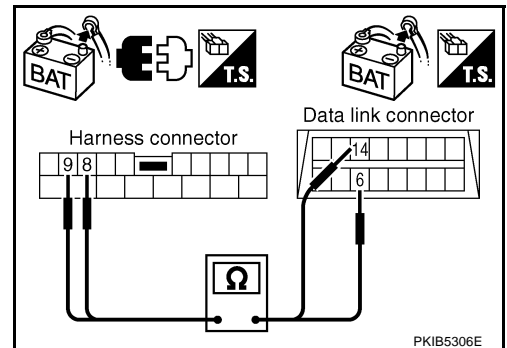
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CLD

### 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 M9
  - Harness connector B2

#### OK or NG

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



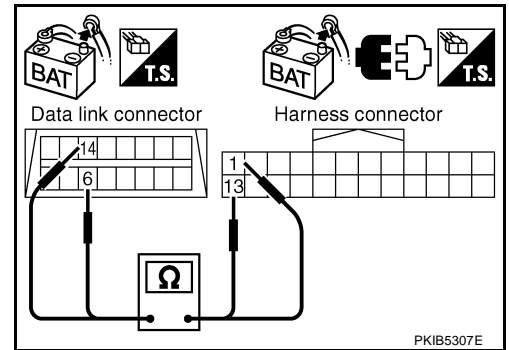
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



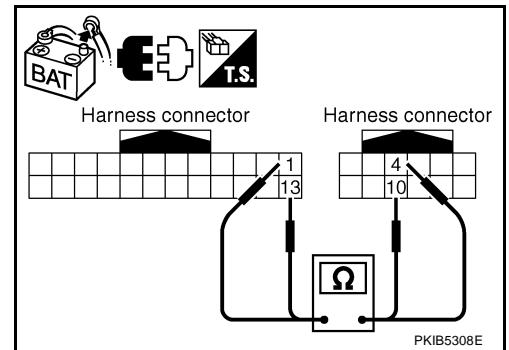
**3. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



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

AKS00CLE

**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 B4
  - Harness connector E105

OK or NG

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

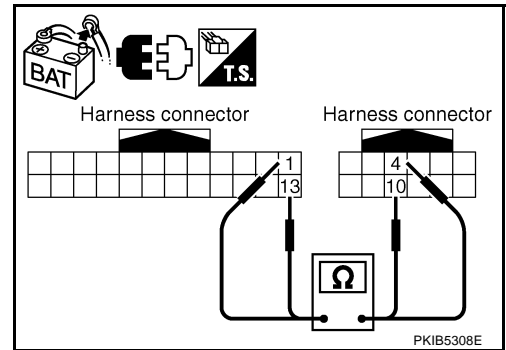
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



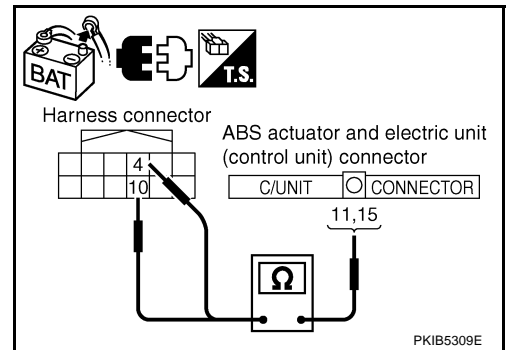
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**4 (L) - 11 (L) : Continuity should exist.**  
**10 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## ECM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

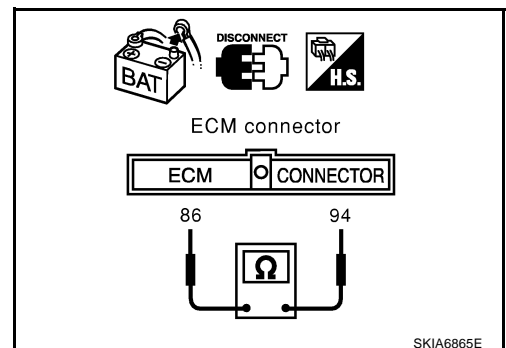
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

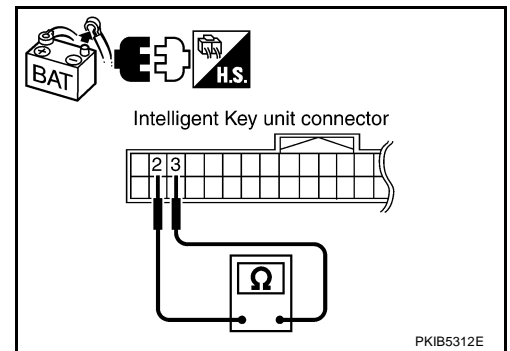
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace Intelligent Key unit.  
NG >> Repair harness between Intelligent Key unit and BCM.



## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

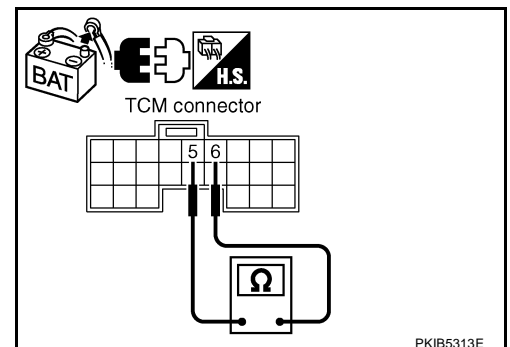
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM and BCM.



**BCM Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

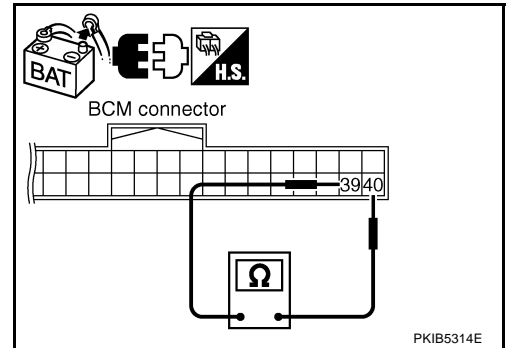
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace BCM. Refer to [BCS-16. "Removal and Installation of BCM"](#) .  
 NG >> Repair harness between BCM and harness connector M82.



AKS00CLJ

**Display Unit Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

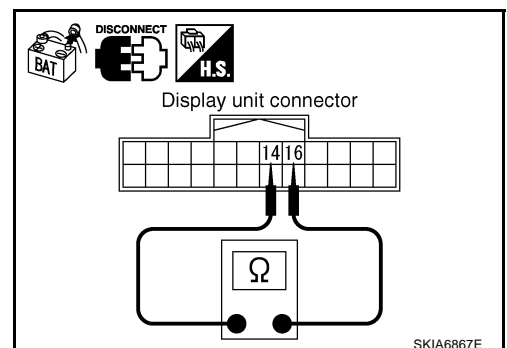
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace display unit.  
 NG >> Repair harness between display unit and data link connector.



## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

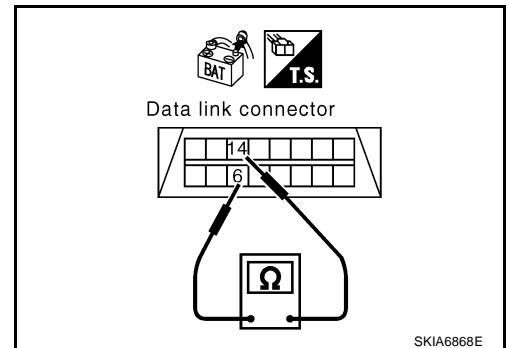
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness between data link connector and unified meter and A/C amp.



## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

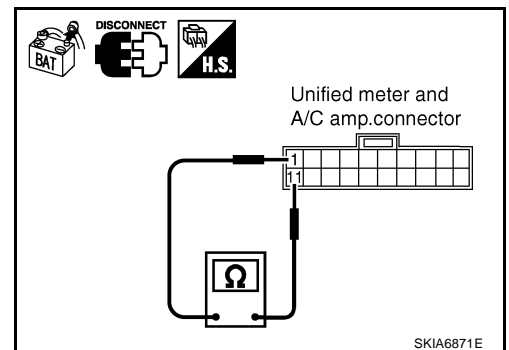
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

## Driver Seat Control Unit Circuit Inspection

AKS00CLM

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

#### OK or NG

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

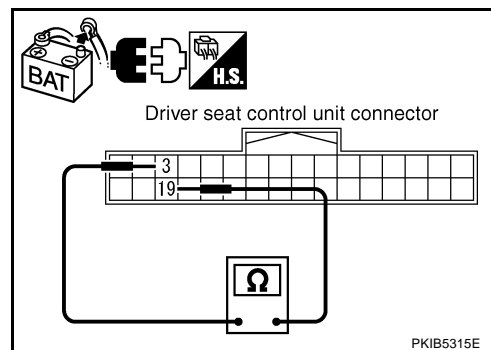
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CLN

### 1. CHECK CONNECTOR

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

#### OK or NG

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

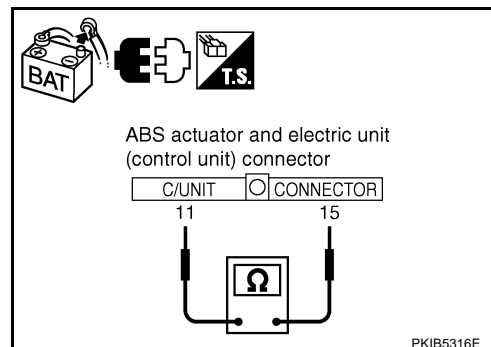
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

#### OK or NG

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



**IPDM E/R Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

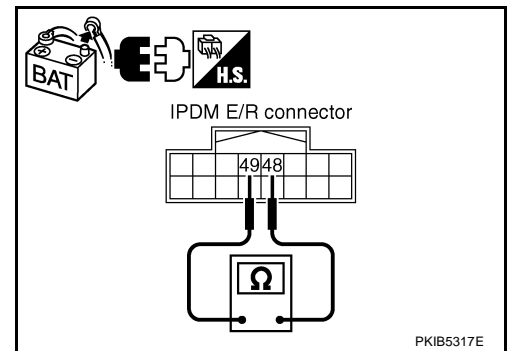
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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

**48 (L) - 49 (Y) : Approx. 108 - 132Ω**

OK or NG

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

**CAN Communication Circuit Inspection****1. CHECK CONNECTOR**

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

- ECM
- Intelligent Key unit
- TCM
- BCM
- Display unit
- Unified meter and A/C amp.
- Driver seat control unit
- ABS actuator and electric unit (control unit)
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and TCM
- Between ECM and driver seat control unit

OK or NG

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

A

B

C

D

E

F

G

H

I

J

LAN

L

M

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

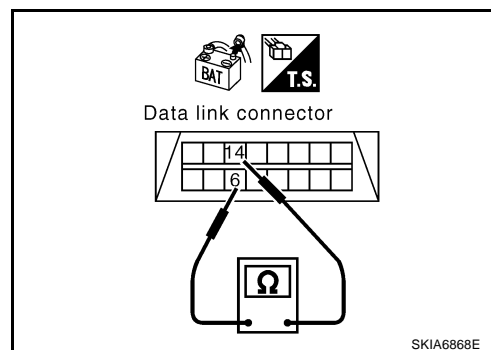
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



## 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

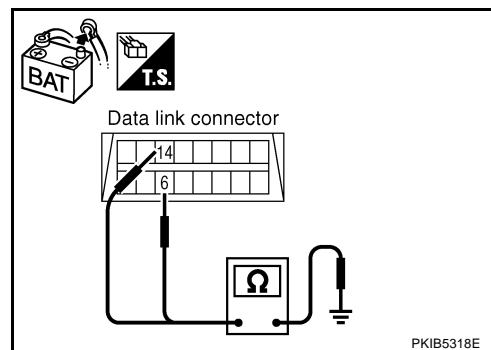
**14 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9





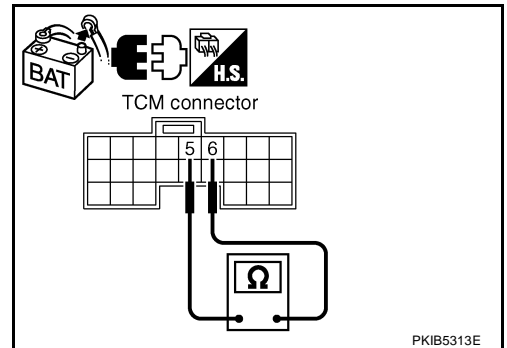
#### 4. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 5.  
 NG >> Repair harness between TCM and harness connector F102.



#### 5. CHECK HARNESS FOR SHORT CIRCUIT

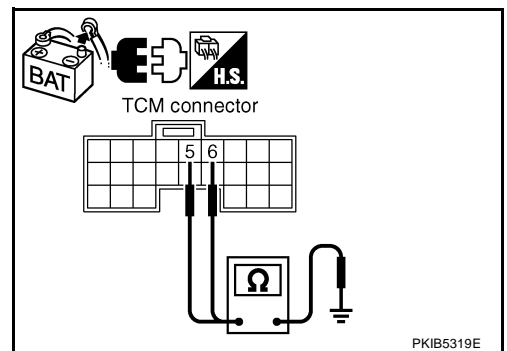
- Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

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

**6 (Y) - Ground : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 6.  
 NG >> Repair harness between TCM and harness connector F102.



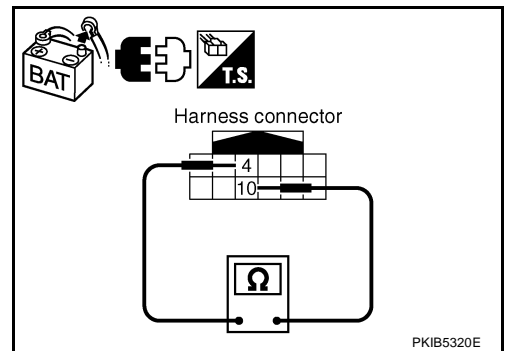
#### 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 7.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between harness connector B4 and harness connector B2
  - Harness between harness connector B4 and harness connector B9



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

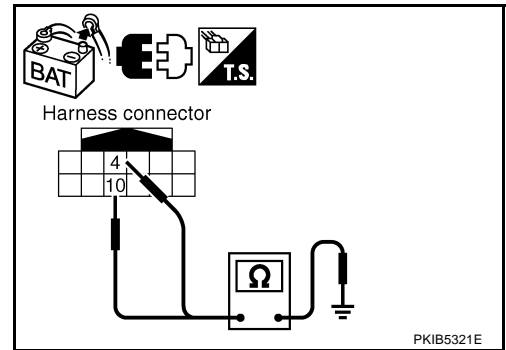
**10 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

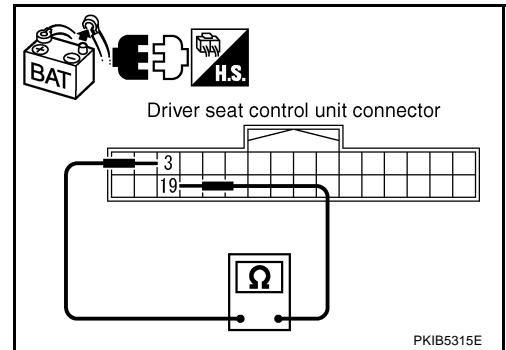
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

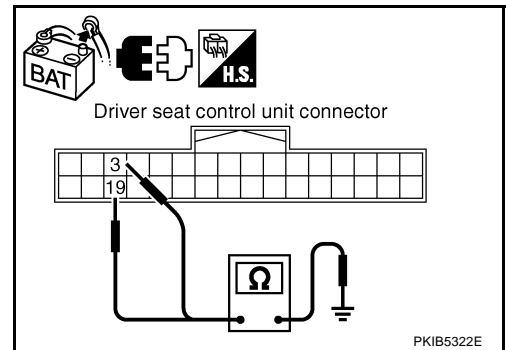
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

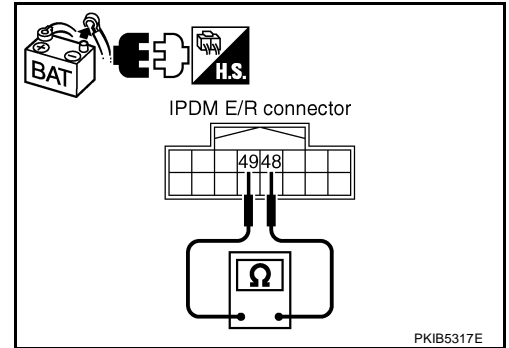
**48 (L) - 49 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

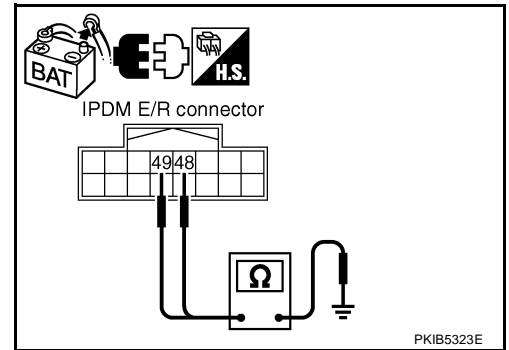
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86 : Approx. 108 – 132 Ω**

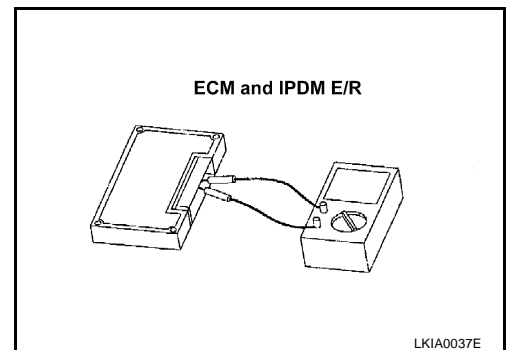
3. Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 13.

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



## 13. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 14.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.

## IPDM E/R Ignition Relay Circuit Inspection

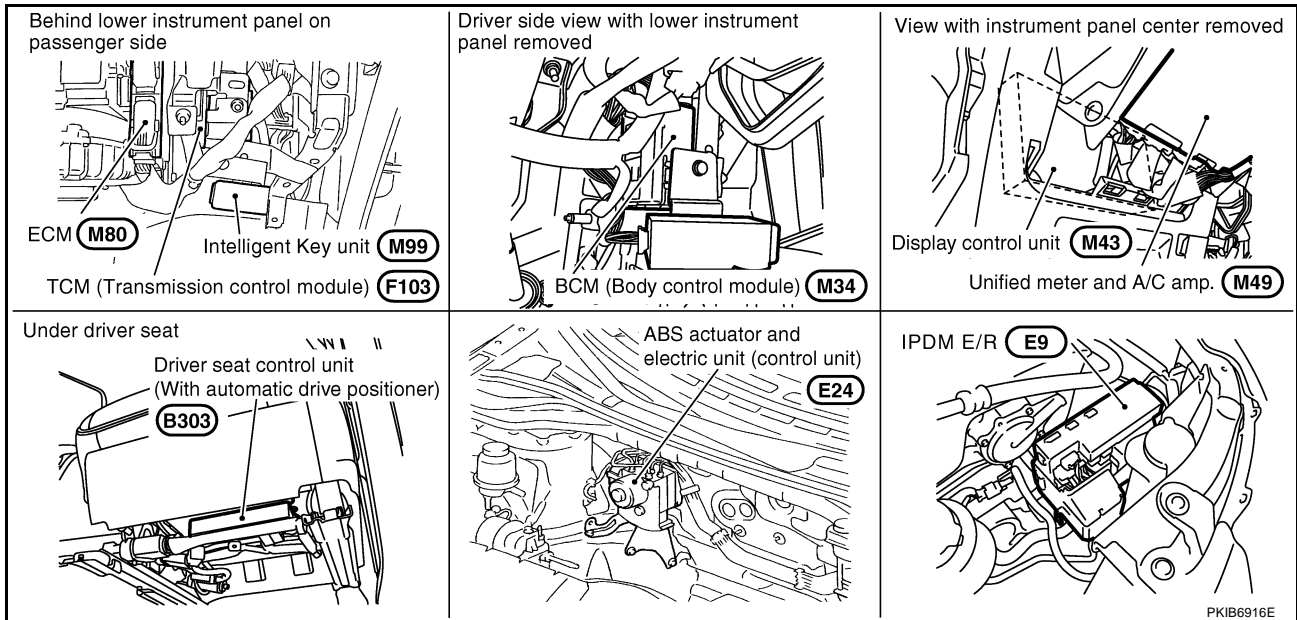
AKS00CLQ

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

- IPDM E/R power supply circuit. Refer to [PG-27, "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" "](#) .

## CAN SYSTEM (TYPE 3)

### Component Parts and Harness Connector Location



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

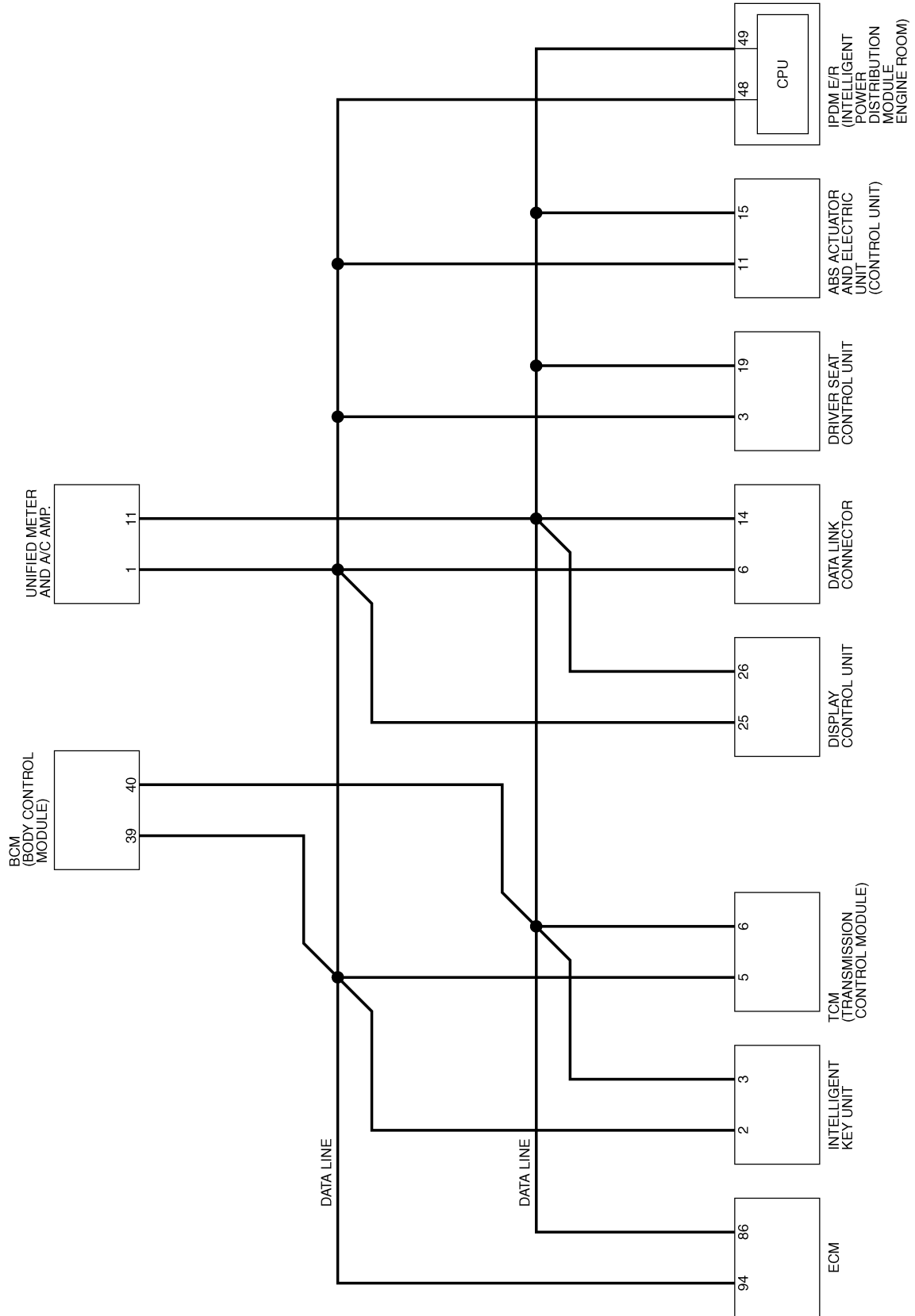
LAN

# CAN SYSTEM (TYPE 3)

[CAN]

## Schematic

AKS00A54



TKWB0832E

# CAN SYSTEM (TYPE 3)

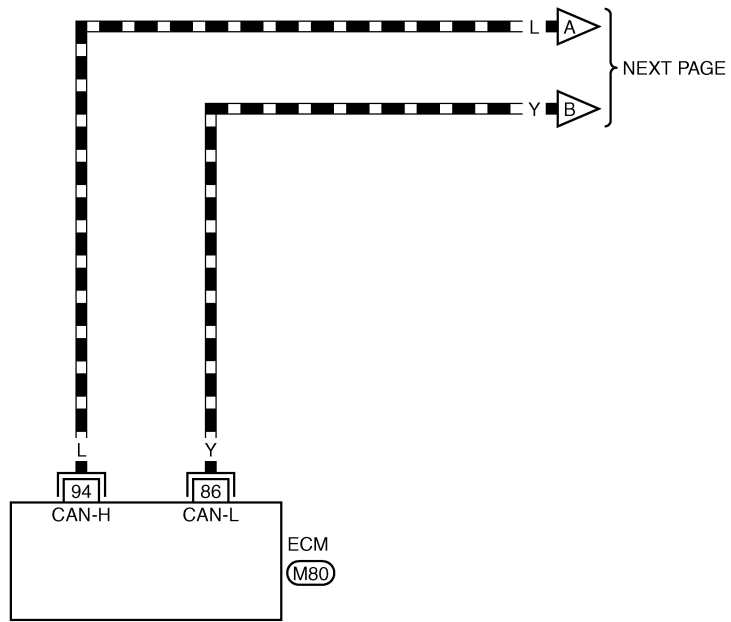
[CAN]

## Wiring Diagram - CAN -

AKS00A55

### LAN-CAN-10

▬ : DATA LINE



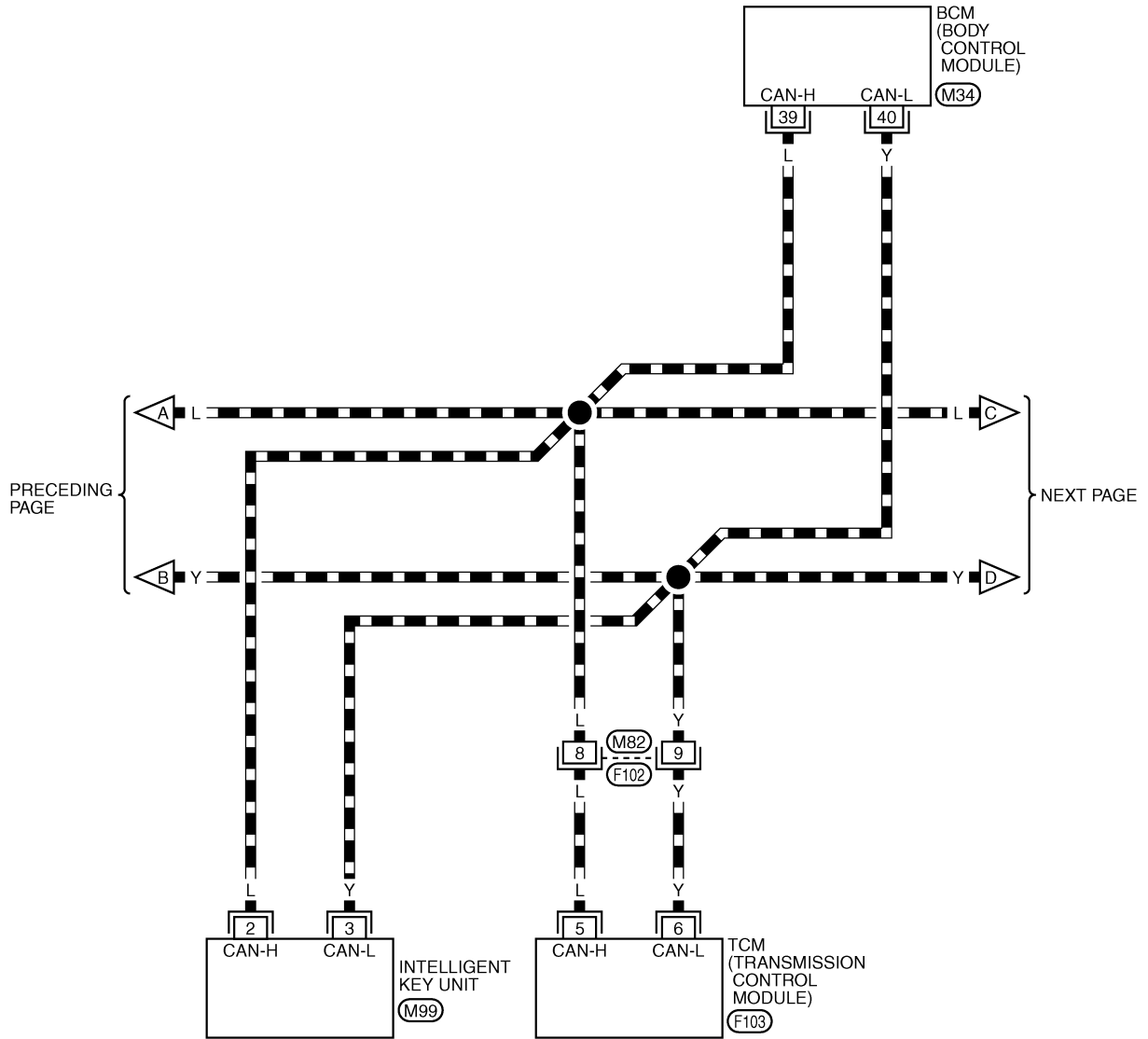
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

TKWB0833E

## LAN-CAN-11

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102)	W

REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

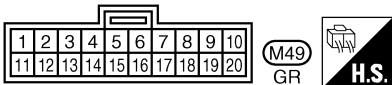
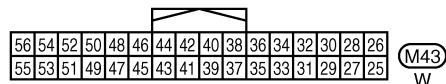
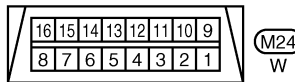
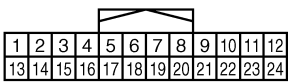
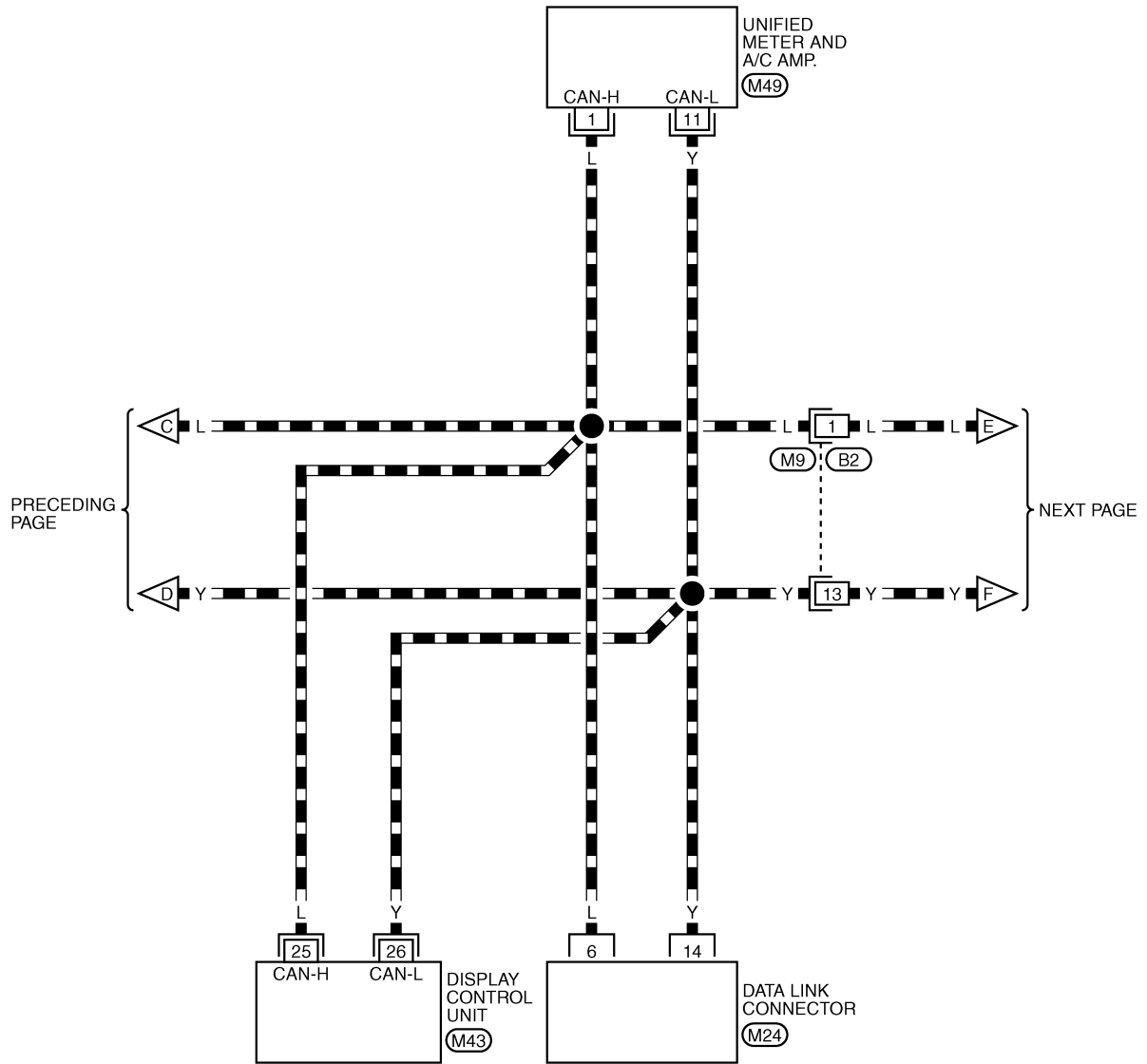


# CAN SYSTEM (TYPE 3)

[CAN]

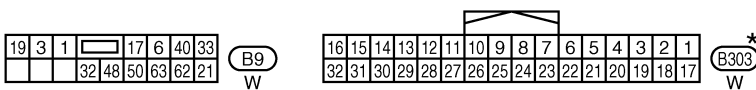
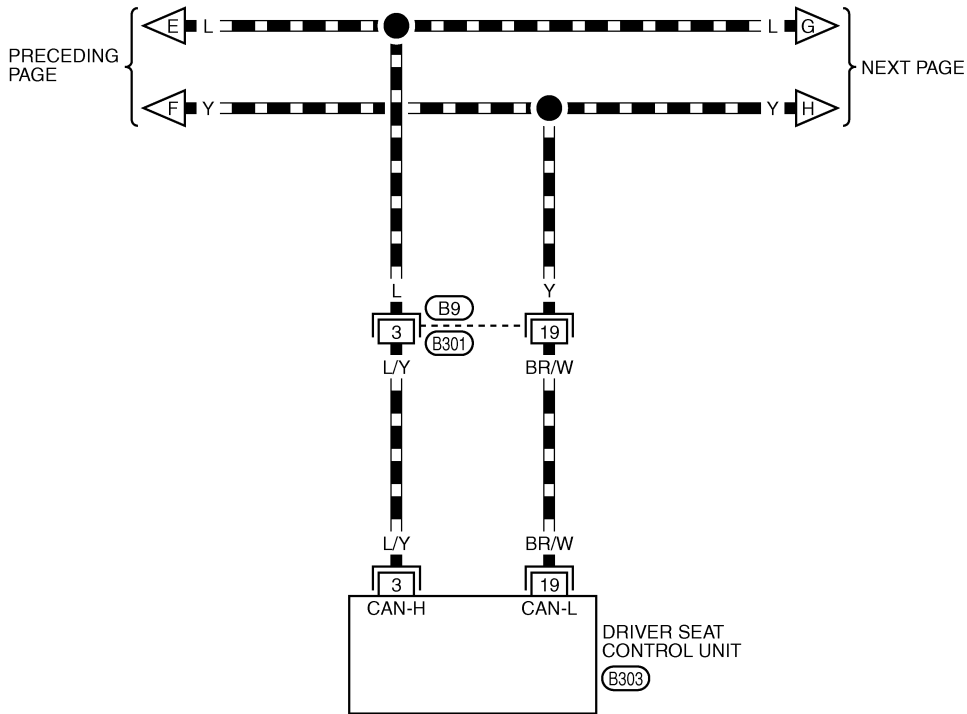
## LAN-CAN-12

▬ : DATA LINE



TKWB0835E

▬ : DATA LINE



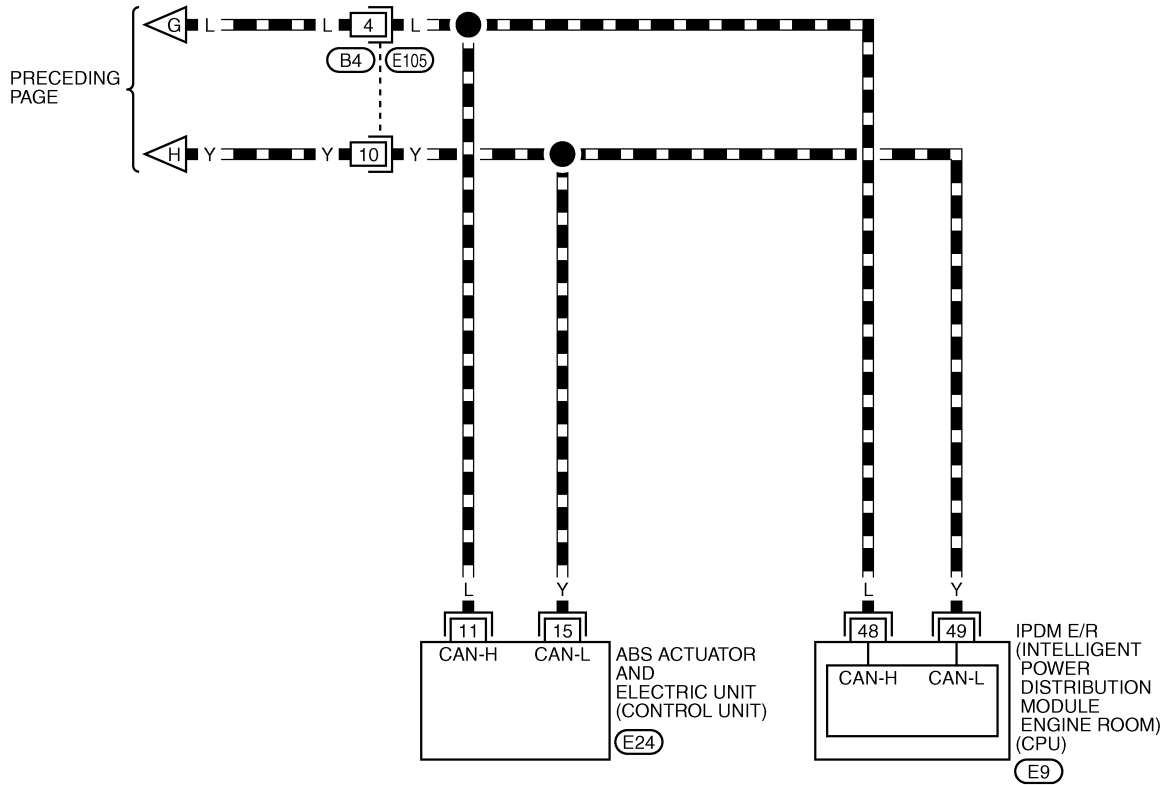
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

# CAN SYSTEM (TYPE 3)

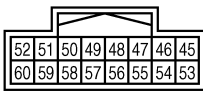
[CAN]

## LAN-CAN-14

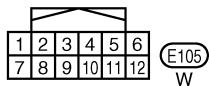
▬ : DATA LINE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M



E9  
W



E105  
W

REFER TO THE FOLLOWING.

E24 -ELECTRICAL UNITS

TKWB0837E

# CAN SYSTEM (TYPE 3)

[CAN]

AKS00ASK

## Check Sheet

**NOTE:**

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

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

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

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

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

PKIB4713E

# CAN SYSTEM (TYPE 3)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4712E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

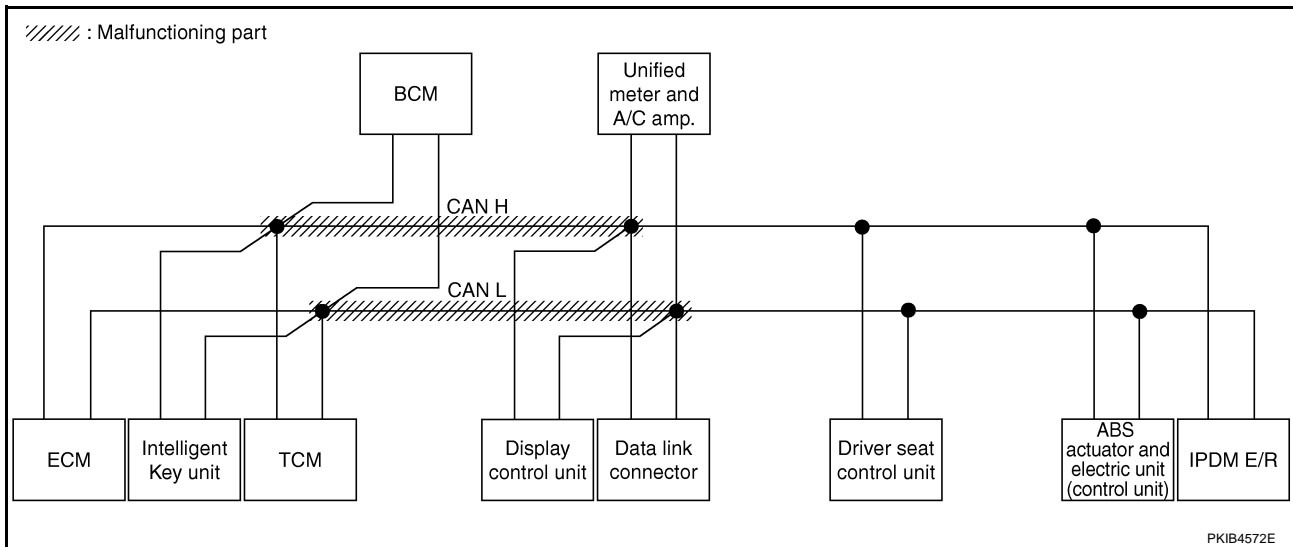
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-132. "Inspection Between TCM and Data Link Connector Circuit"](#) .

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

PKIB4763E



# CAN SYSTEM (TYPE 3)

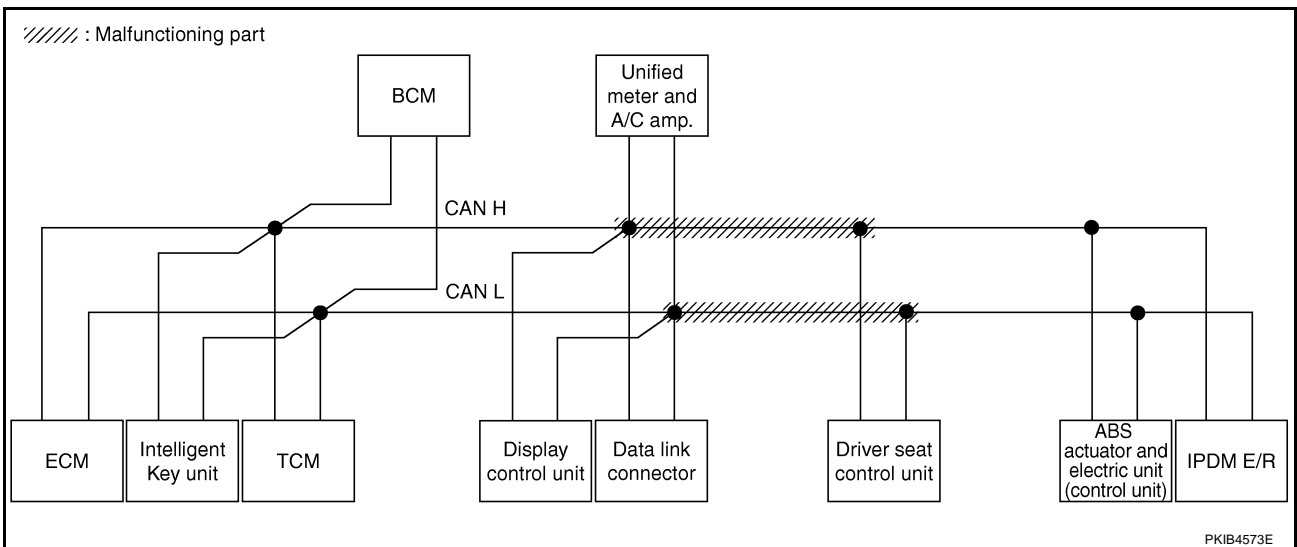
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-132. "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										IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	✓	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	✓	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN ✓	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4764E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# CAN SYSTEM (TYPE 3)

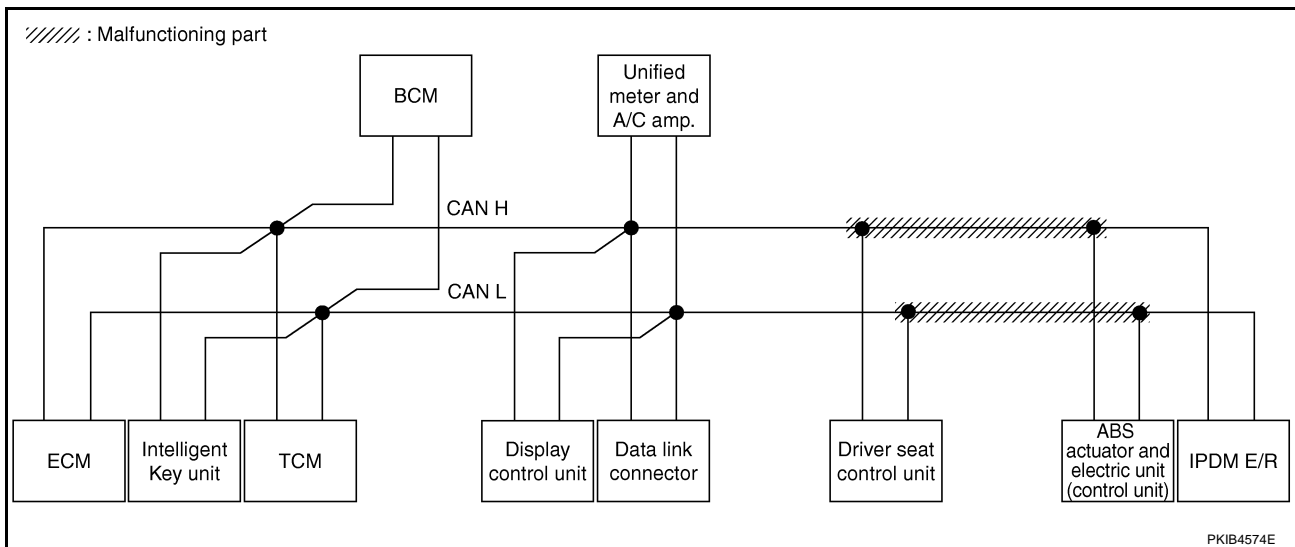
[CAN]

## Case 3

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-133, "Inspection Between Driver Seat Control Unit and ABS Actuator and Electric Unit \(Control Unit\) Circuit"](#) .

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

PKIB4765E





# CAN SYSTEM (TYPE 3)

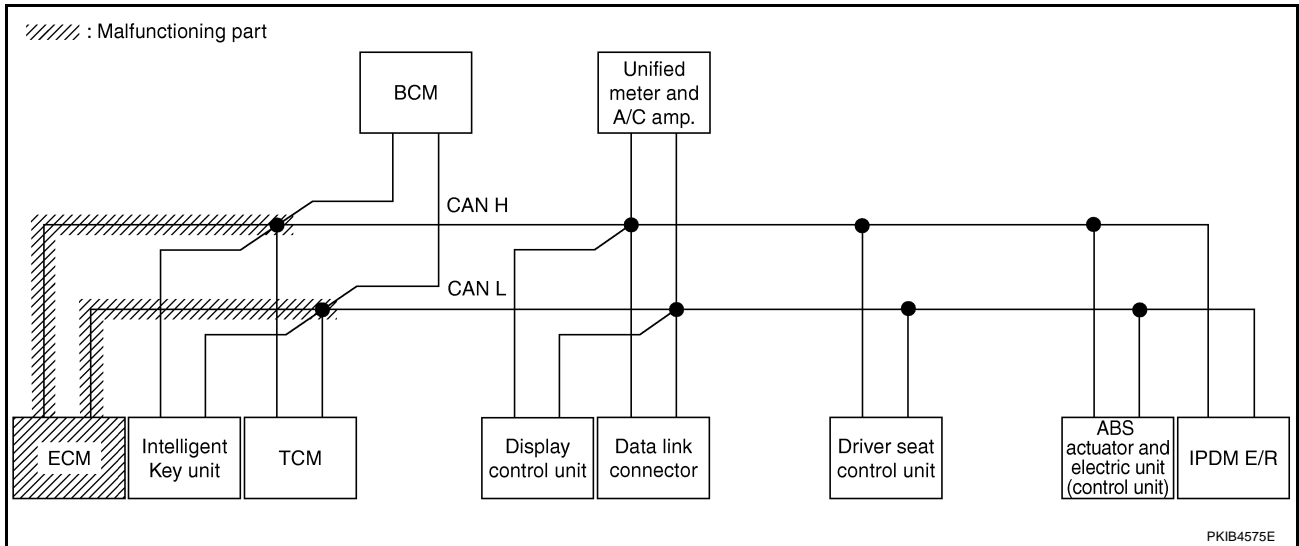
[CAN]

## Case 4

Check ECM circuit. Refer to [LAN-134, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4766E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 3)

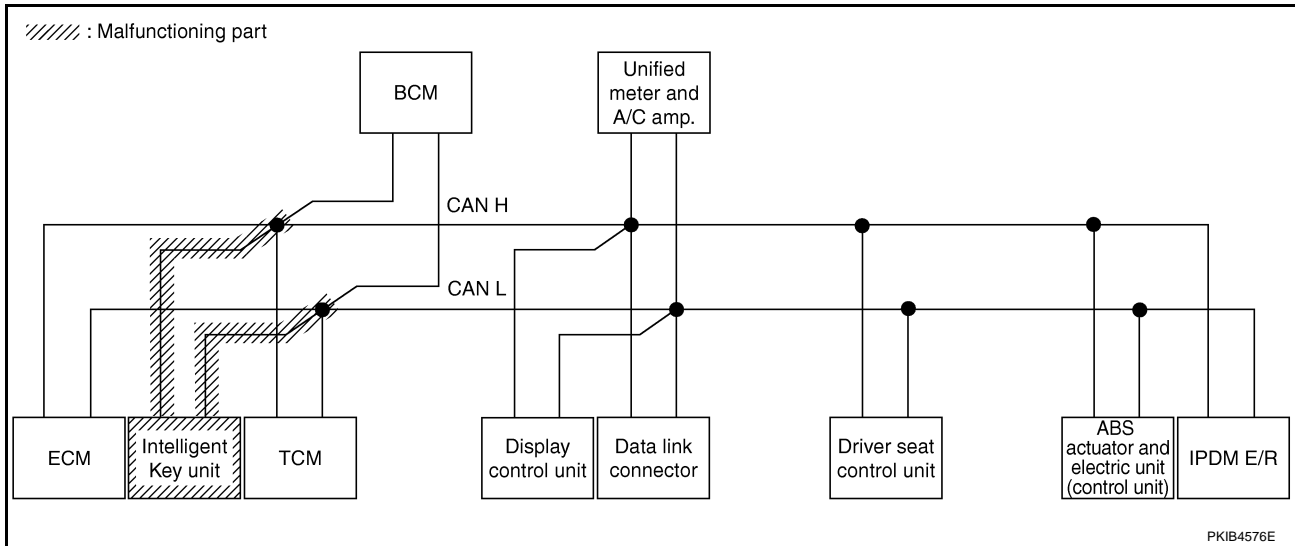
[CAN]

## Case 5

Check Intelligent Key unit circuit. Refer to [LAN-135, "Intelligent Key Unit Circuit Inspection"](#) .

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

PKIB4767E



# CAN SYSTEM (TYPE 3)

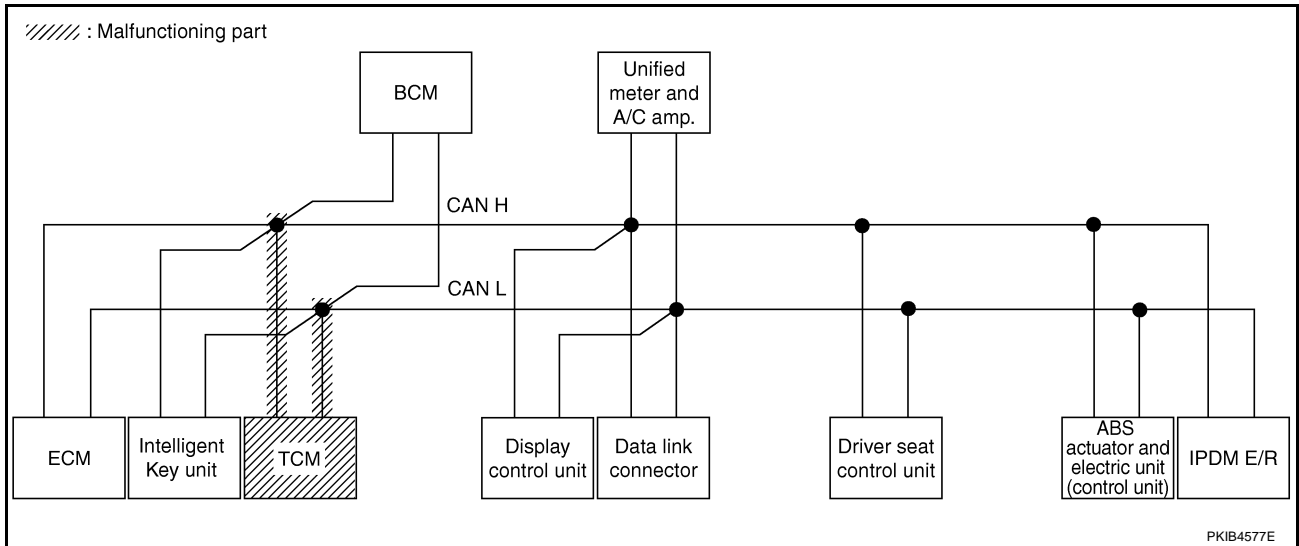
[CAN]

## Case 6

Check TCM circuit. Refer to [LAN-135. "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R				
ENGINE	—	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	✓	CAN COMM CIRCUIT (U101)	✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—	—	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—	—	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	—	—	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—	—	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—	—	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	—	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—	—	—

PKIB4768E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 3)

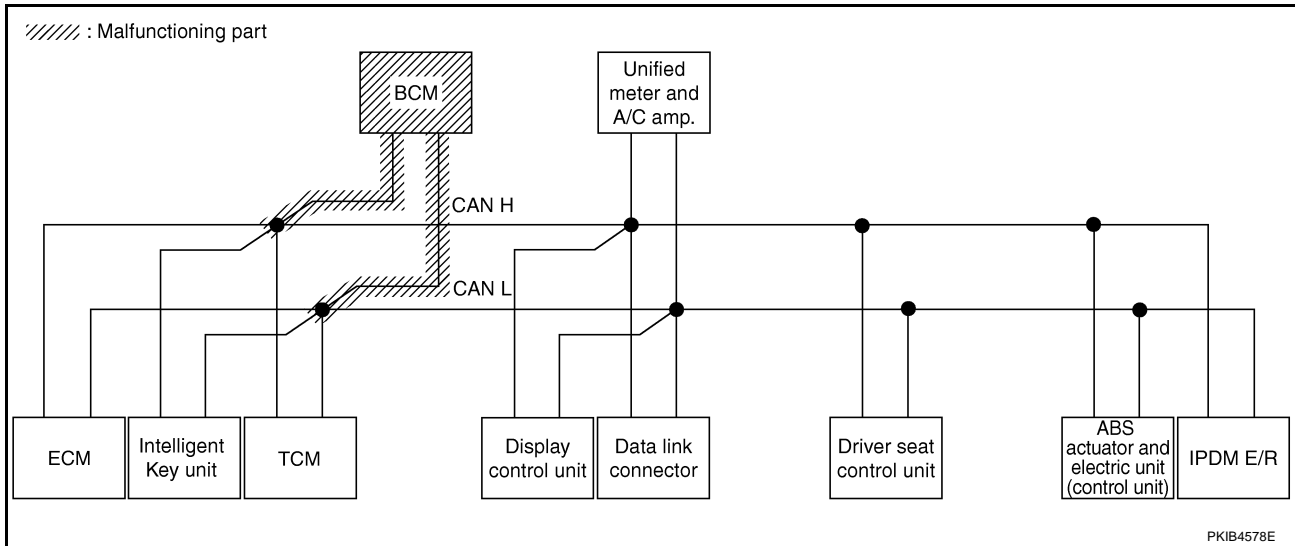
[CAN]

## Case 7

Check BCM circuit. Refer to [LAN-136, "BCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—

PKIB4769E



# CAN SYSTEM (TYPE 3)

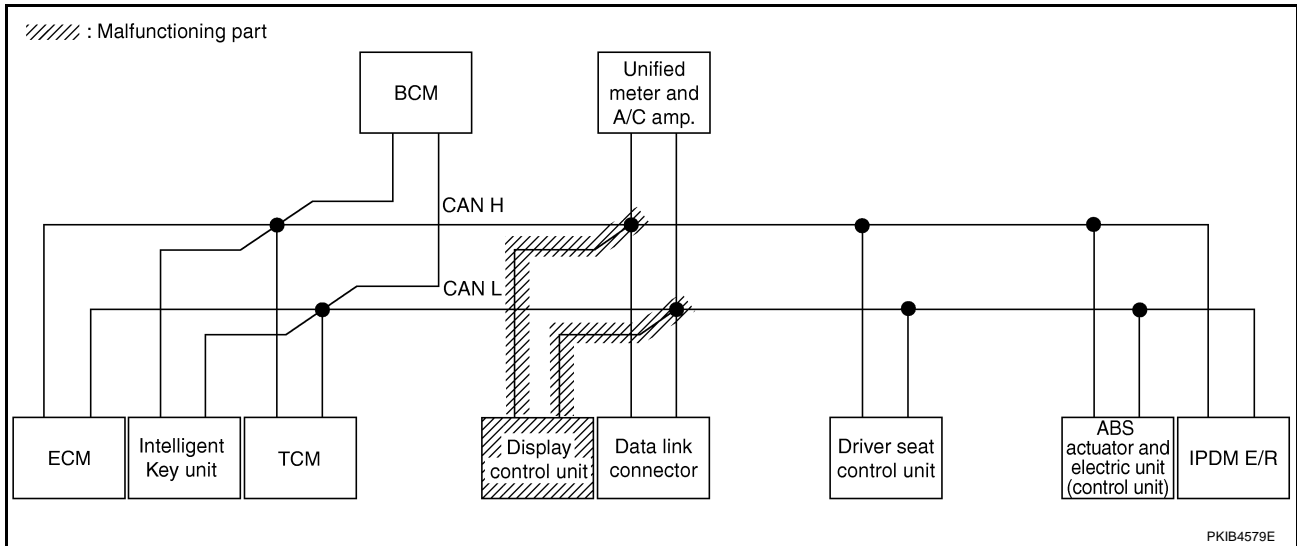
[CAN]

## Case 8

Check display control unit circuit. Refer to [LAN-136, "Display Control Unit Circuit Inspection"](#) .

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

PKIB4770E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 3)

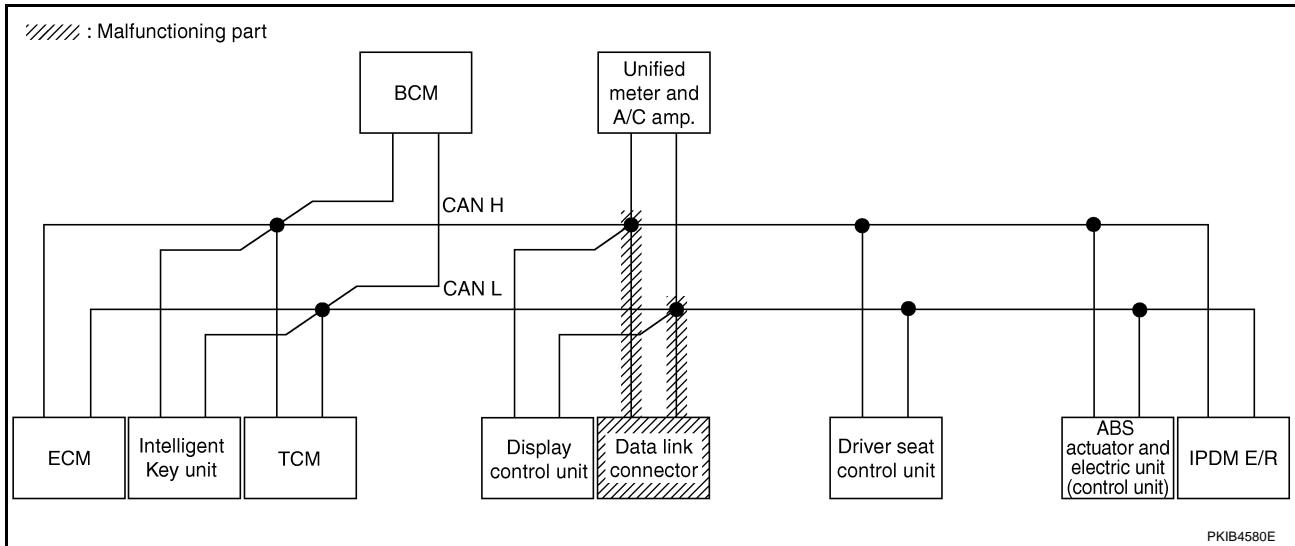
[CAN]

## Case 9

Check data link connector circuit. Refer to [LAN-137, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	<del>N</del> indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	<del>N</del> indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	<del>N</del> indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	<del>N</del> indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	<del>N</del> indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	<del>N</del> indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4771E



# CAN SYSTEM (TYPE 3)

[CAN]

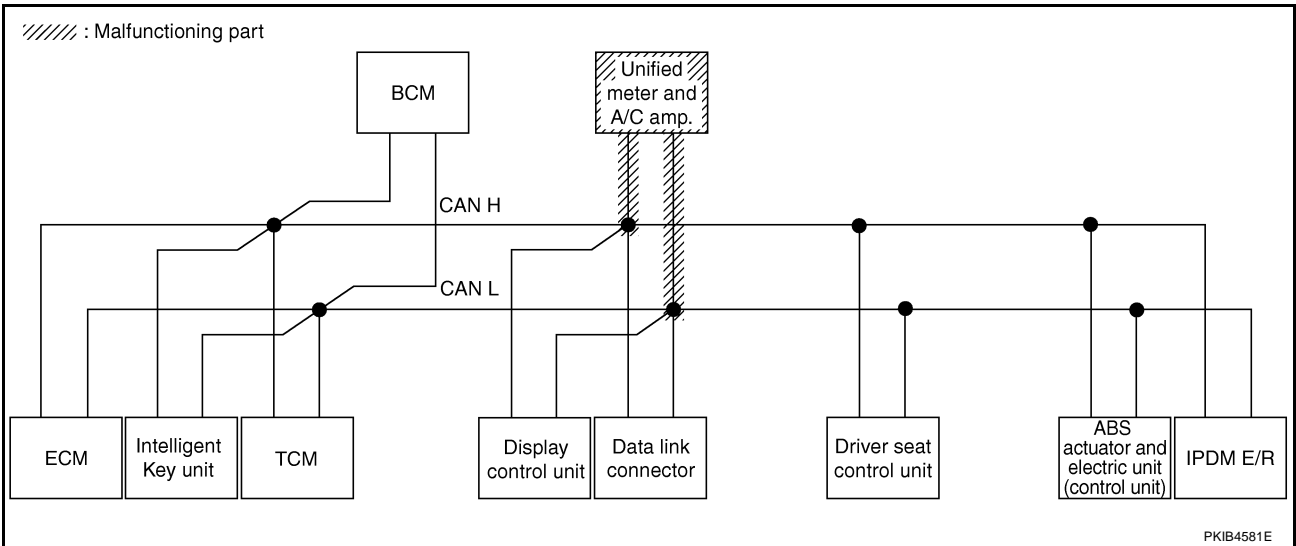
## Case 10

Check unified meter and A/C amp. circuit. Refer to [LAN-137, "Unified Meter and A/C Amp. Circuit Inspection"](#).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

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

PKIB4772E



PKIB4581E

# CAN SYSTEM (TYPE 3)

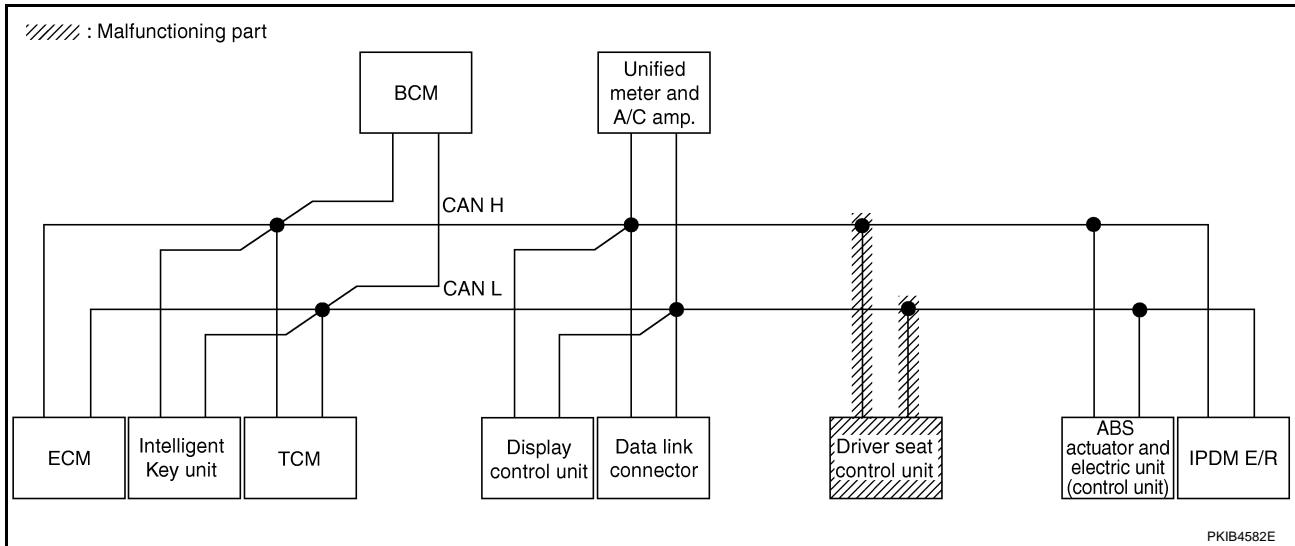
[CAN]

## Case 11

Check driver seat control unit circuit. Refer to [LAN-138, "Driver Seat Control Unit Circuit Inspection"](#) .

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

PKIB4773E





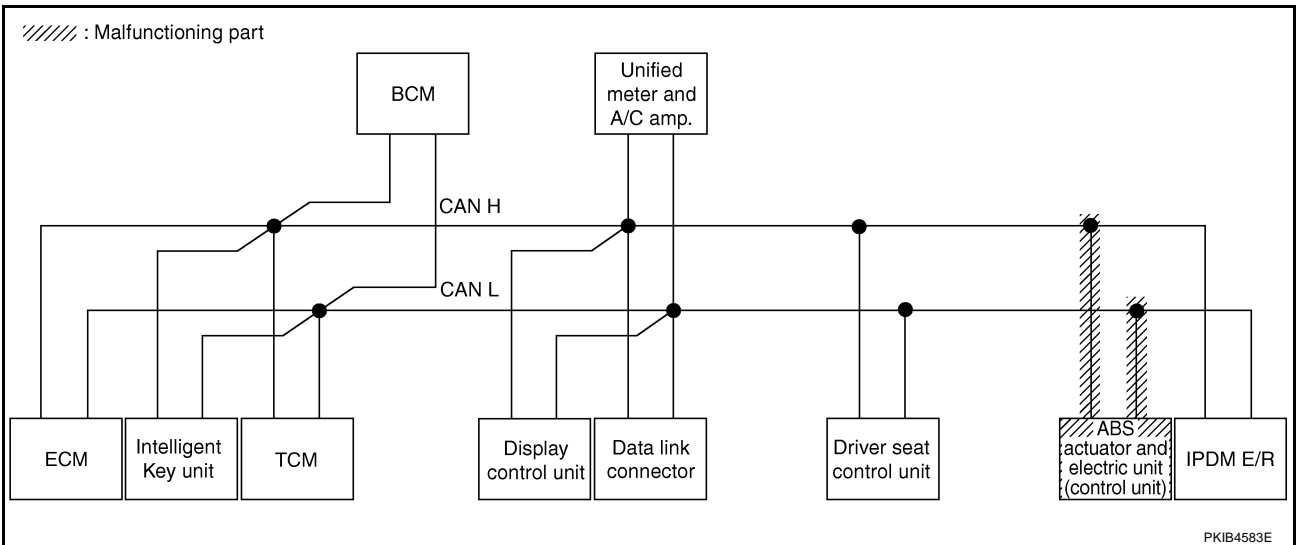
## Case 12

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-138, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

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

PKIB4774E



# CAN SYSTEM (TYPE 3)

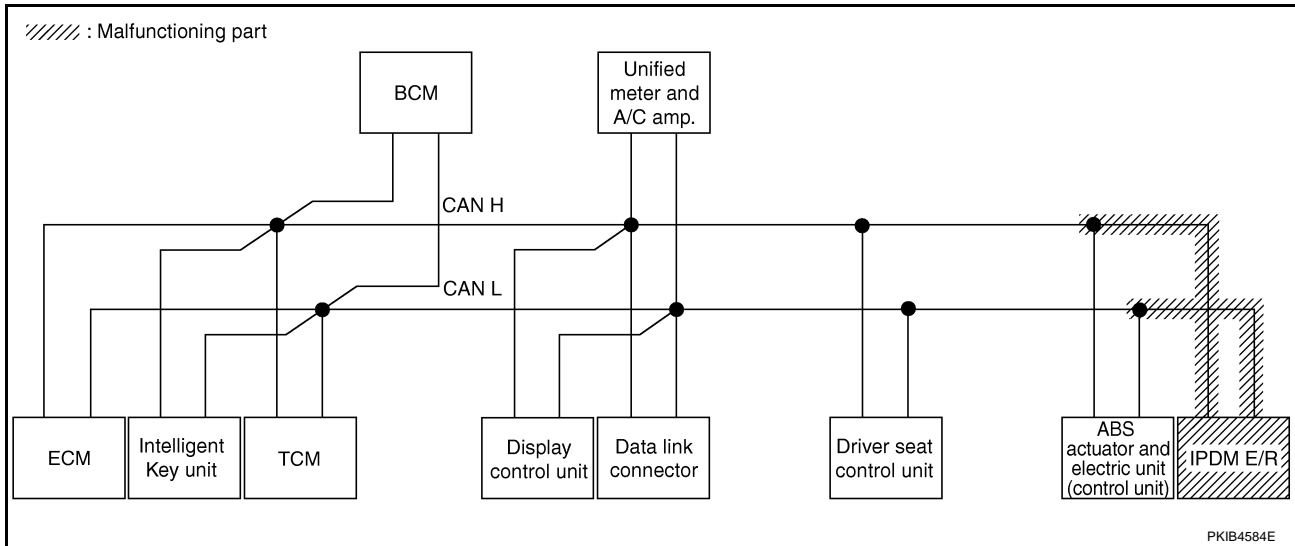
[CAN]

## Case 13

Check IPDM E/R circuit. Refer to [LAN-139, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4775E



# CAN SYSTEM (TYPE 3)

[CAN]

## Case 14

Check CAN communication circuit. Refer to [LAN-139, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4776E

## Case 15

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-144, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4776E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 16

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-144, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

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

PKIB4778E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CKV

### 1. CHECK HARNESS FOR OPEN CIRCUIT

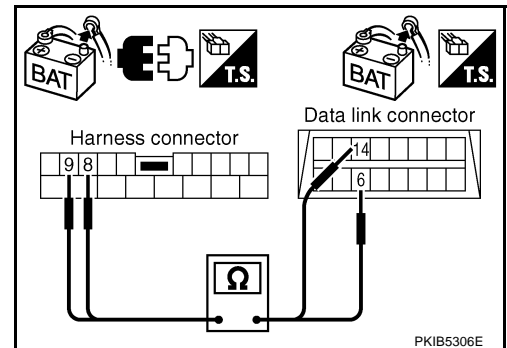
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CKW

### 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 M9
  - Harness connector B2

#### OK or NG

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

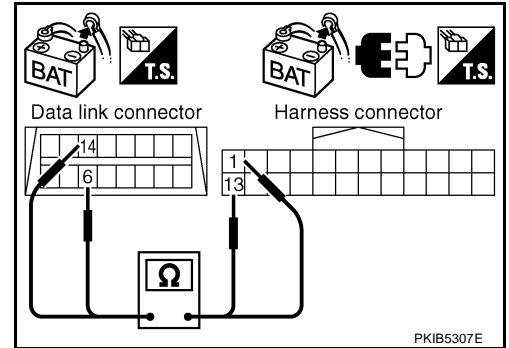
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



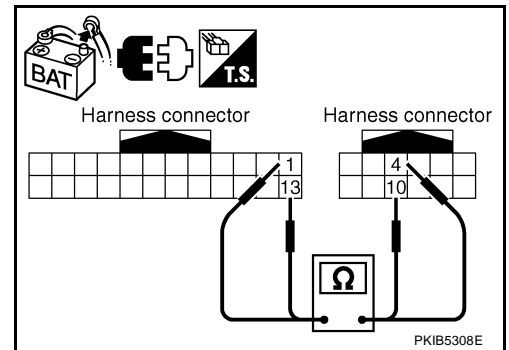
**3. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



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

AKS00CLB

**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 B4
  - Harness connector E105

OK or NG

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

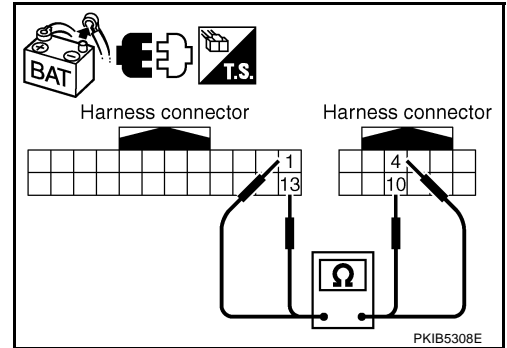
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



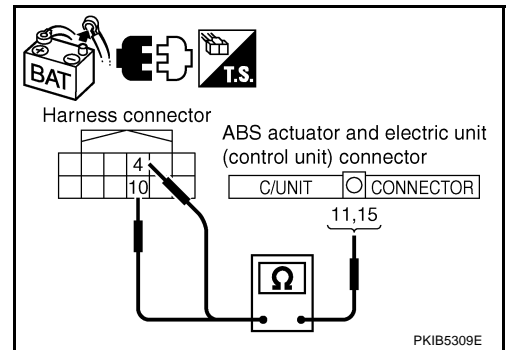
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**4 (L) - 11 (L) : Continuity should exist.**  
**10 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## ECM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

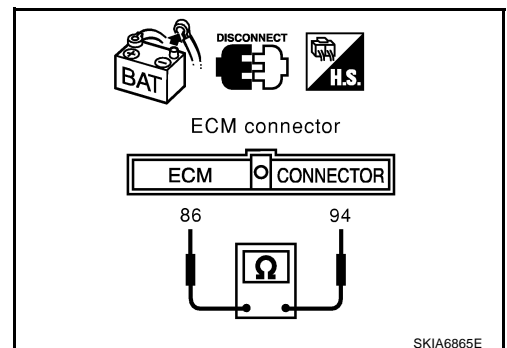
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



**Intelligent Key Unit Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

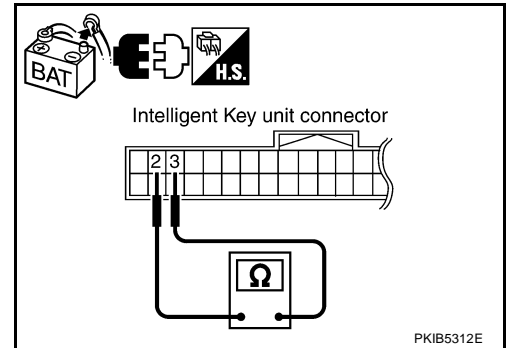
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.

**TCM Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

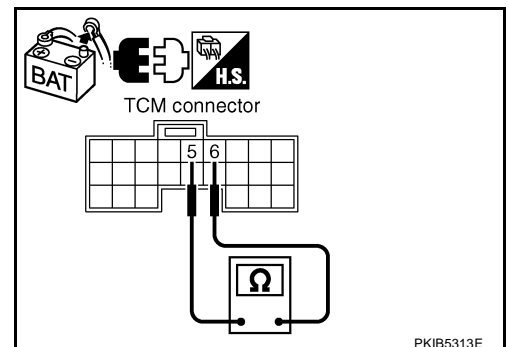
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM and BCM.



**BCM Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

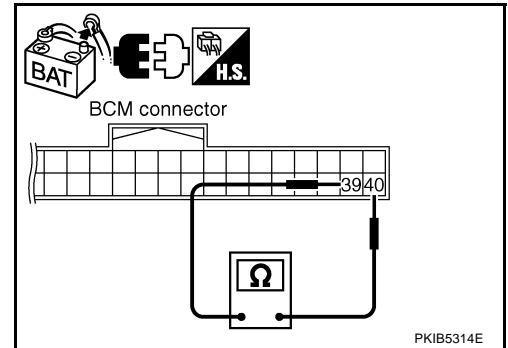
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace BCM. Refer to [BCS-16. "Removal and Installation of BCM"](#) .  
 NG >> Repair harness between BCM and harness connector M82.

**Display Control Unit Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

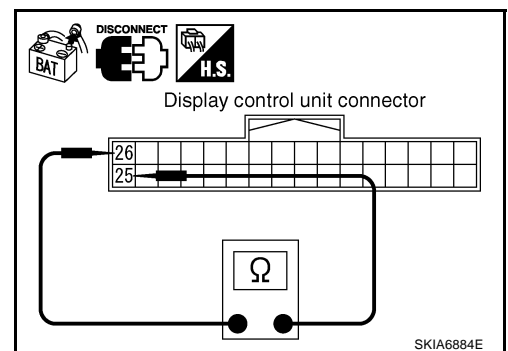
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect display control unit connector.
2. Check resistance between display control unit harness connector M43 terminals 25 (L) and 26 (Y).

**25 (L) - 26 (Y) : Approx. 54 - 66Ω**

OK or NG

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





## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

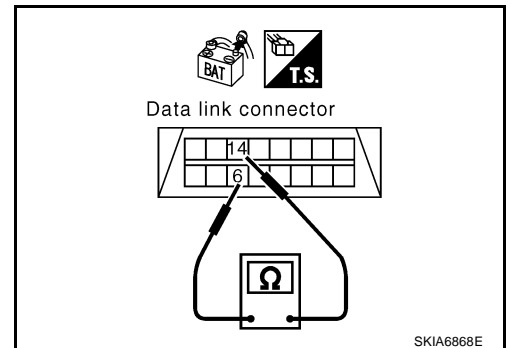
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness between data link connector and unified meter and A/C amp.



## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

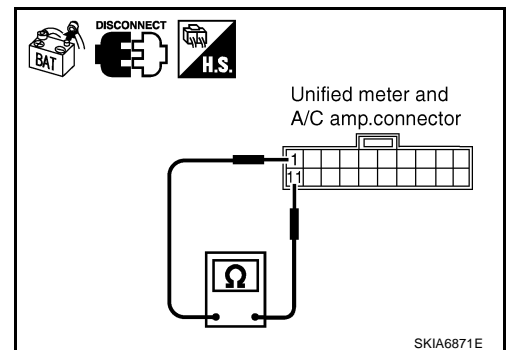
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.



A

B

C

D

E

F

G

H

I

J

LAN

L

M

## Driver Seat Control Unit Circuit Inspection

AKS00CL6

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

#### OK or NG

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

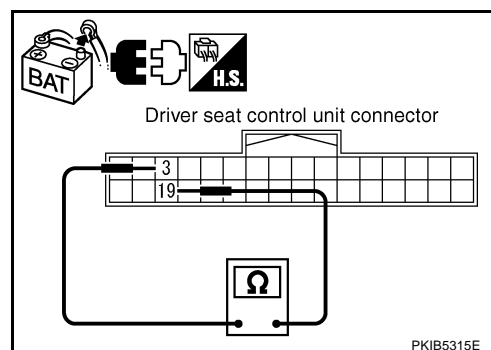
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace driver seat control unit.  
NG >> Repair harness between driver seat control unit and harness connector B4.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CL7

### 1. CHECK CONNECTOR

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

#### OK or NG

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

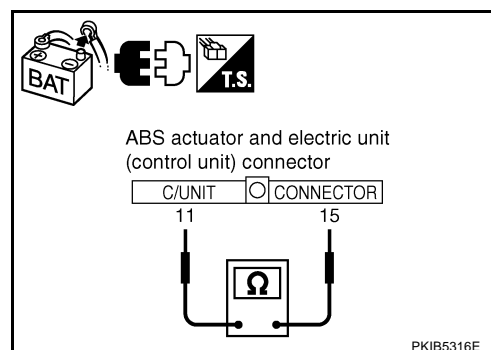
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

#### OK or NG

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



**IPDM E/R Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

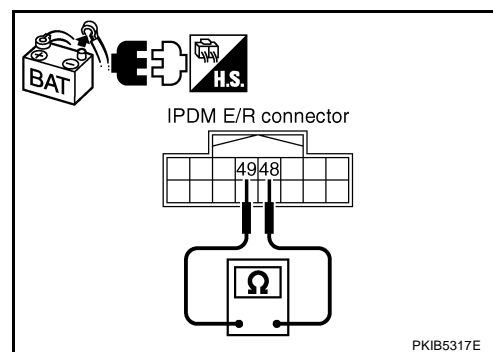
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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

**48 (L) - 49 (Y) : Approx. 108 - 132Ω**

OK or NG

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

**CAN Communication Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - BCM connector
  - Display control unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

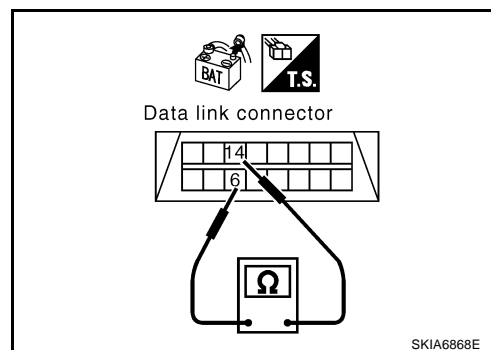
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



## 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

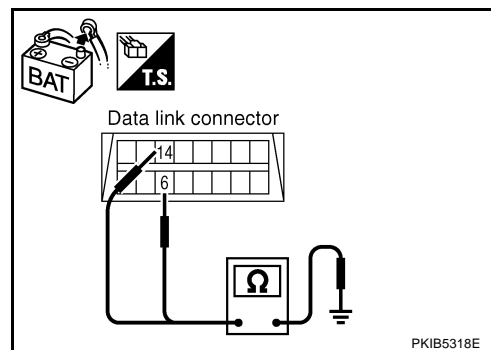
**14 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



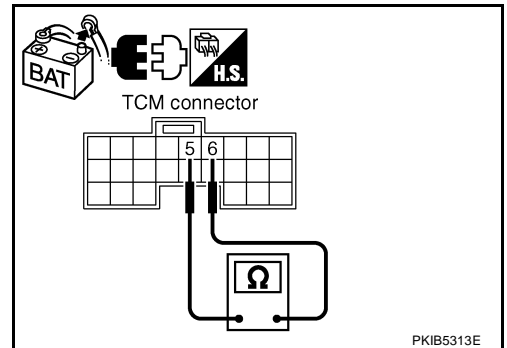
#### 4. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 5.  
 NG >> Repair harness between TCM and harness connector F102.



#### 5. CHECK HARNESS FOR SHORT CIRCUIT

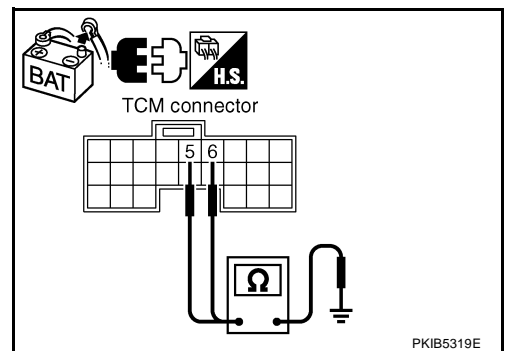
- Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

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

**6 (Y) - Ground : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 6.  
 NG >> Repair harness between TCM and harness connector F102.



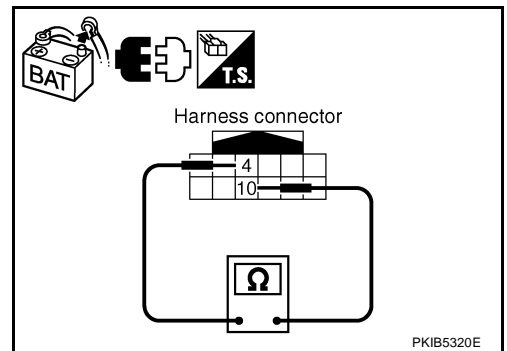
#### 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 7.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between harness connector B4 and harness connector B2
  - Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

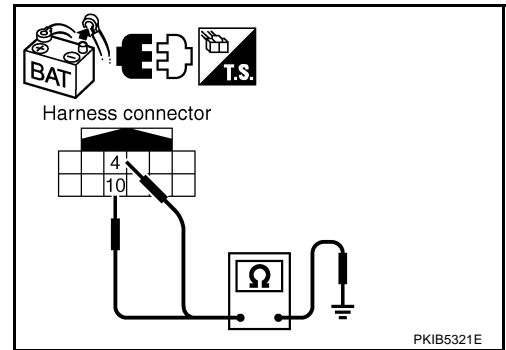
**10 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

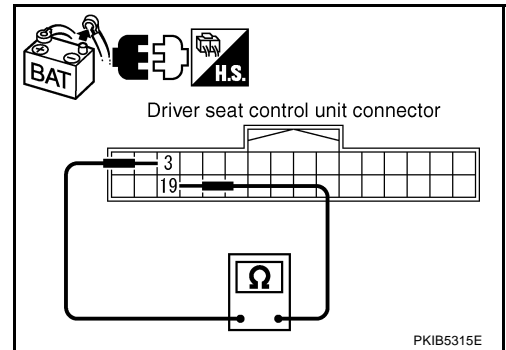
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

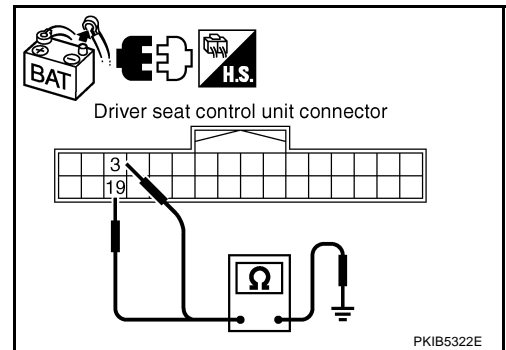
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

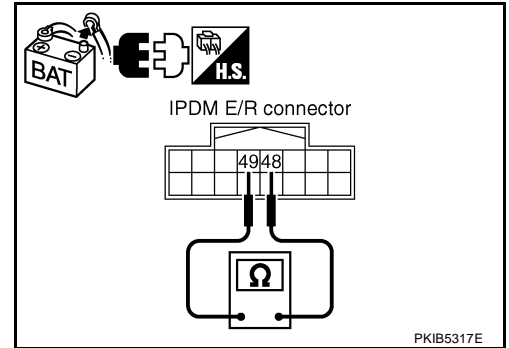
**48 (L) - 49 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

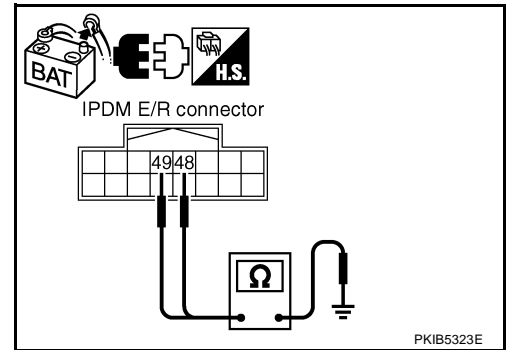
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86 : Approx. 108 – 132 Ω**

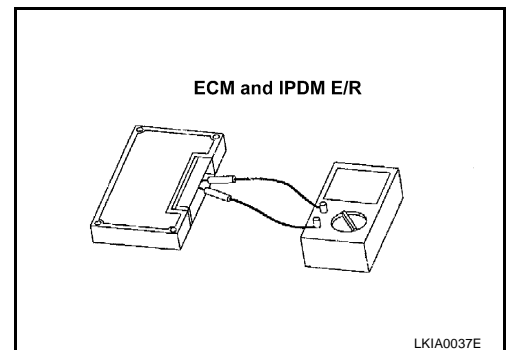
3. Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 13.

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



## 13. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 14.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.

### IPDM E/R Ignition Relay Circuit Inspection

AKS00CLA

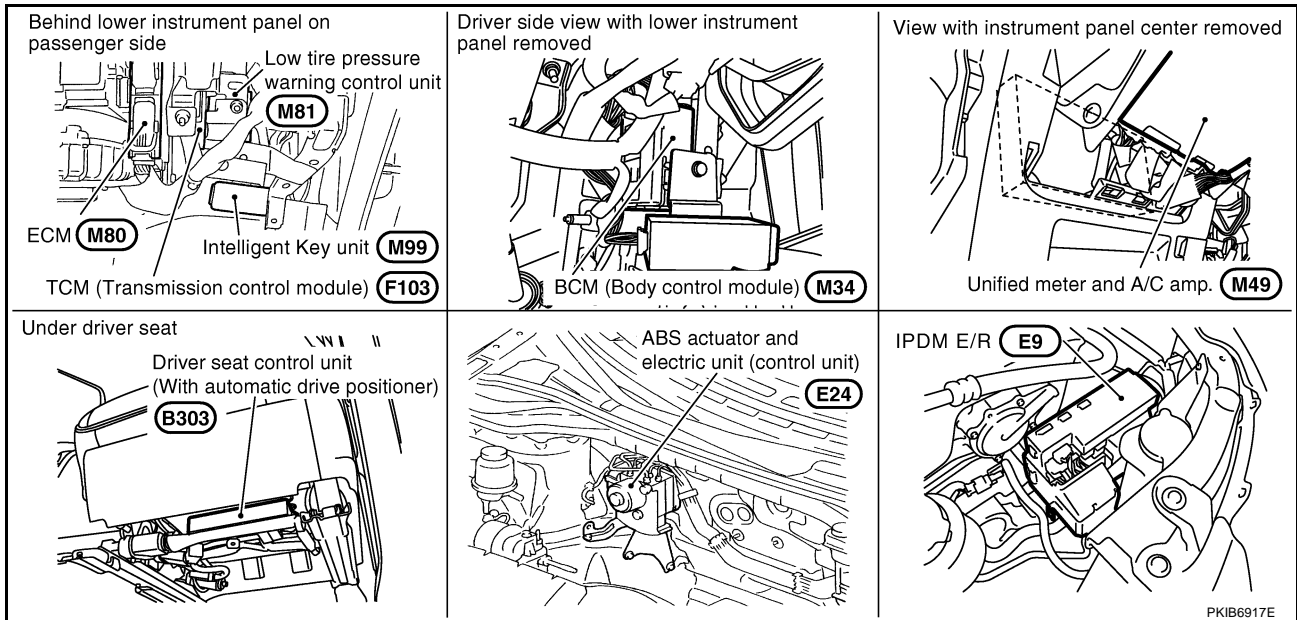
Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to [PG-27, "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" .](#)



## CAN SYSTEM (TYPE 4)

### Component Parts and Harness Connector Location



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

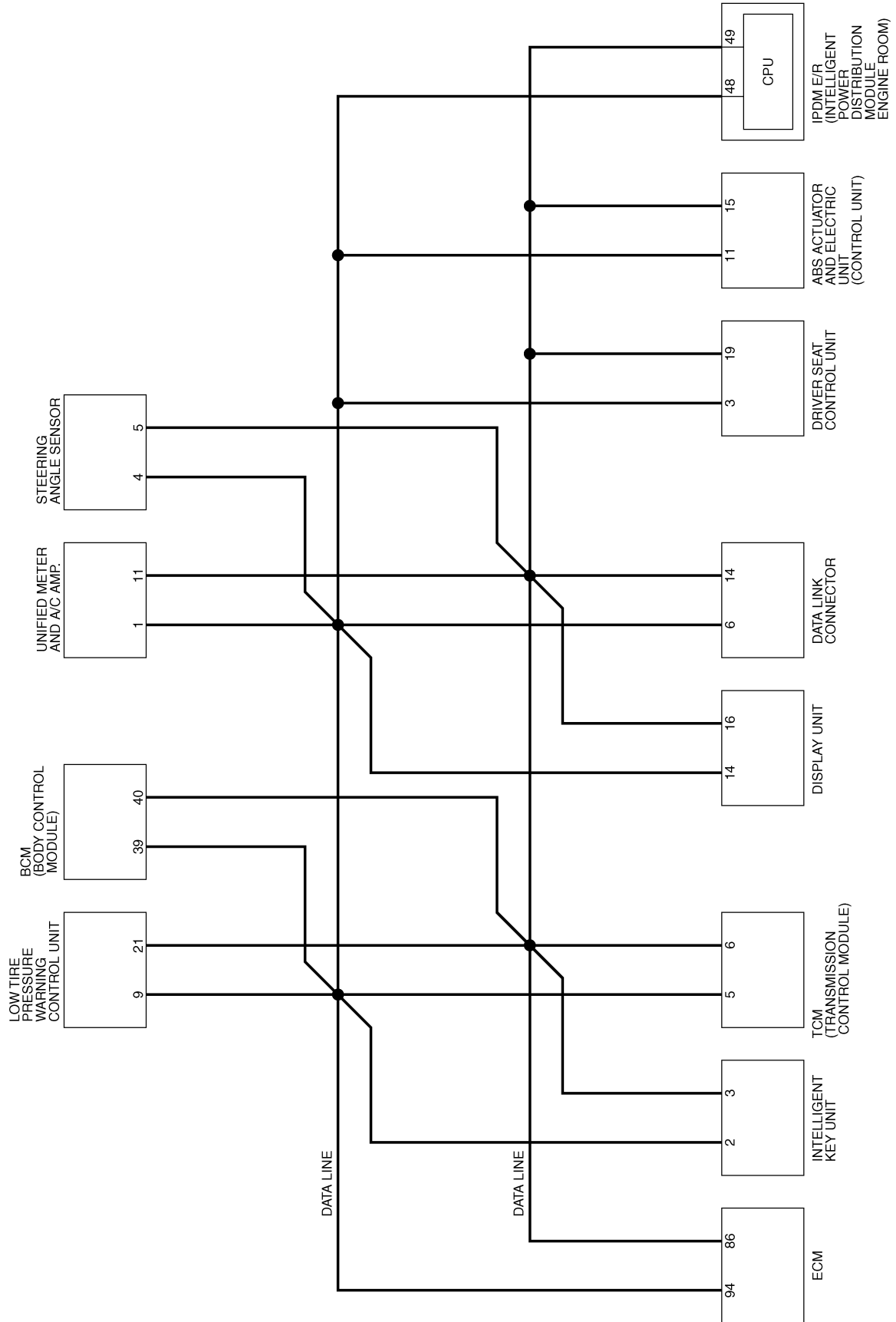
LAN

# CAN SYSTEM (TYPE 4)

[CAN]

## Schematic

AKS00ADZ



TKWB0838E

# CAN SYSTEM (TYPE 4)

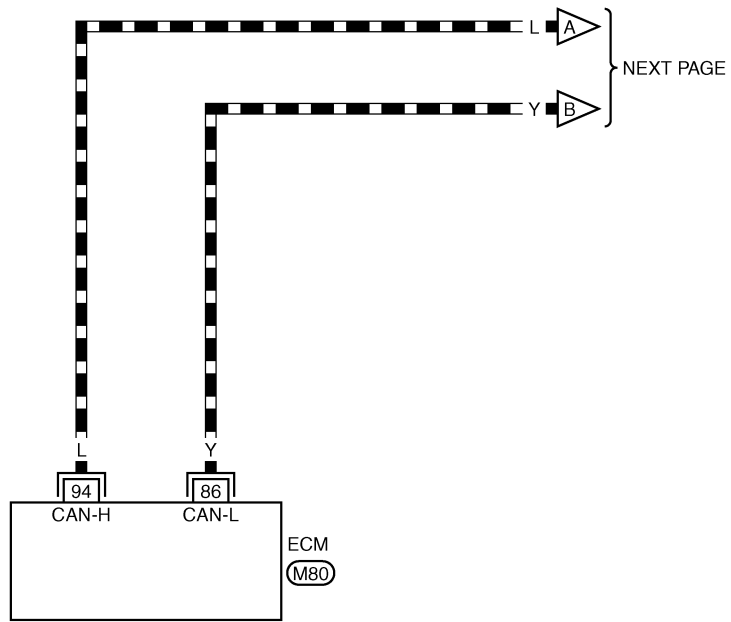
[CAN]

## Wiring Diagram - CAN -

AKS00AE0

### LAN-CAN-15

▬ : DATA LINE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

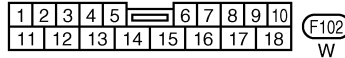
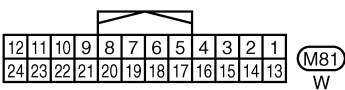
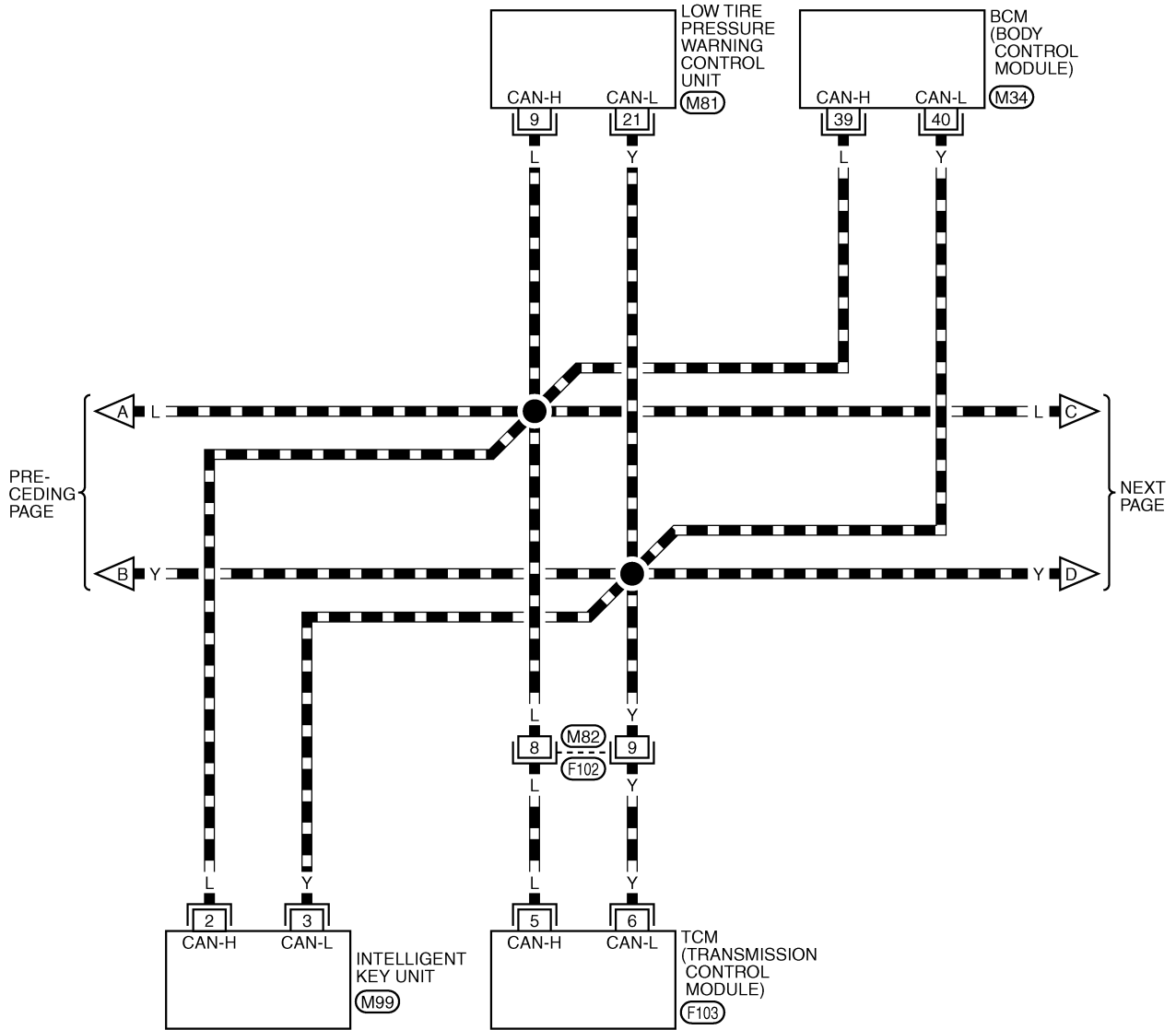
TKWB0839E

# CAN SYSTEM (TYPE 4)

[CAN]

## LAN-CAN-16

▬ : DATA LINE



REFER TO THE FOLLOWING.

M34, M99, F103  
-ELECTRICAL UNITS

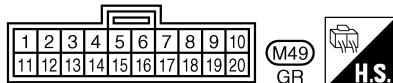
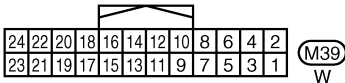
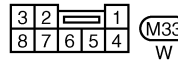
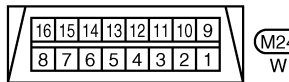
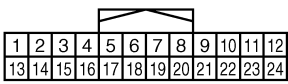
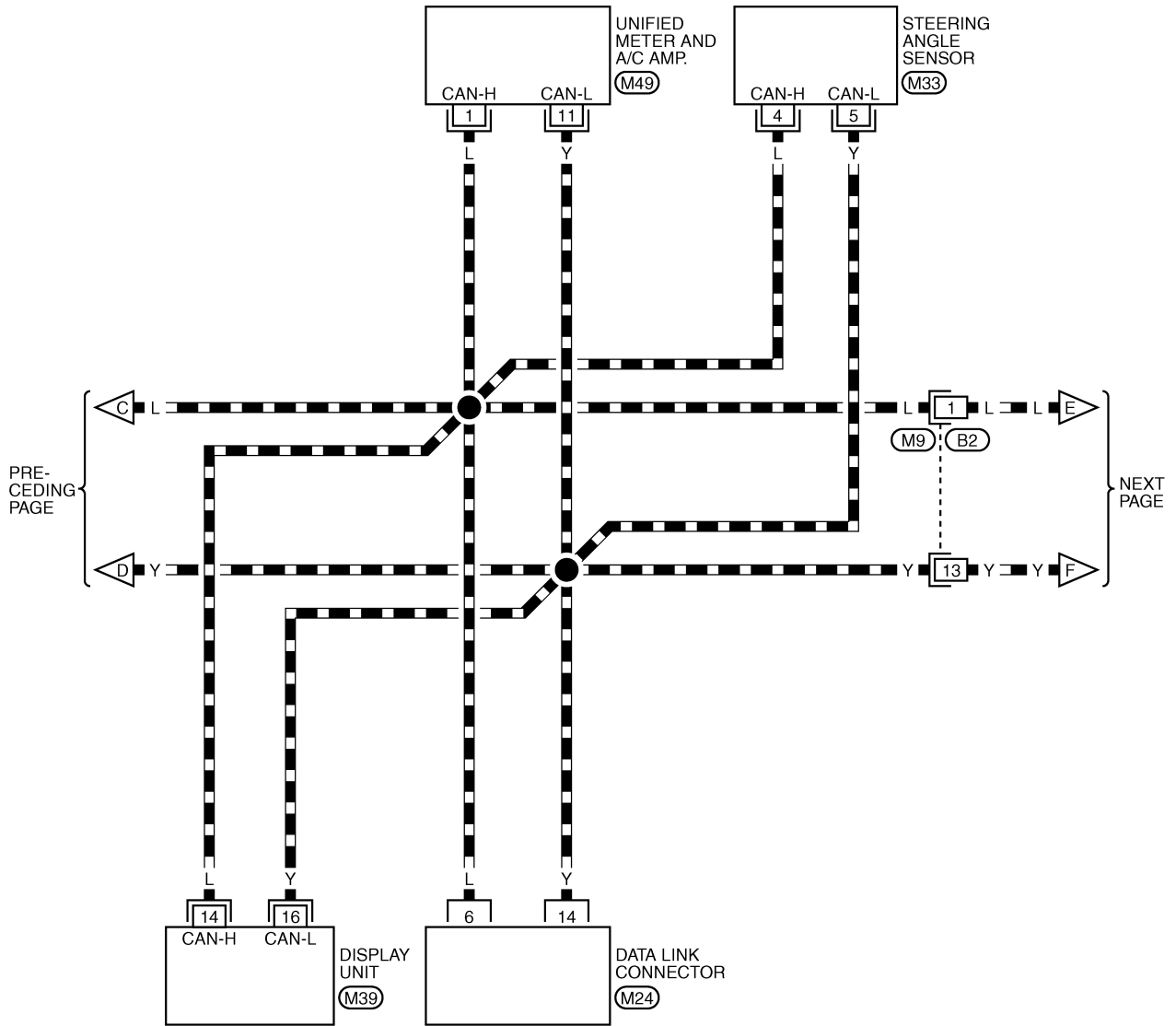
TKWB0840E

# CAN SYSTEM (TYPE 4)

[CAN]

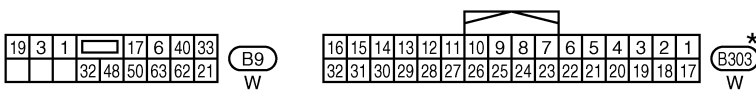
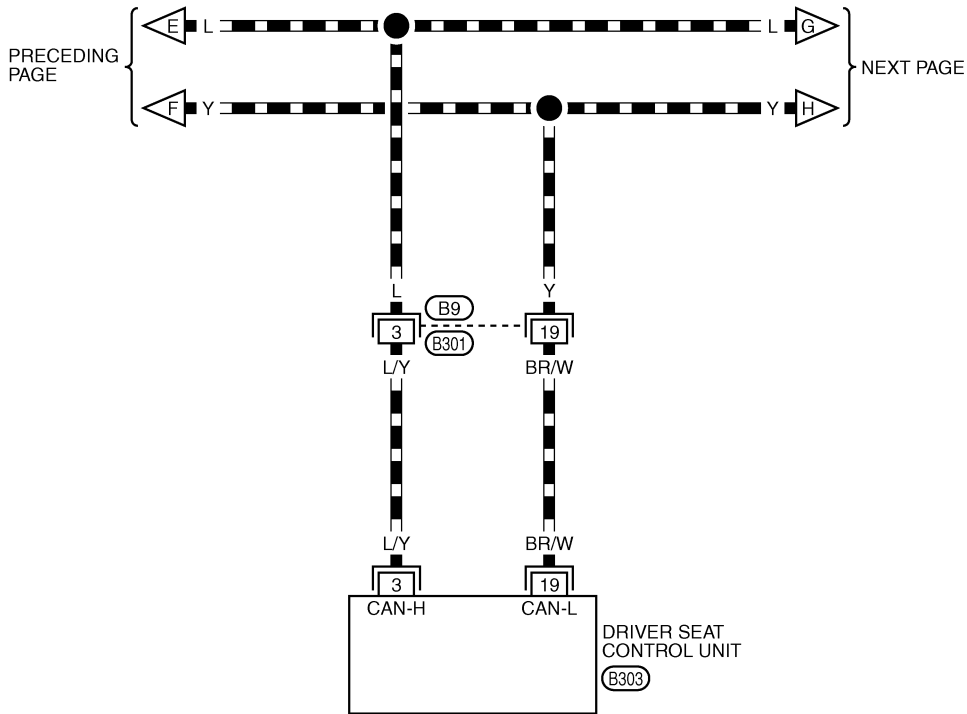
## LAN-CAN-17

▬ : DATA LINE



TKWB0841E

▬ : DATA LINE



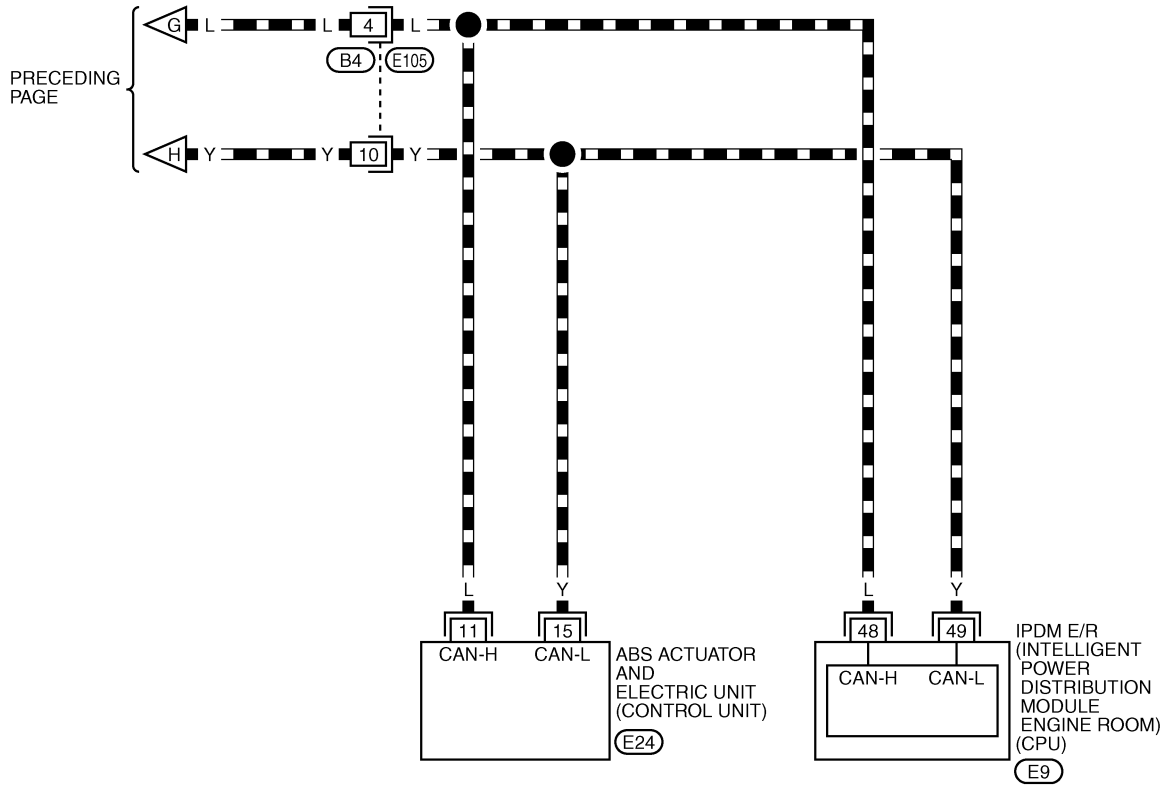
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

# CAN SYSTEM (TYPE 4)

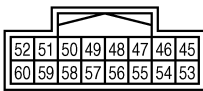
[CAN]

LAN-CAN-19

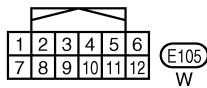
▬ : DATA LINE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M



E9  
W



E105  
W

REFER TO THE FOLLOWING.

E24 -ELECTRICAL UNITS

TKWB0843E

# CAN SYSTEM (TYPE 4)

[CAN]

AKS00AE1

## Check Sheet

**NOTE:**

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

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

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	TIRE-P
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4714E



# CAN SYSTEM (TYPE 4)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
AIR PRESSURE  
MONITOR  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4715E

# CAN SYSTEM (TYPE 4)

[CAN]

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AIR PRESSURE  
MONITOR  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4716E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

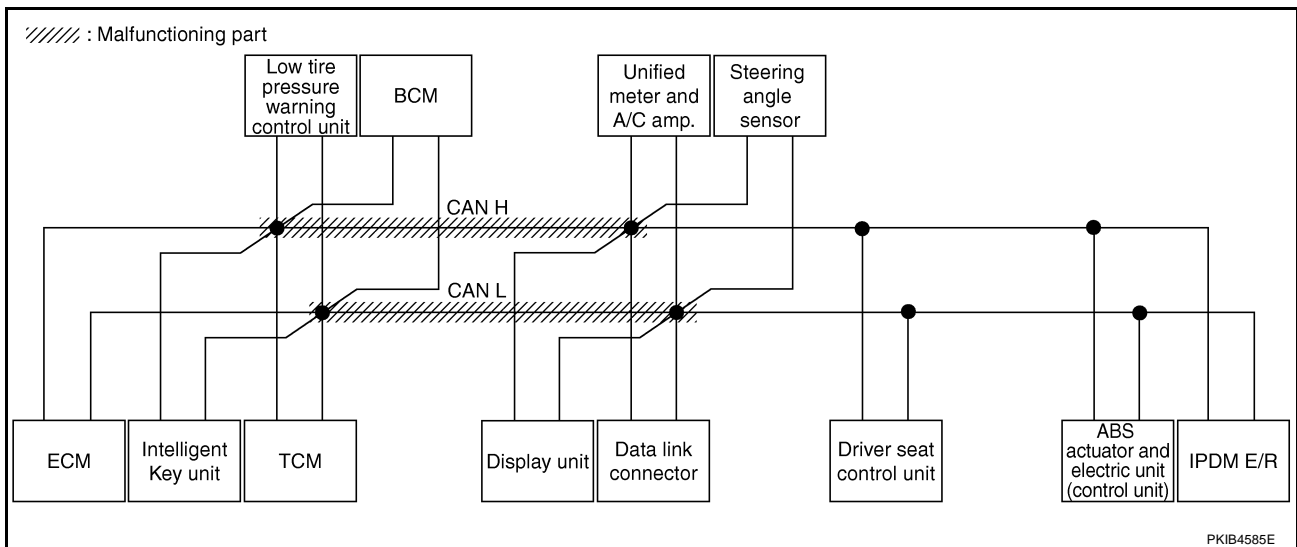
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-171, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen	CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
	Initial diagnosis	Transmit diagnosis	Receive diagnosis												
			ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4779E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

# CAN SYSTEM (TYPE 4)

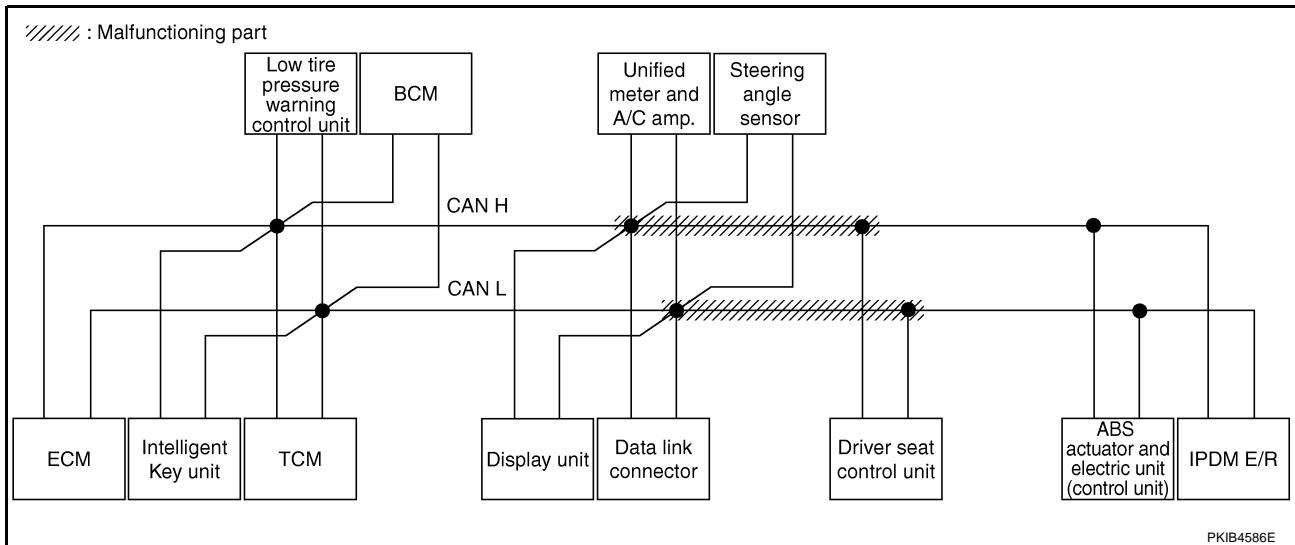
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-171, "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	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R					
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—

PKIB4780E

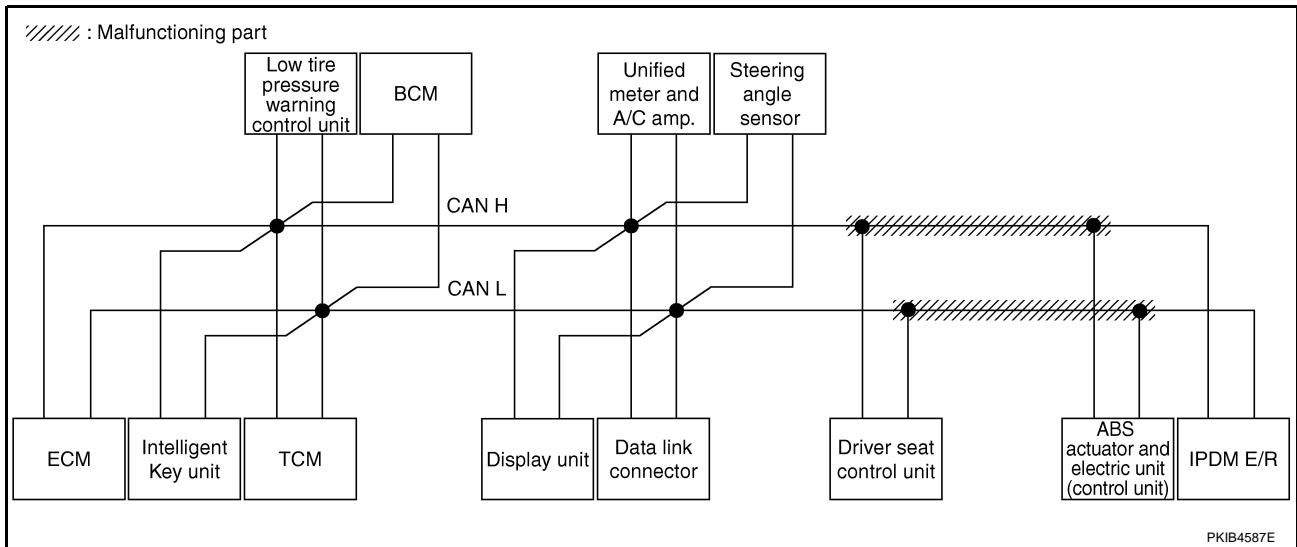


### Case 3

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to LAN-172, "Inspection Between Driver Seat Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit" .

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

PKIB4781E



# CAN SYSTEM (TYPE 4)

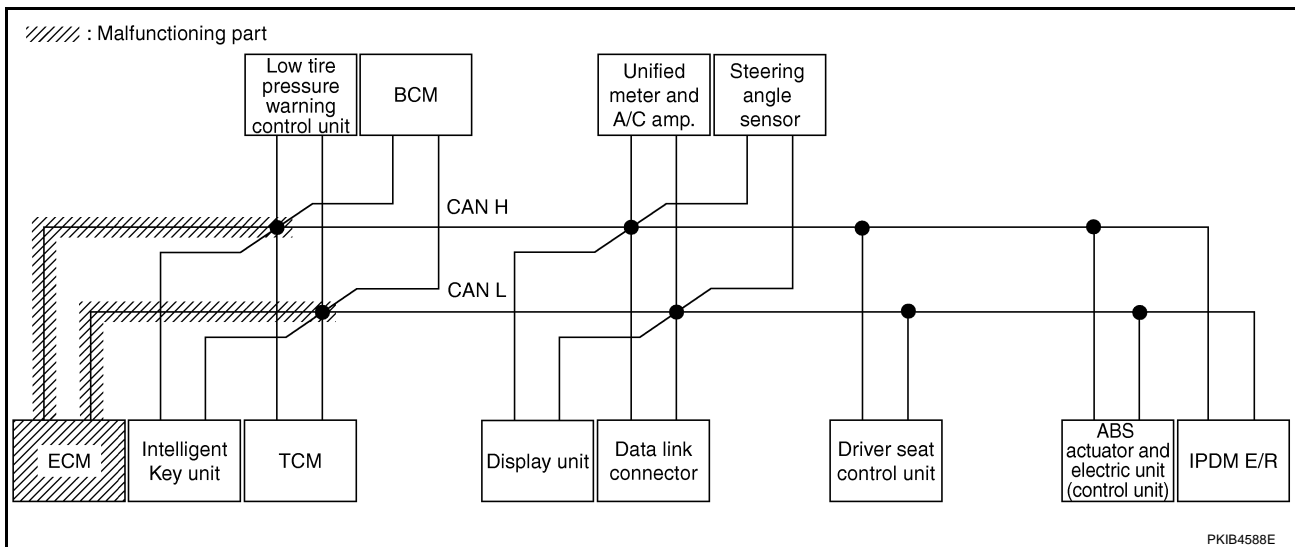
[CAN]

## Case 4

Check ECM circuit. Refer to [LAN-173, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN ✓	—	—	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN ✓	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN ✓	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN ✓	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN ✓	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U100) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—

PKIB4782E



PKIB4588E

# CAN SYSTEM (TYPE 4)

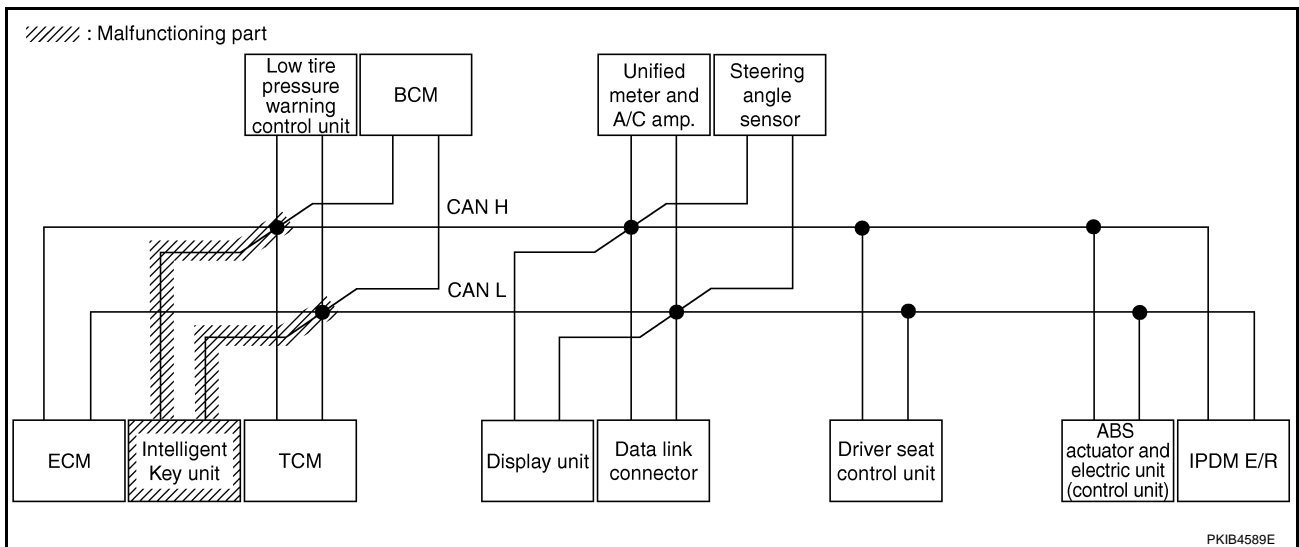
[CAN]

## Case 5

Check Intelligent Key unit circuit. Refer to [LAN-174, "Intelligent Key Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4783E



# CAN SYSTEM (TYPE 4)

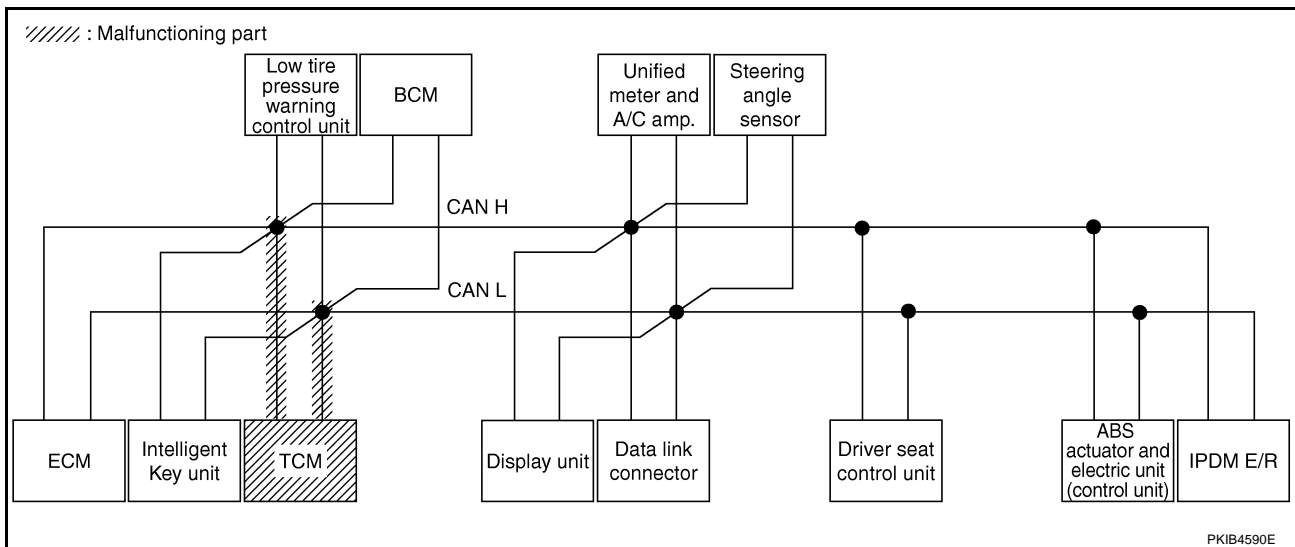
[CAN]

## Case 6

Check TCM circuit. Refer to [LAN-174, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U100)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4784E



PKIB4590E



# CAN SYSTEM (TYPE 4)

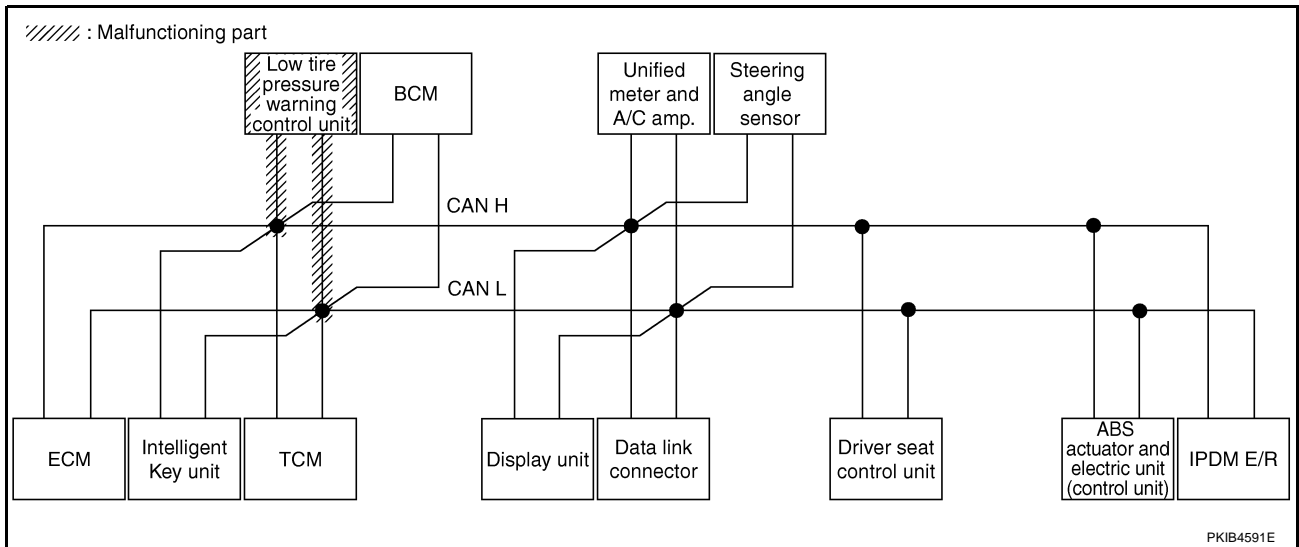
[CAN]

## Case 7

Check low tire pressure warning control unit circuit. Refer to [LAN-175, "Low Tire Pressure Warning Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4785E



# CAN SYSTEM (TYPE 4)

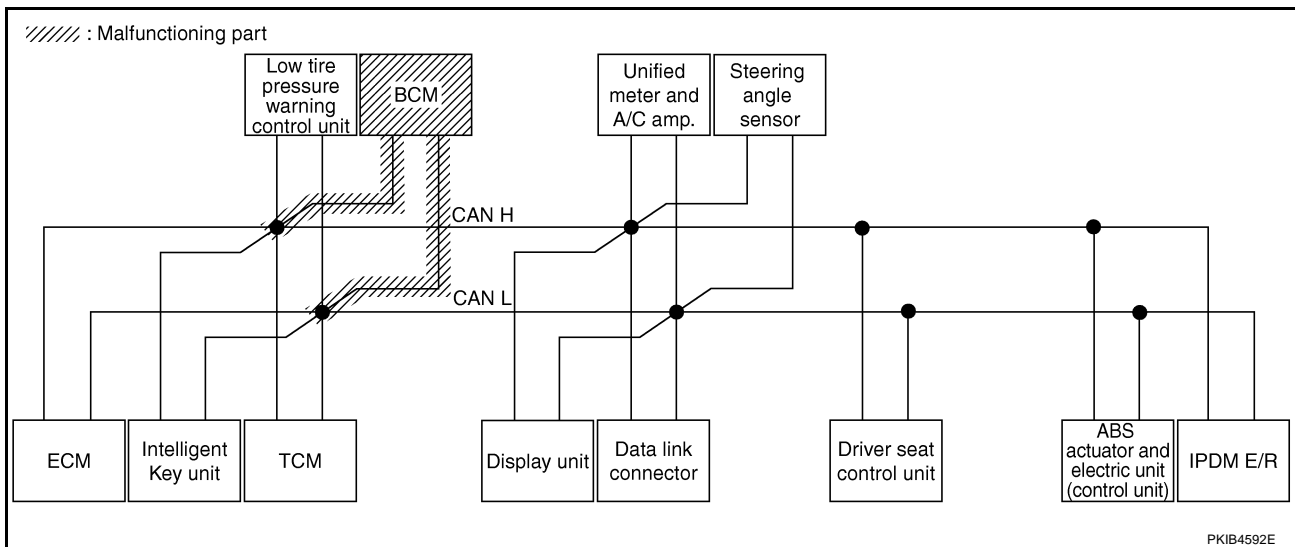
[CAN]

## Case 8

Check BCM circuit. Refer to [LAN-175, "BCM Circuit Inspection"](#) .

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

PKIB4786E



PKIB4592E

# CAN SYSTEM (TYPE 4)

[CAN]

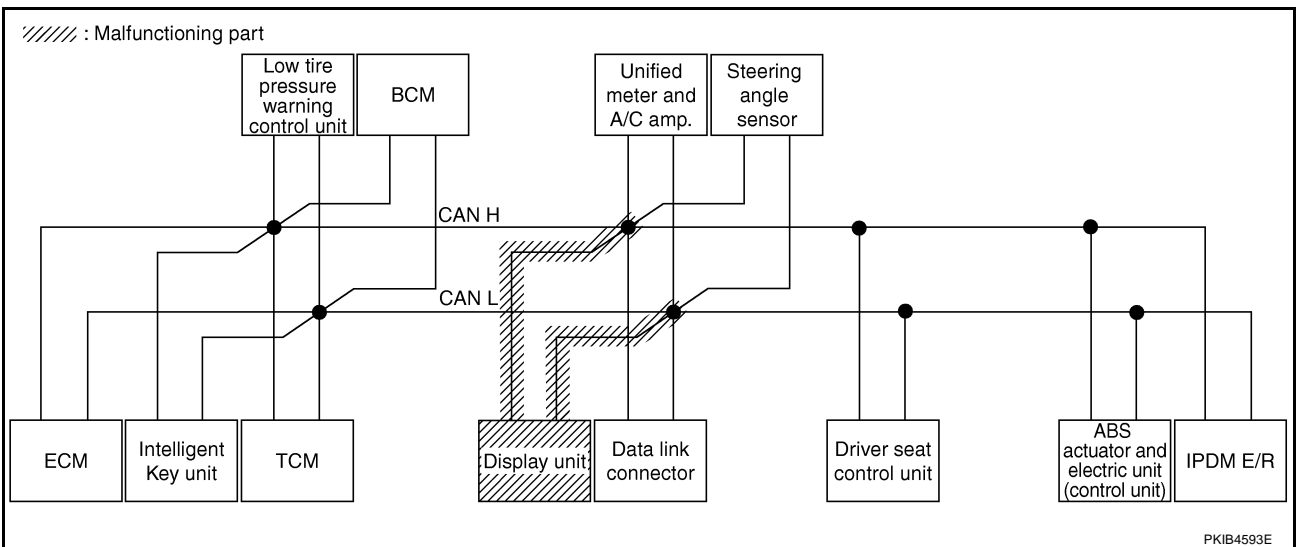
## Case 9

Check display unit circuit. Refer to [LAN-176, "Display Unit Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

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

PKIB4787E



PKIB4593E

LAN

# CAN SYSTEM (TYPE 4)

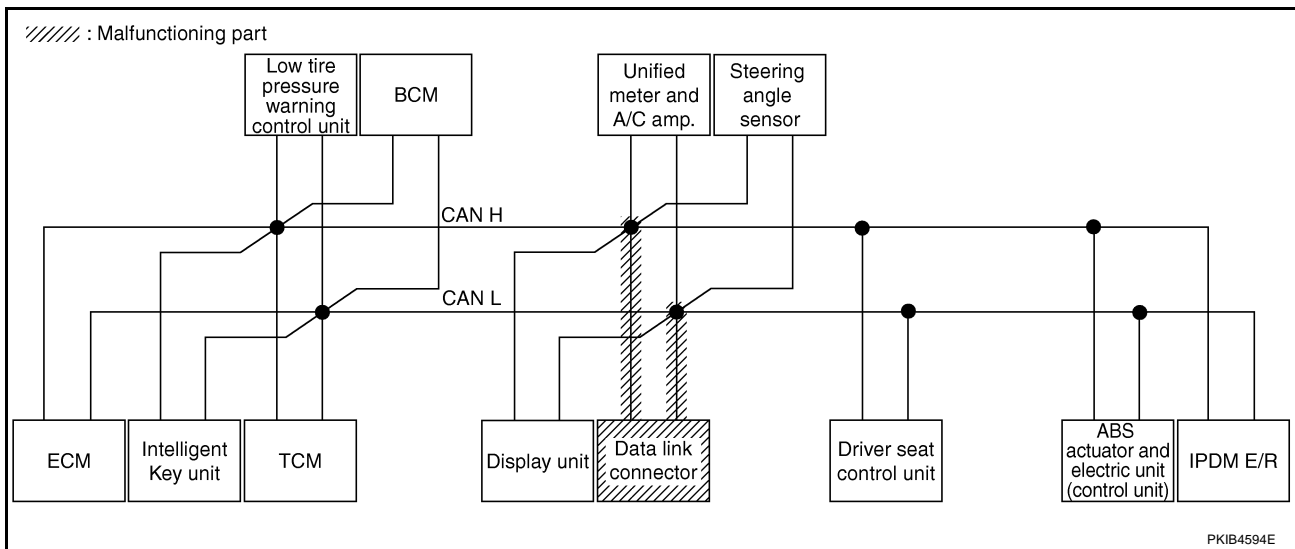
[CAN]

## Case 10

Check data link connector circuit. Refer to [LAN-176, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4788E



PKIB4594E

# CAN SYSTEM (TYPE 4)

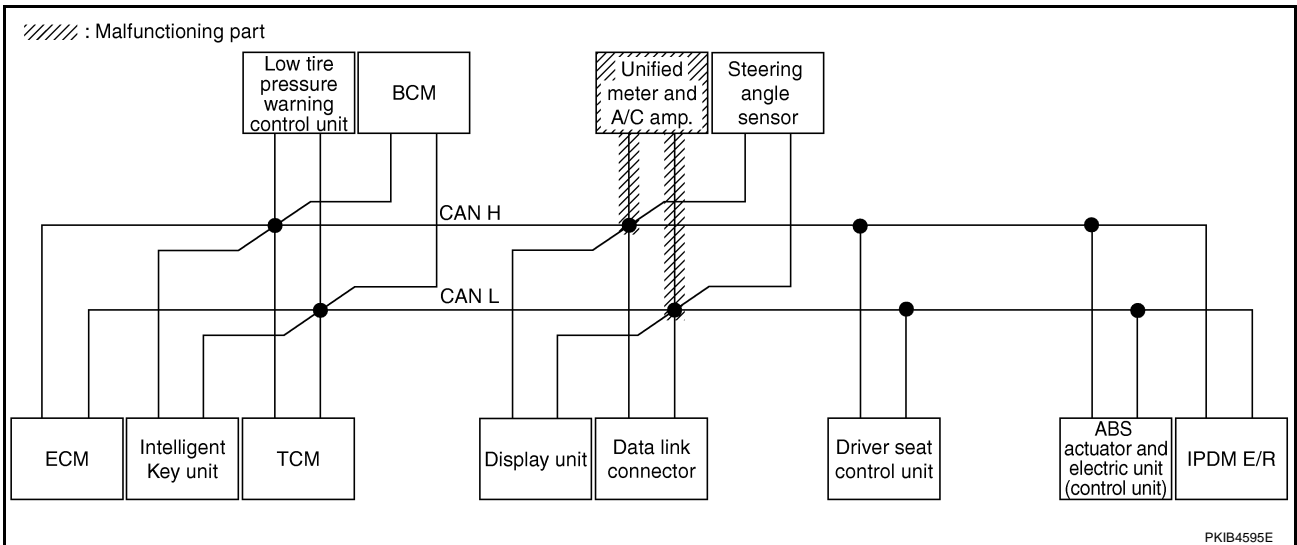
[CAN]

## Case 11

Check unified meter and A/C amp. circuit. Refer to [LAN-177, "Unified Meter and A/C Amp. Circuit Inspection"](#).

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

PKIB4789E



PKIB4595E

# CAN SYSTEM (TYPE 4)

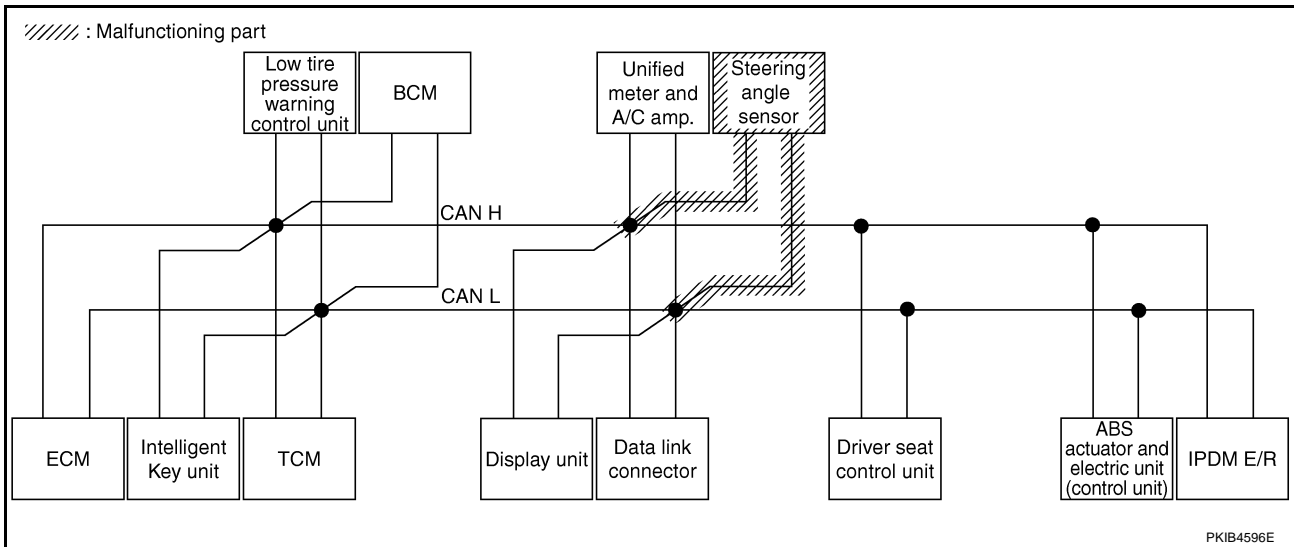
[CAN]

## Case 12

Check steering angle sensor circuit. Refer to [LAN-177, "Steering Angle Sensor Circuit Inspection"](#) .

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

PKIB4790E



PKIB4596E

# CAN SYSTEM (TYPE 4)

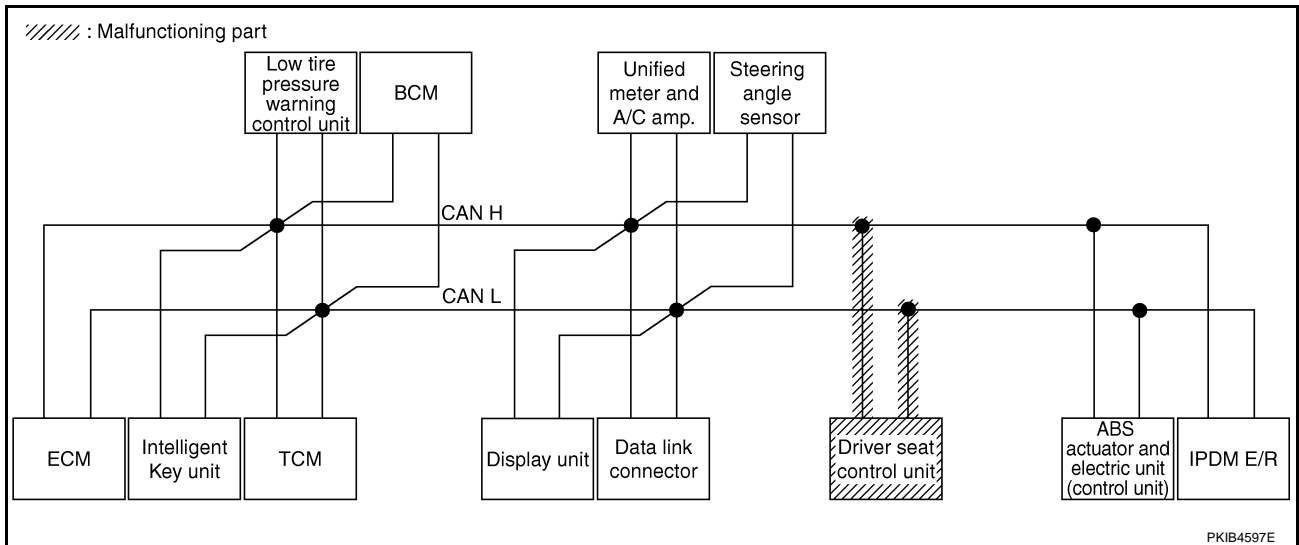
[CAN]

## Case 13

Check driver seat control unit circuit. Refer to [LAN-178, "Driver Seat Control Unit Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4791E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# CAN SYSTEM (TYPE 4)

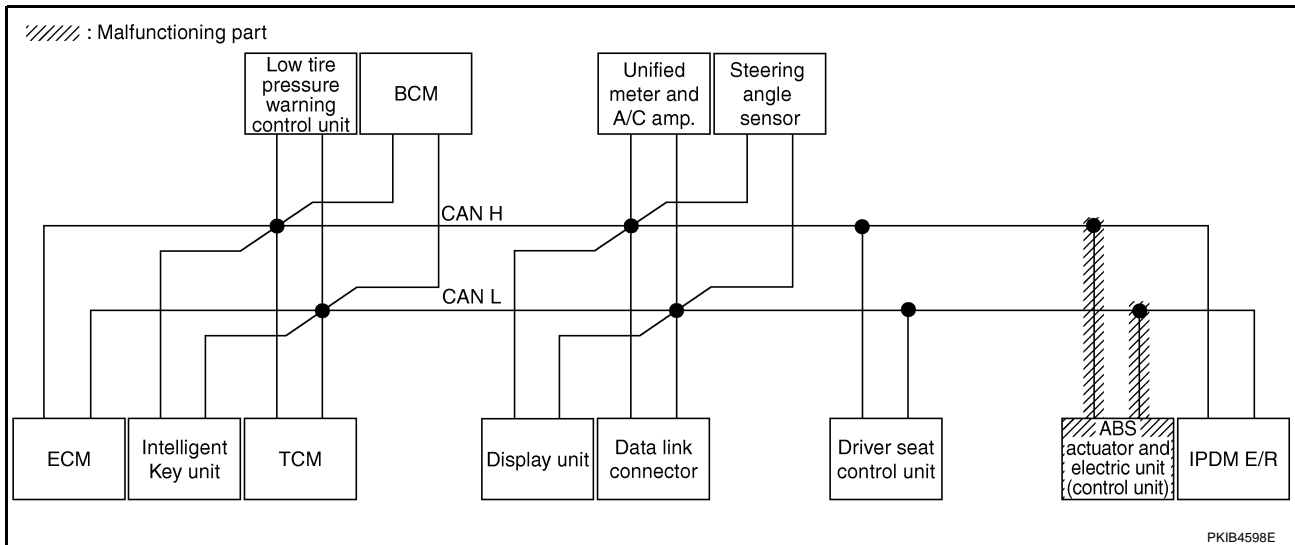
[CAN]

## Case 14

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-178. "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS					
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	✓	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	✓	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	✓	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4792E



PKIB4598E



# CAN SYSTEM (TYPE 4)

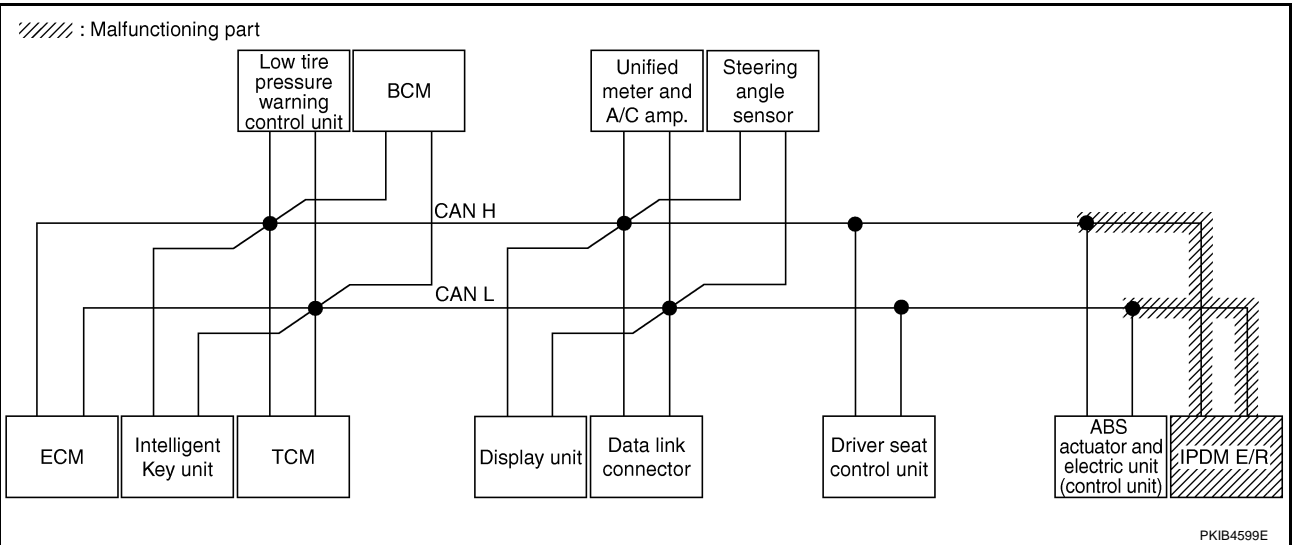
[CAN]

## Case 15

Check IPDM E/R circuit. Refer to [LAN-179, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4793E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 16

Check CAN communication circuit. Refer to [LAN-179, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis													
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	✓	—	—	✓	—	✓	—	✓	—	✓	✓	CAN COMM CIRCUIT (U100)	✓	CAN COMM CIRCUIT (U101)	✓
INTELLIGENT KEY	No indication ✓	—	UNKW	UNKW	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
TRANSMISSION	No indication ✓	NG	UNKW	UNKW	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKW	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
BCM	No indication ✓	NG	UNKW	UNKW	UNKW	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	✓	—	—
Display unit	—	NG	✓	✓	—	—	✓	✓	—	✓	—	—	✓	—	—	—	—
METER A/C AMP	No indication ✓	—	UNKW	UNKW	—	—	UNKW	UNKW	UNKW	—	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
AUTO DRIVE POS.	No indication ✓	NG	UNKW	—	—	UNKW	—	UNKW	—	UNKW	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
ABS	—	✓	✓	✓	—	—	✓	—	—	—	—	—	✓	CAN COMM CIRCUIT (U100)	✓	—	—
IPDM E/R	No indication ✓	—	UNKW	UNKW	—	—	—	UNKW	—	—	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—

PKIB4794E

## Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-184, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis													
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKW	—	—	✓	—	UNKW	—	UNKW	—	—	✓	CAN COMM CIRCUIT (U100)	✓	CAN COMM CIRCUIT (U101)	✓
INTELLIGENT KEY	No indication	—	UNKW	UNKW	—	—	—	UNKW	—	UNKW	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
TRANSMISSION	No indication	NG	UNKW	UNKW	—	—	—	—	—	UNKW	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
AIR PRESSURE MONITOR	No indication	NG	UNKW	—	—	—	—	—	—	UNKW	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
BCM	No indication	NG	UNKW	UNKW	UNKW	—	—	—	—	UNKW	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
Display unit	—	NG	UNKW	UNKW	—	—	UNKW	UNKW	—	UNKW	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKW	UNKW	—	—	✓	UNKW	UNKW	UNKW	—	—	✓	CAN COMM CIRCUIT (U100)	✓	—	—
AUTO DRIVE POS.	No indication	NG	UNKW	—	—	✓	—	UNKW	—	UNKW	—	—	—	CAN COMM CIRCUIT (U100)	✓	—	—
ABS	—	NG	UNKW	UNKW	—	—	UNKW	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
IPDM E/R	No indication	—	UNKW	UNKW	—	—	—	UNKW	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—

PKIB4795E

## Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-184, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

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

PKIB4796E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CKD

### 1. CHECK HARNESS FOR OPEN CIRCUIT

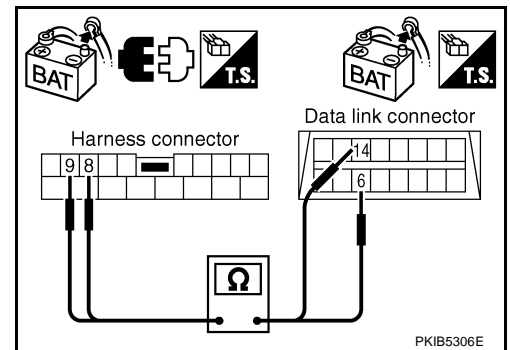
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CKE

### 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 M9
  - Harness connector B2

OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

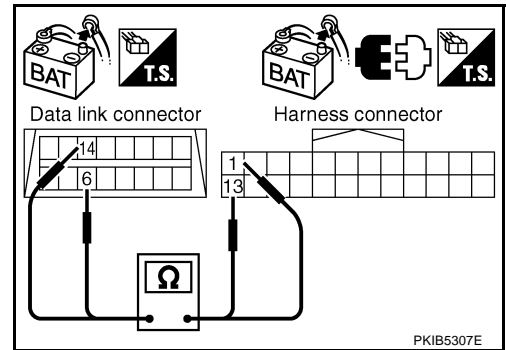
**6 (L) - 1 (L) : Continuity should exist.**

**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

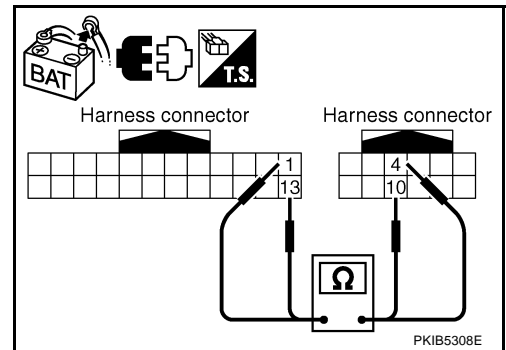
**1 (L) - 4 (L) : Continuity should exist.**

**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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

NG >> Repair harness.



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

AKS00CKF

### 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 B4
  - Harness connector E105

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

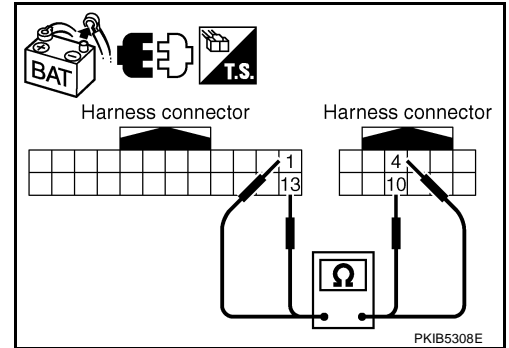
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

#### OK or NG

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



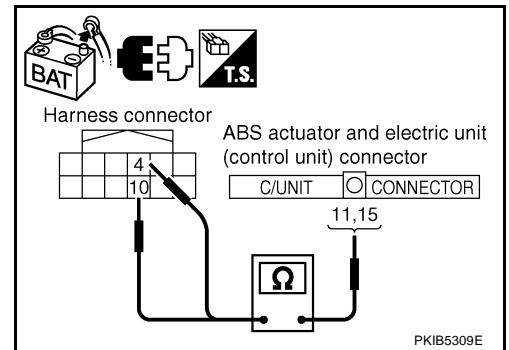
### 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**4 (L) - 11 (L) : Continuity should exist.**  
**10 (Y) - 15 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## ECM Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

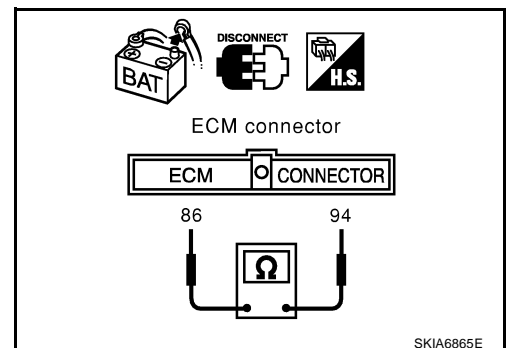
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

#### OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

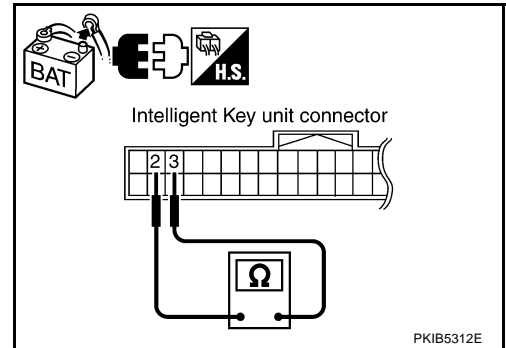
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.



AKS00CKJ

## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

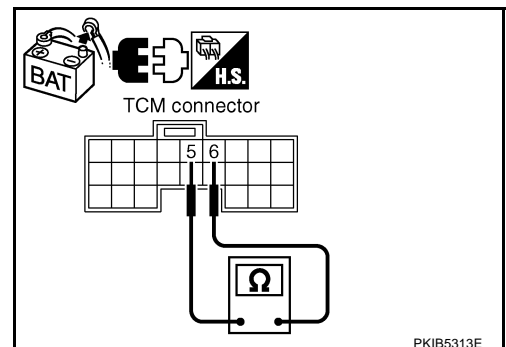
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM and BCM.



## Low Tire Pressure Warning Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of low tire pressure warning 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.

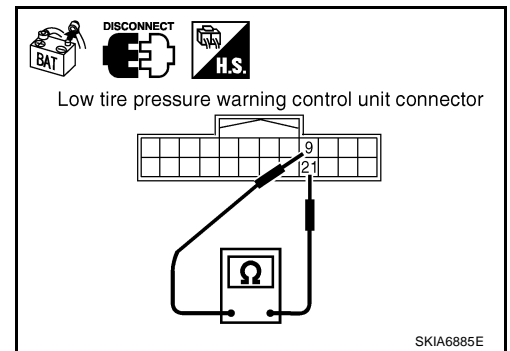
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect low tire pressure warning control unit connector.
2. Check resistance between low tire pressure warning control unit harness connector M81 terminals 9 (L) and 21 (Y).

**9 (L) - 21 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace low tire pressure warning control unit.  
NG >> Repair harness between low tire pressure warning control unit and BCM.



## BCM Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

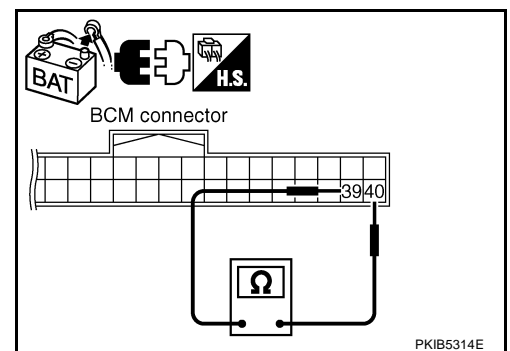
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#).  
NG >> Repair harness between BCM and harness connector M82.



## Display Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

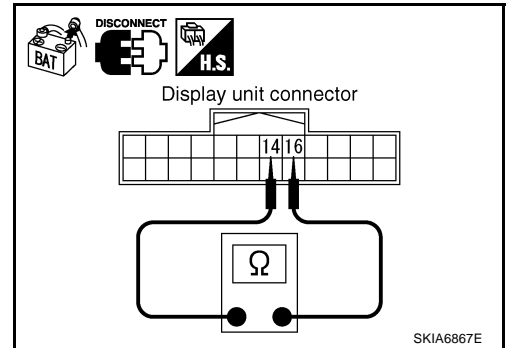
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace display unit.  
NG >> Repair harness between display unit and data link connector.



AKS00CKN

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

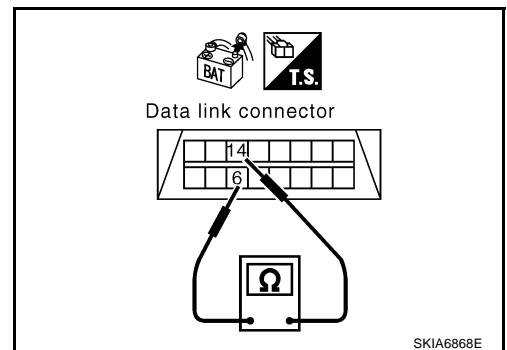
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
NG >> Repair harness between data link connector and unified meter and A/C amp.





**Unified Meter and A/C Amp. Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

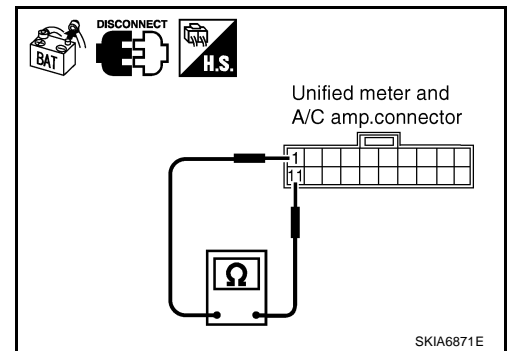
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.

**Steering Angle Sensor Circuit Inspection****1. CHECK CONNECTOR**

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
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.

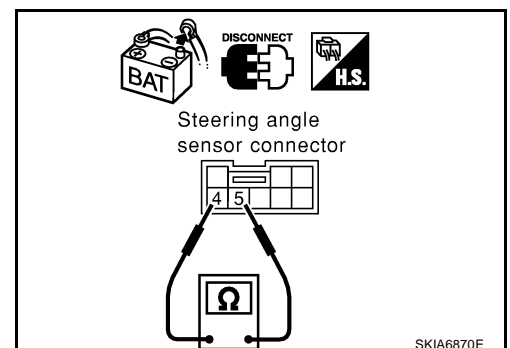
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect steering angle sensor connector.
2. Check resistance between steering angle sensor harness connector M33 terminals 4 (L) and 5 (Y).

**4 (L) - 5 (Y) : Approx. 54 - 66Ω**

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

AKS00CKQ

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

#### OK or NG

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

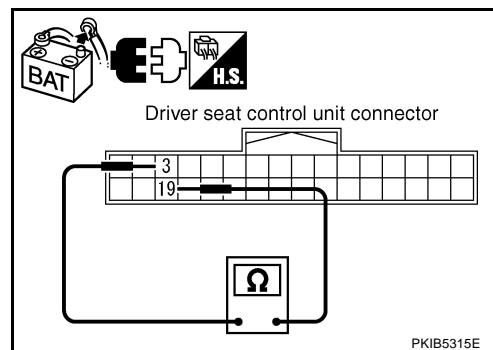
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace driver seat control unit.  
NG >> Repair harness between driver seat control unit and harness connector B4.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CKR

### 1. CHECK CONNECTOR

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

#### OK or NG

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

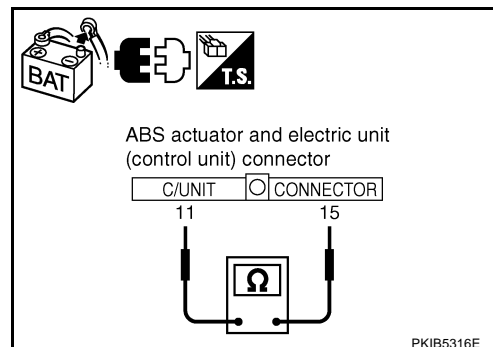
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

#### OK or NG

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



**IPDM E/R Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

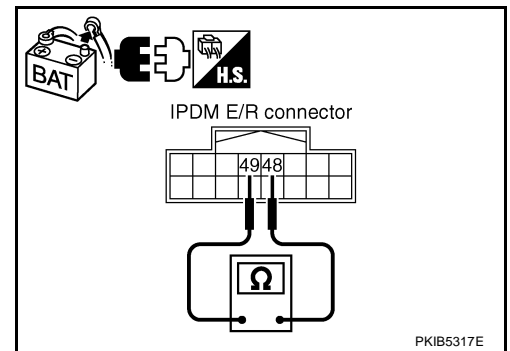
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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

**48 (L) - 49 (Y) : Approx. 108 - 132Ω**

OK or NG

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

**CAN Communication Circuit Inspection****1. CHECK CONNECTOR**

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

- ECM
- Intelligent Key unit
- TCM
- Low tire pressure warning control unit
- BCM
- Display unit
- Unified meter and A/C amp.
- Steering angle sensor
- Driver seat control unit
- ABS actuator and electric unit (control unit)
- IPDM E/R
- Between ECM and IPDM E/R
- Between ECM and TCM
- Between ECM and driver seat control unit

OK or NG

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

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - Low tire pressure warning control unit connector
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Steering angle sensor connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

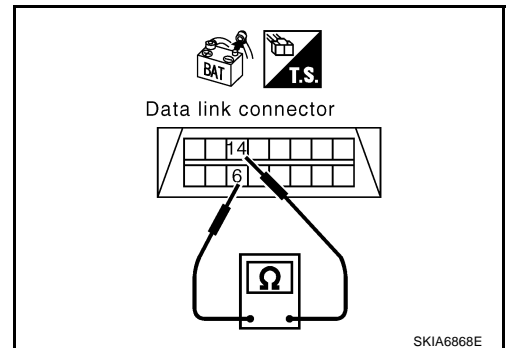
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

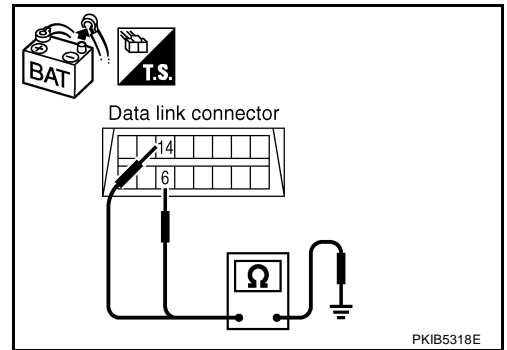
**14 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 4. CHECK HARNESS FOR SHORT CIRCUIT

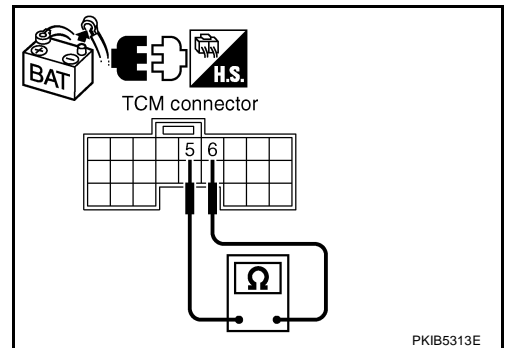
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

#### OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



### 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

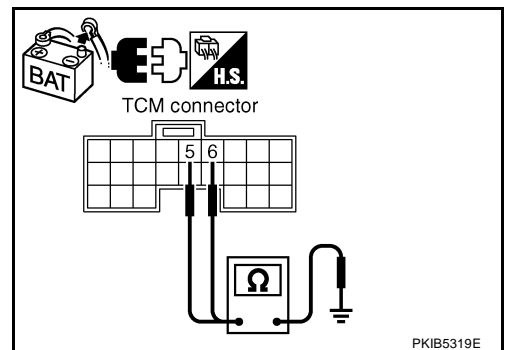
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



## 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

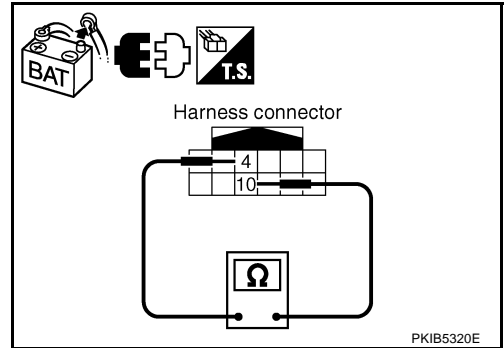
**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 7.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

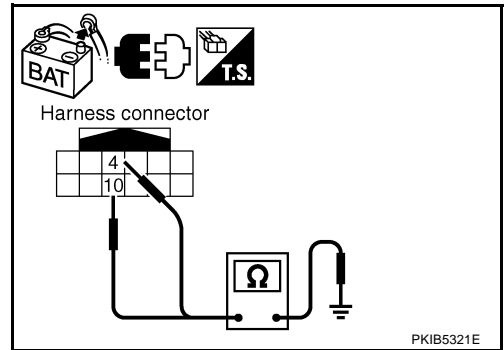
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

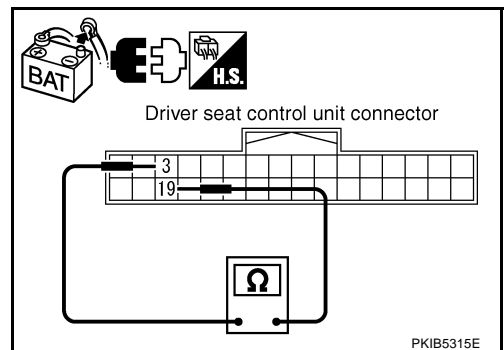
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

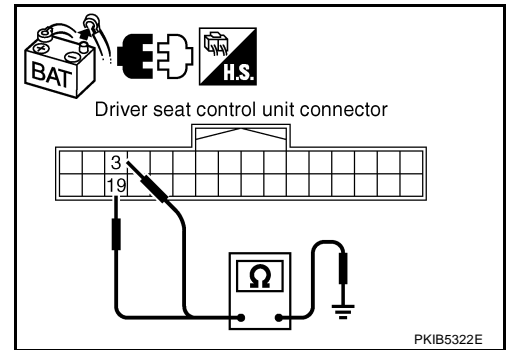
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

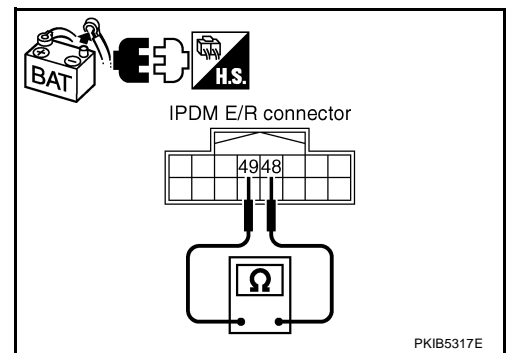
**48 (L) - 49 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

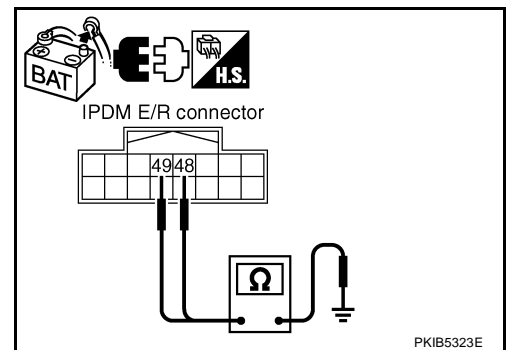
**49 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

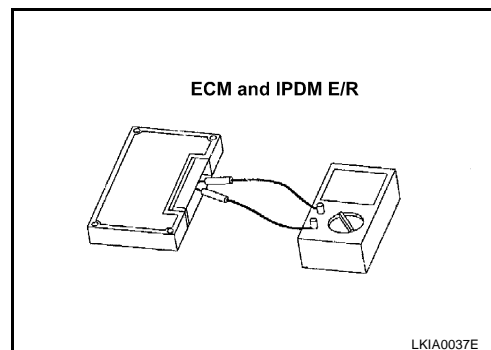
1. Remove ECM and IPDM E/R from vehicle.
2. Check resistance between ECM terminals 94 and 86.
3. Check resistance between IPDM E/R terminals 48 and 49.

**94 - 86** : **Approx. 108 – 132 Ω**

**48 - 49** : **Approx. 108 – 132 Ω**

### OK or NG

- OK >> GO TO 13.  
 NG >> Replace ECM and/or IPDM E/R.



## 13. CHECK SYMPTOM

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

### OK or NG

- OK >> GO TO 14.  
 NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

## IPDM E/R Ignition Relay Circuit Inspection

AKS00CKU

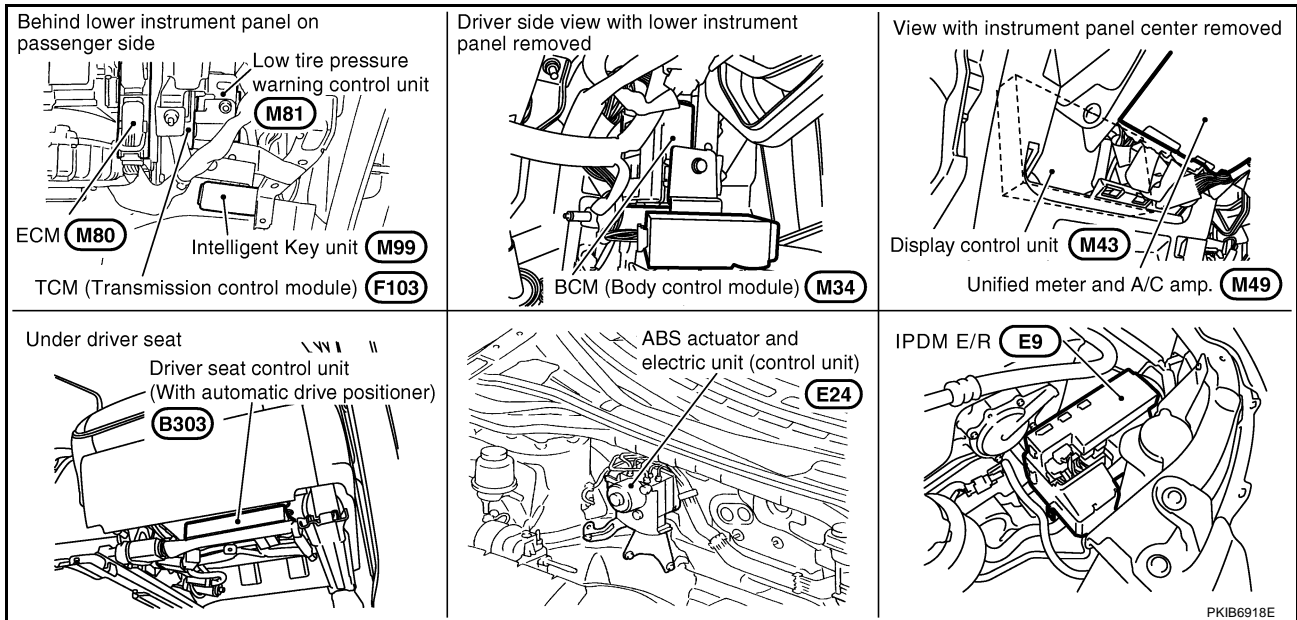
Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to [PG-27, "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" "](#).



## CAN SYSTEM (TYPE 5)

### Component Parts and Harness Connector Location



PKIB6918E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

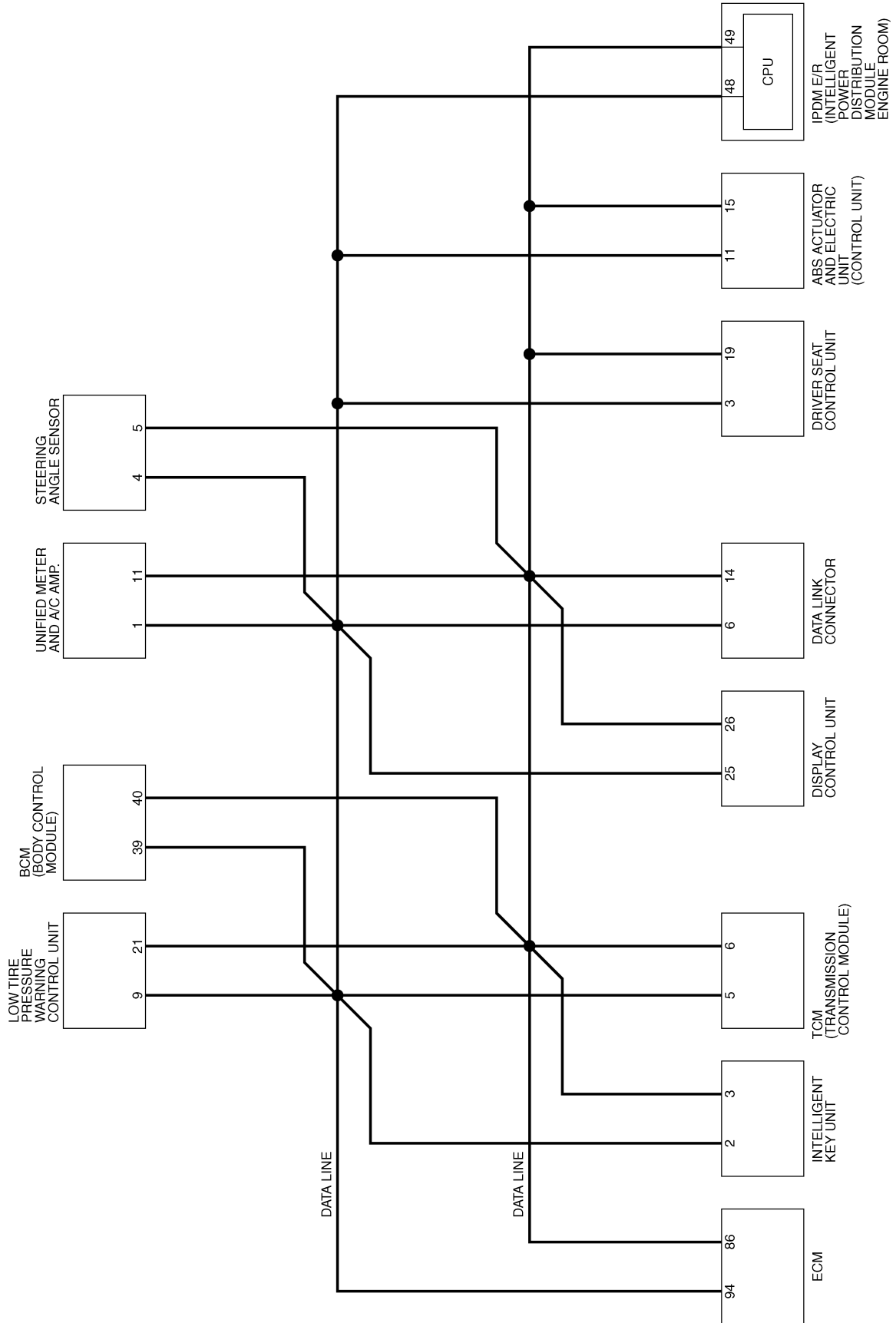
LAN

# CAN SYSTEM (TYPE 5)

[CAN]

## Schematic

AKS00AEJ



TKWB0844E

# CAN SYSTEM (TYPE 5)

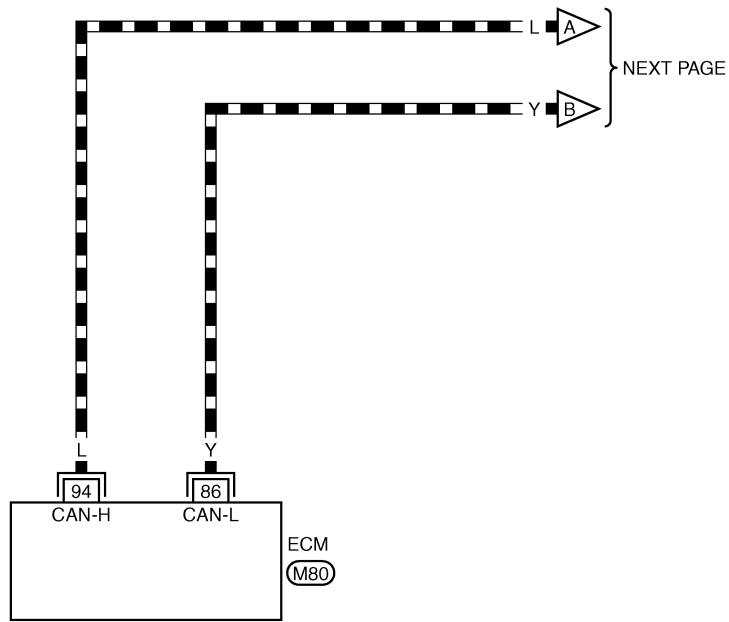
[CAN]

## Wiring Diagram - CAN -

AKS00AEK

### LAN-CAN-20

DATA LINE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
M80 -ELECTRICAL UNITS

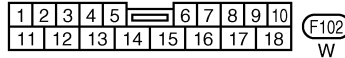
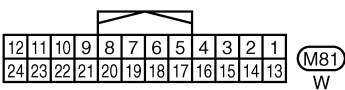
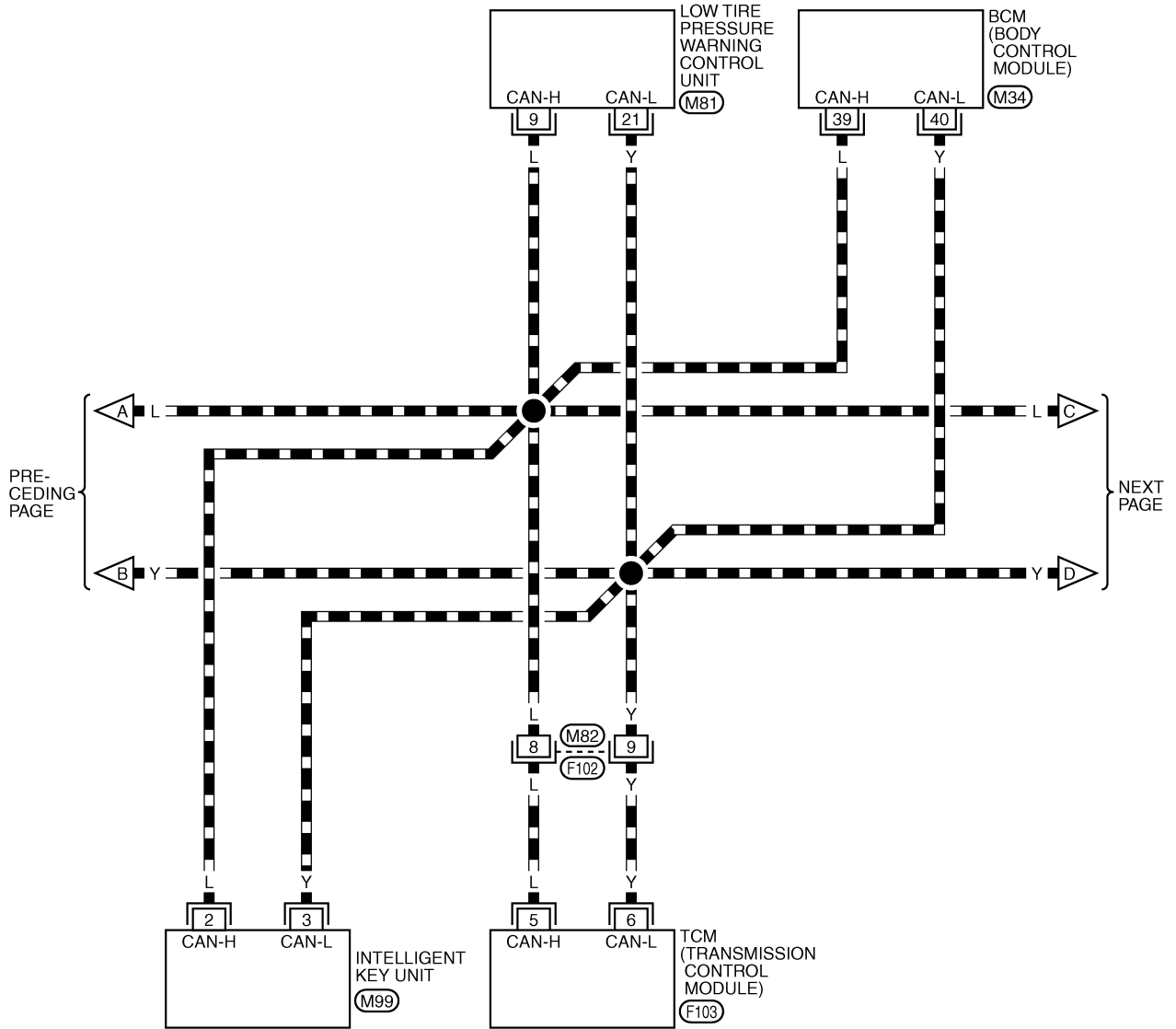
TKWB0845E

# CAN SYSTEM (TYPE 5)

[CAN]

## LAN-CAN-21

▬ : DATA LINE



REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

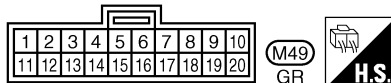
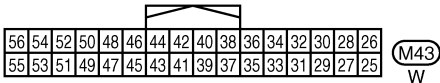
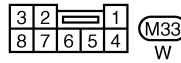
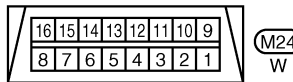
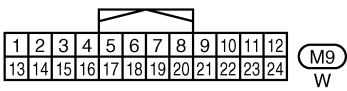
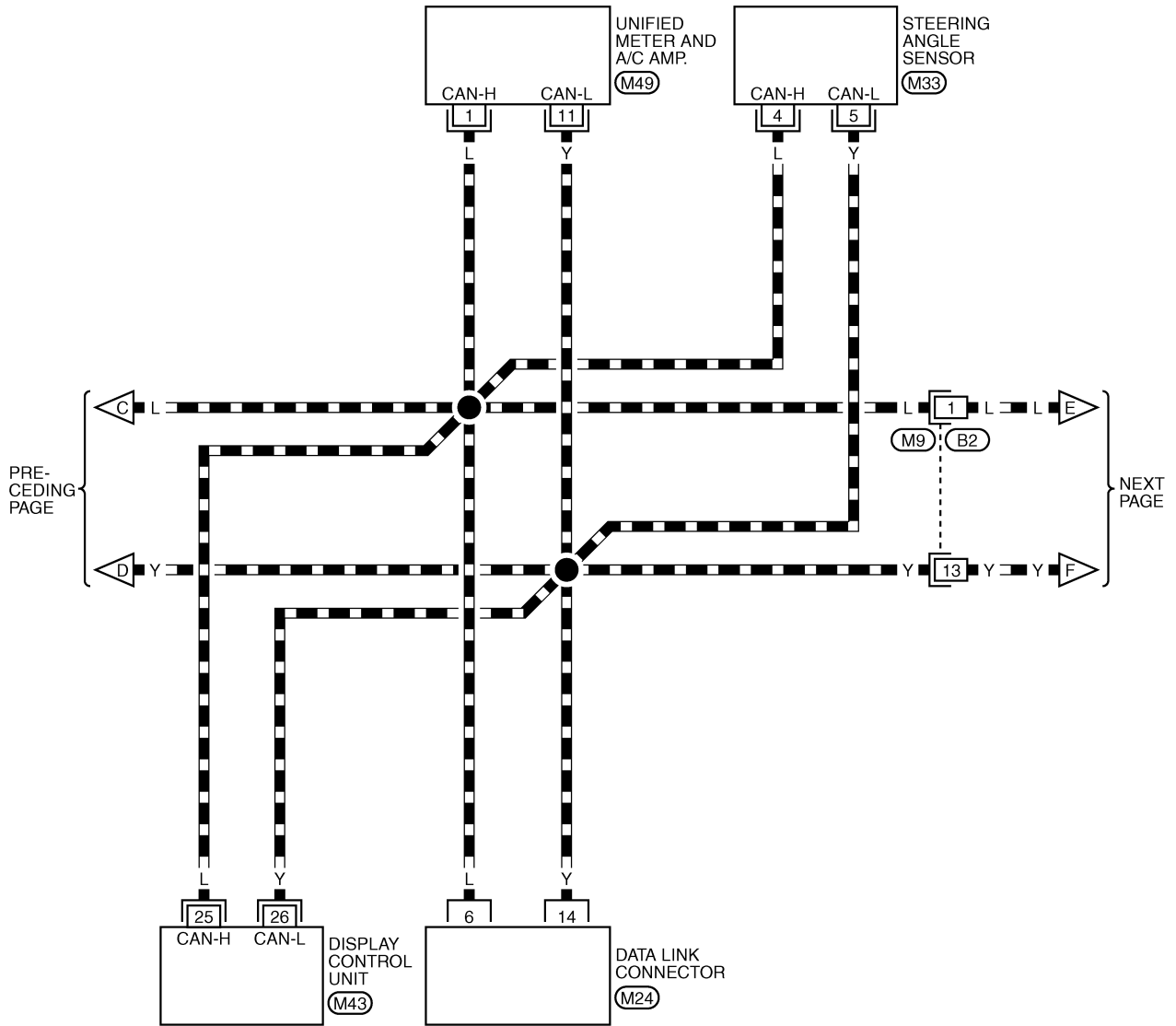
TKWB0846E

# CAN SYSTEM (TYPE 5)

[CAN]

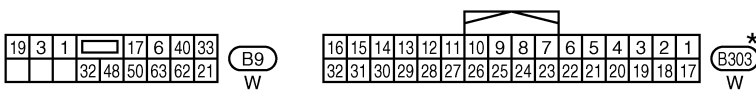
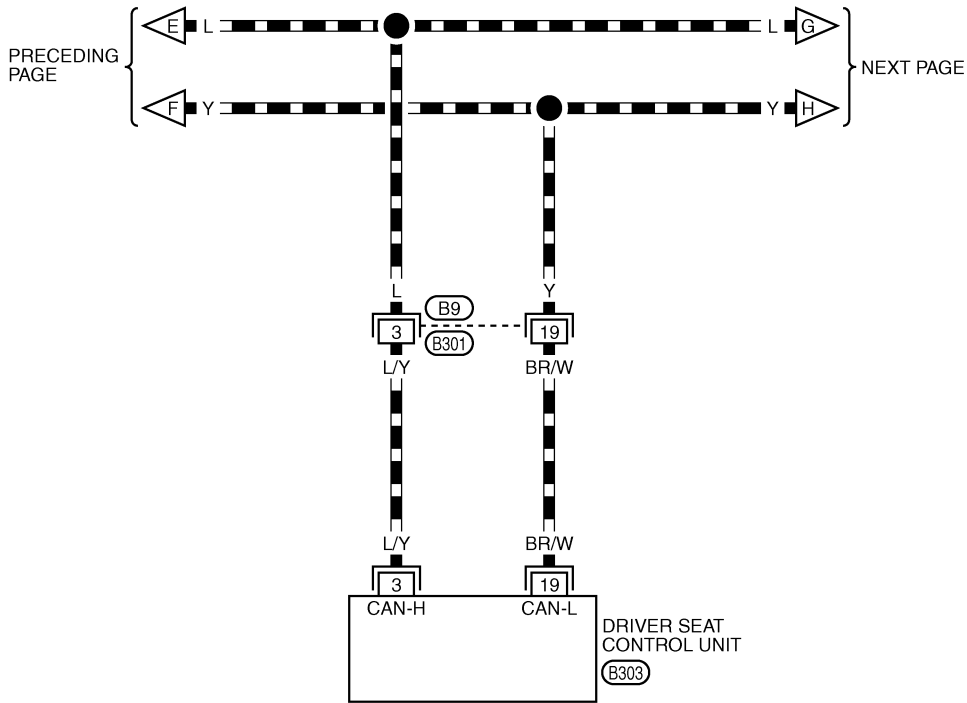
## LAN-CAN-22

▬ : DATA LINE



TKWB0847E

▬ : DATA LINE



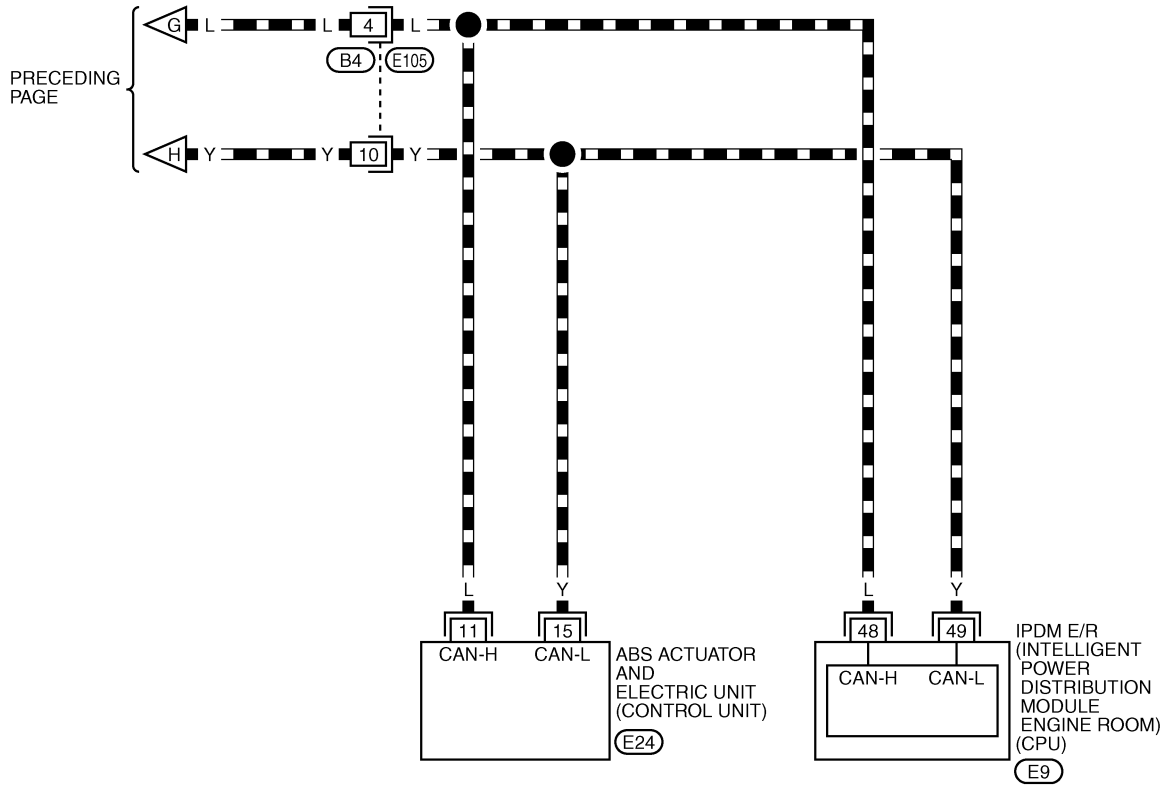
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

# CAN SYSTEM (TYPE 5)

[CAN]

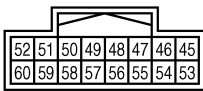
## LAN-CAN-24

▬ : DATA LINE

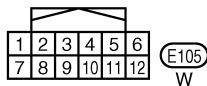


PRECEDING PAGE

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M



E9  
W



E105  
W

REFER TO THE FOLLOWING.

E24 -ELECTRICAL UNITS

TKWB0849E

# CAN SYSTEM (TYPE 5)

[CAN]

AKS00ASJ

## Check Sheet

**NOTE:**

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

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display control unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	TIRE-P
CAN CIRC 2	BCM	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	—
CAN CIRC 4	—	CAN CIRC 9	—

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

PKIB4717E



# CAN SYSTEM (TYPE 5)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
AIR PRESSURE  
MONITOR  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4715E

# CAN SYSTEM (TYPE 5)

[CAN]

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AIR PRESSURE  
MONITOR  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4716E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

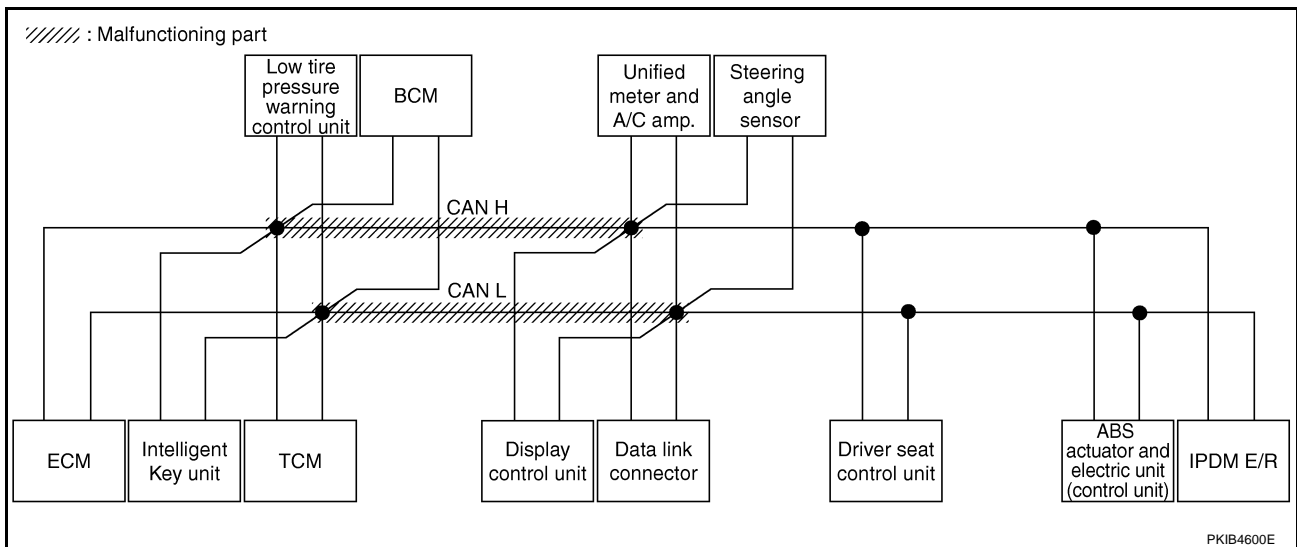
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-211, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS						
		Initial diagnosis	Transmit diagnosis	Receive diagnosis															
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4797E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

# CAN SYSTEM (TYPE 5)

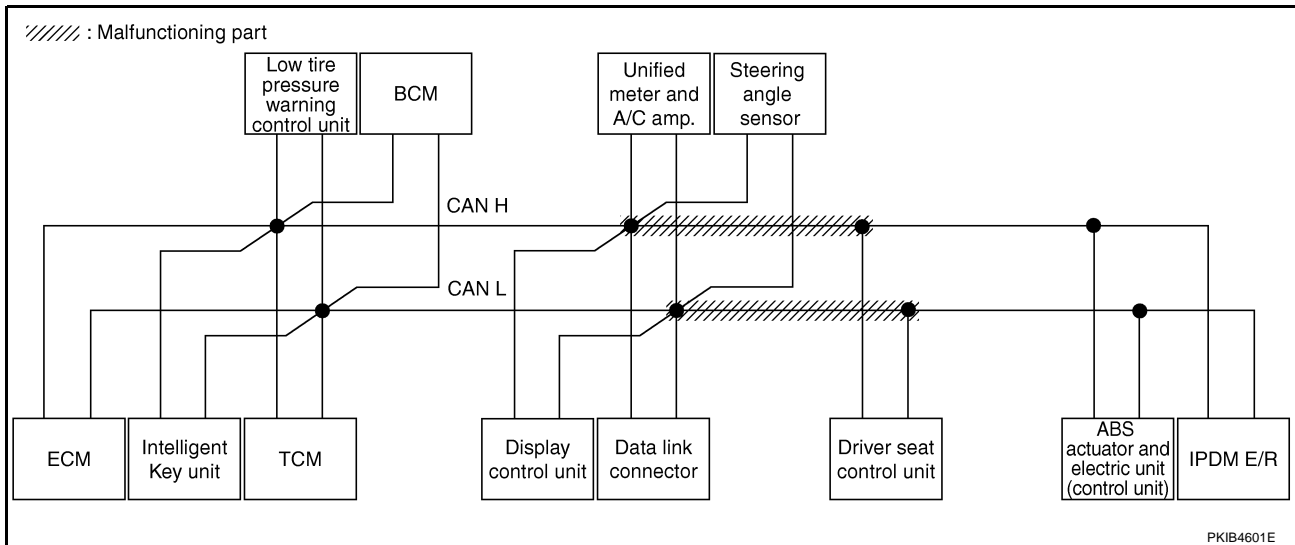
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-211, "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	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R					
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—

PKIB4798E



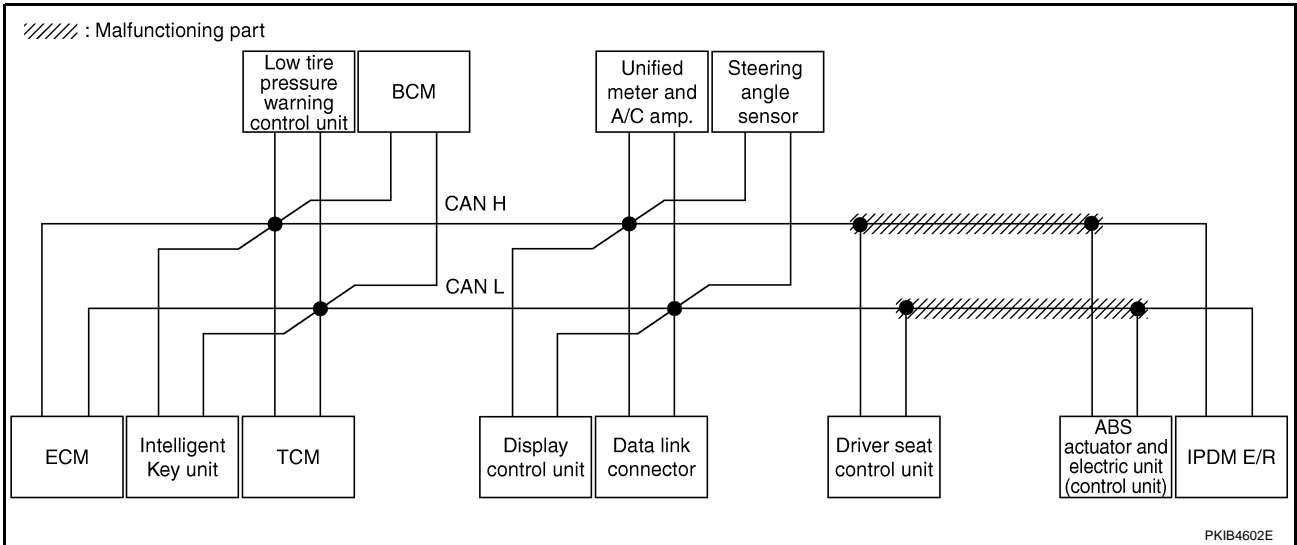
PKIB4601E

## Case 3

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-212, "Inspection Between Driver Seat Control Unit and ABS Actuator and Electric Unit \(Control Unit\) Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS							
		Initial diagnosis	Transmit diagnosis	Receive diagnosis																
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R					
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—

PKIB4799E



PKIB4602E

# CAN SYSTEM (TYPE 5)

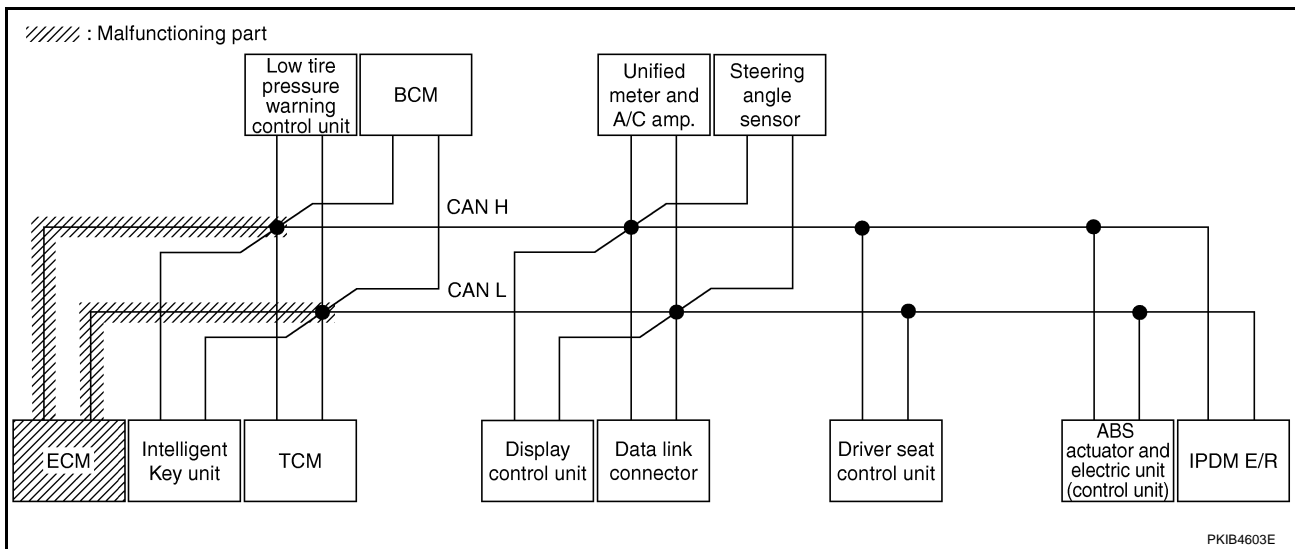
[CAN]

## Case 4

Check ECM circuit. Refer to [LAN-213, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN ✓	—	—	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN ✓	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN ✓	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN ✓	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN ✓	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U100) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—

PKIB4800E



PKIB4603E

# CAN SYSTEM (TYPE 5)

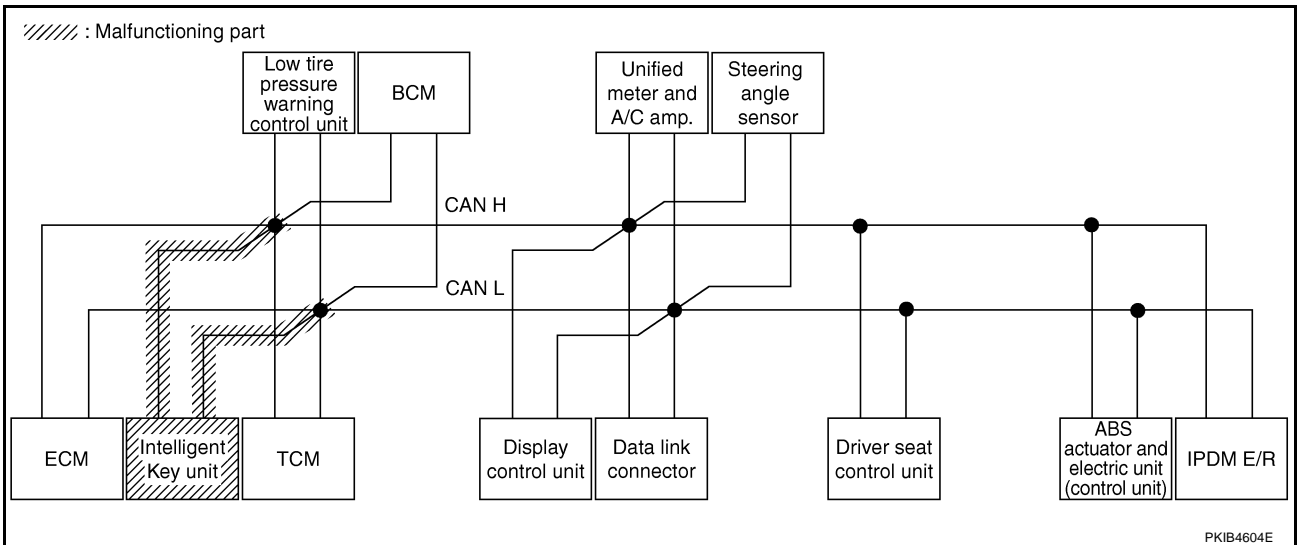
[CAN]

## Case 5

Check Intelligent Key unit circuit. Refer to [LAN-214, "Intelligent Key Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4801E



# CAN SYSTEM (TYPE 5)

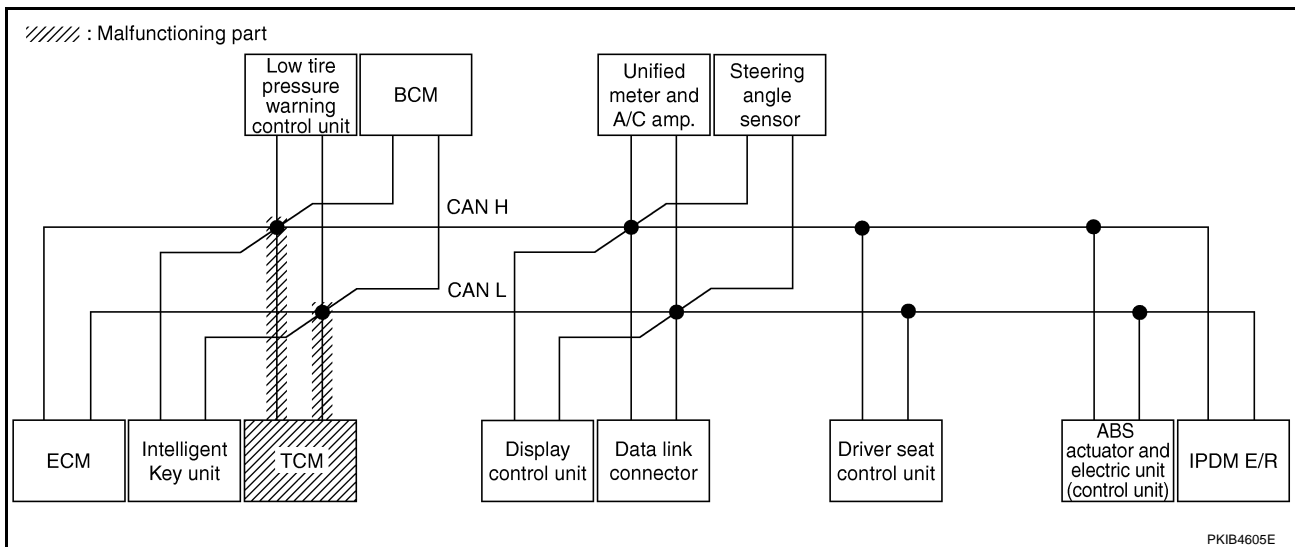
[CAN]

## Case 6

Check TCM circuit. Refer to [LAN-214, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U100) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4802E



PKIB4605E



# CAN SYSTEM (TYPE 5)

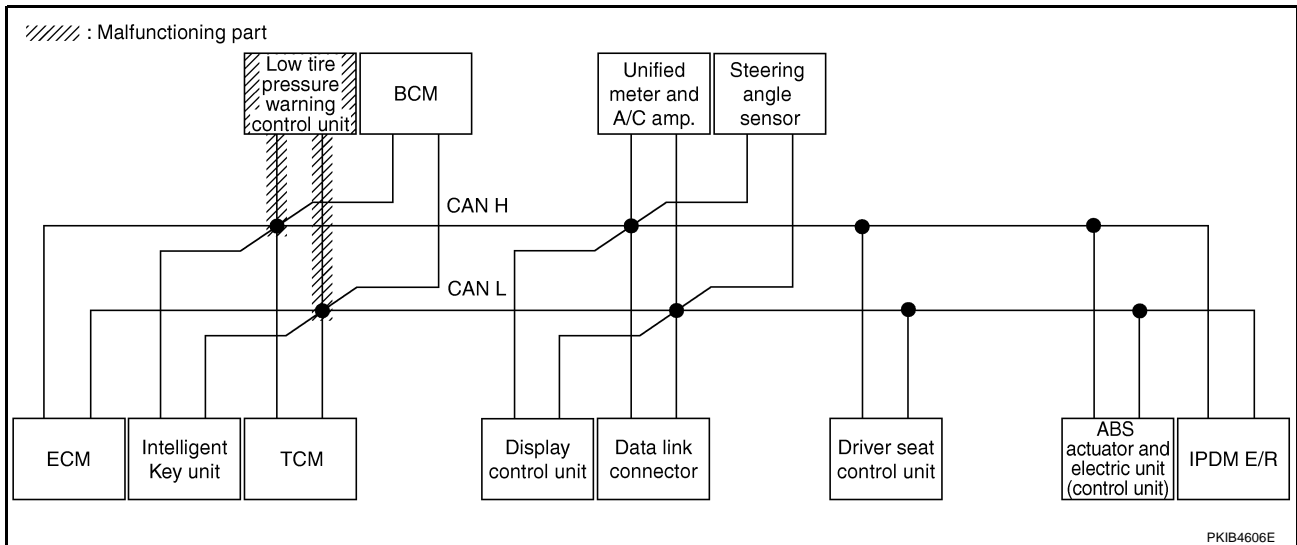
[CAN]

## Case 7

Check low tire pressure warning control unit circuit. Refer to [LAN-215, "Low Tire Pressure Warning Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4803E



# CAN SYSTEM (TYPE 5)

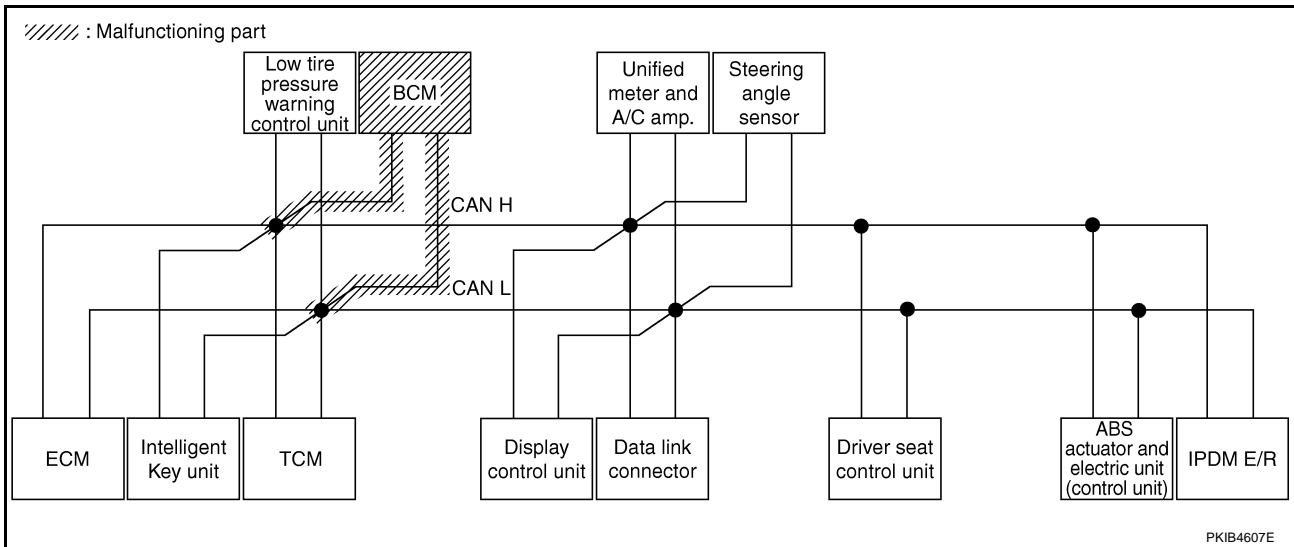
[CAN]

## Case 8

Check BCM circuit. Refer to [LAN-215, "BCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1011)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4804E



PKIB4607E

# CAN SYSTEM (TYPE 5)

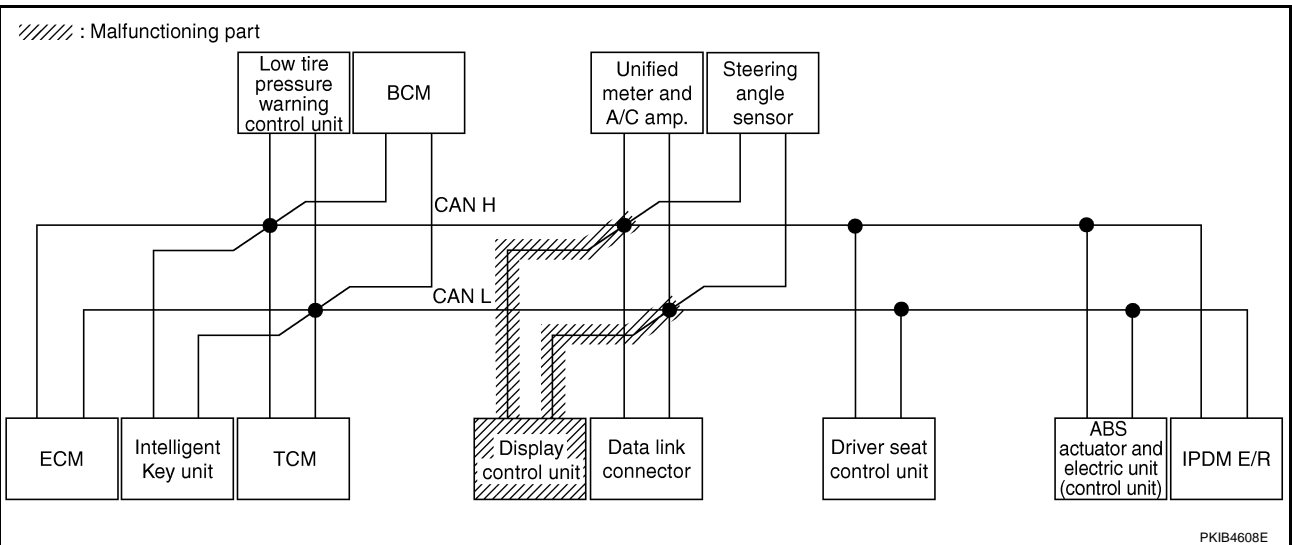
[CAN]

## Case 9

Check display control unit circuit. Refer to [LAN-216, "Display Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4805E



PKIB4608E

# CAN SYSTEM (TYPE 5)

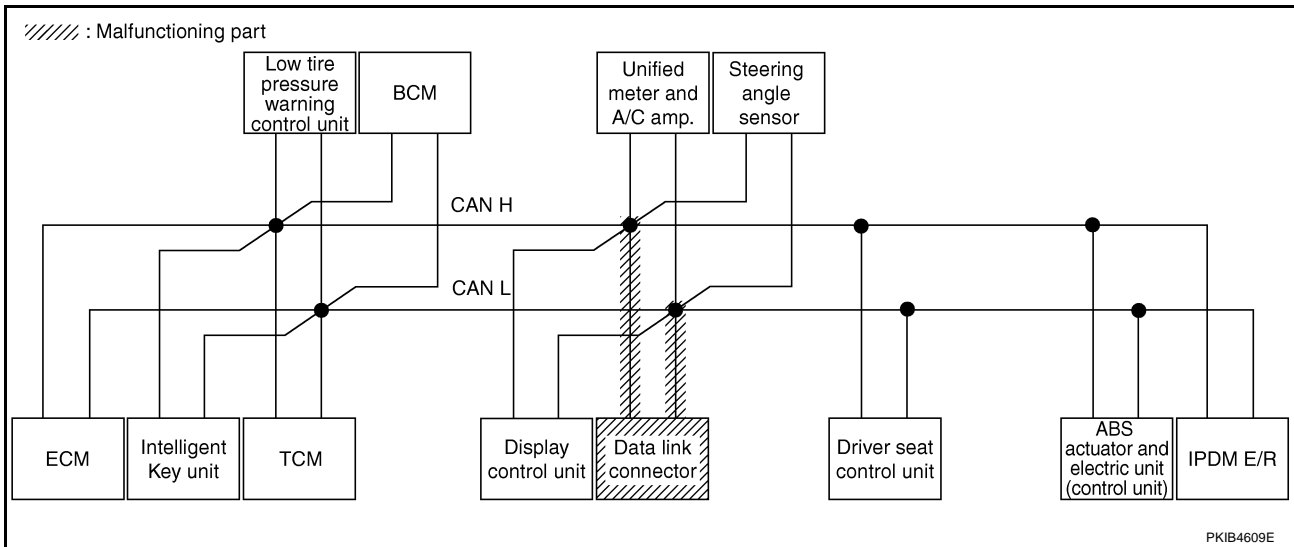
[CAN]

## Case 10

Check data link connector circuit. Refer to [LAN-216, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4806E



PKIB4609E

# CAN SYSTEM (TYPE 5)

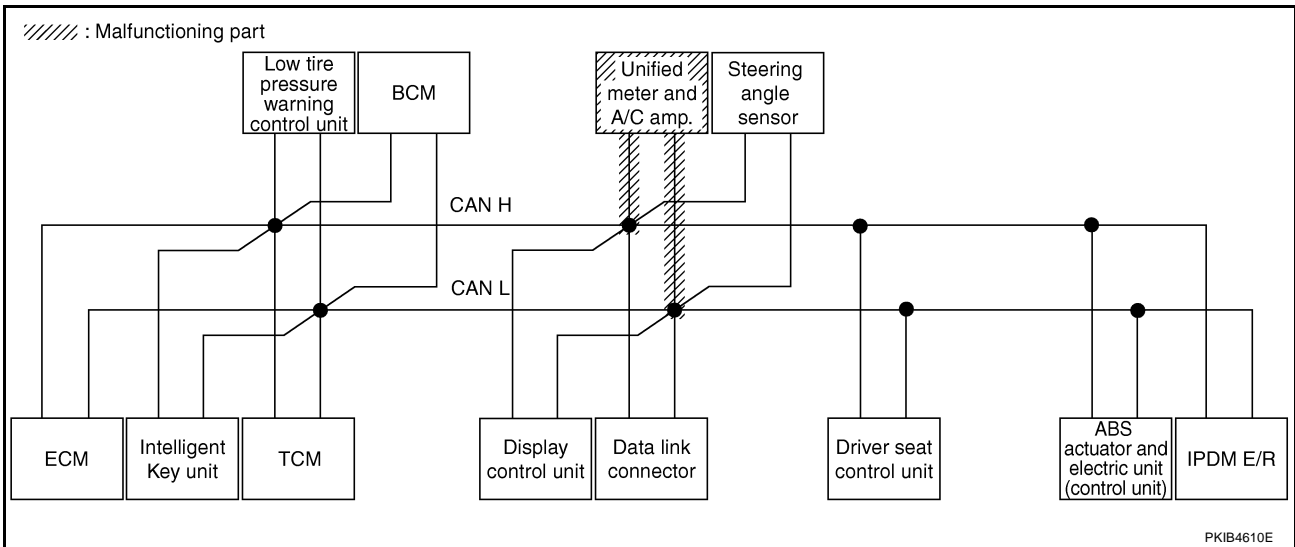
[CAN]

## Case 11

Check unified meter and A/C amp. circuit. Refer to [LAN-217, "Unified Meter and A/C Amp. Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4807E



PKIB4610E

# CAN SYSTEM (TYPE 5)

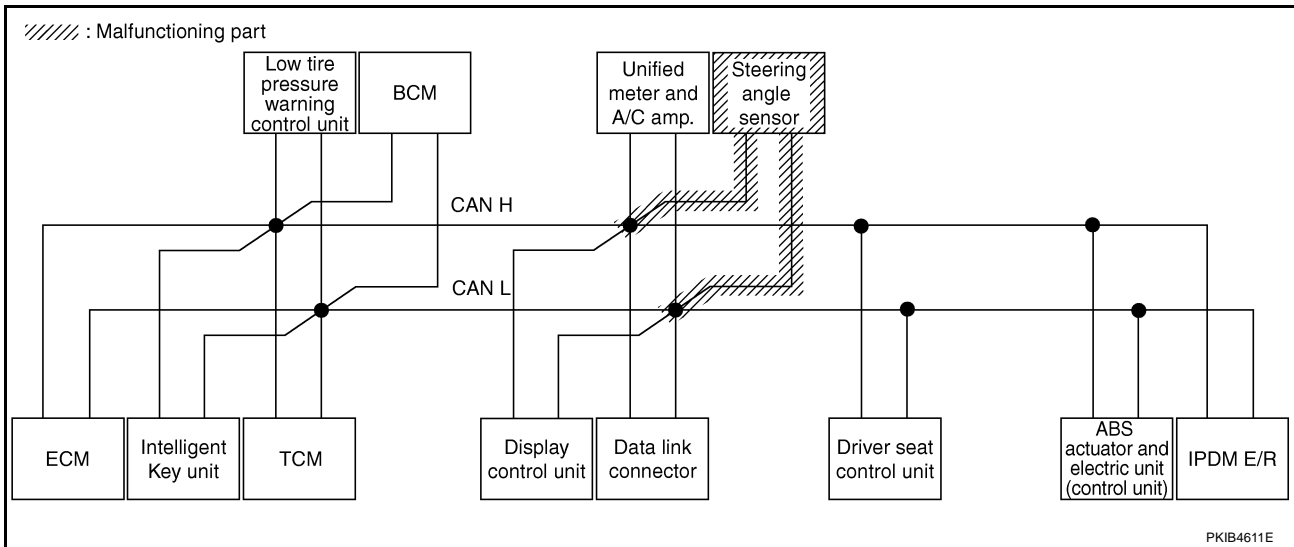
[CAN]

## Case 12

Check steering angle sensor circuit. Refer to [LAN-217, "Steering Angle Sensor Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4808E



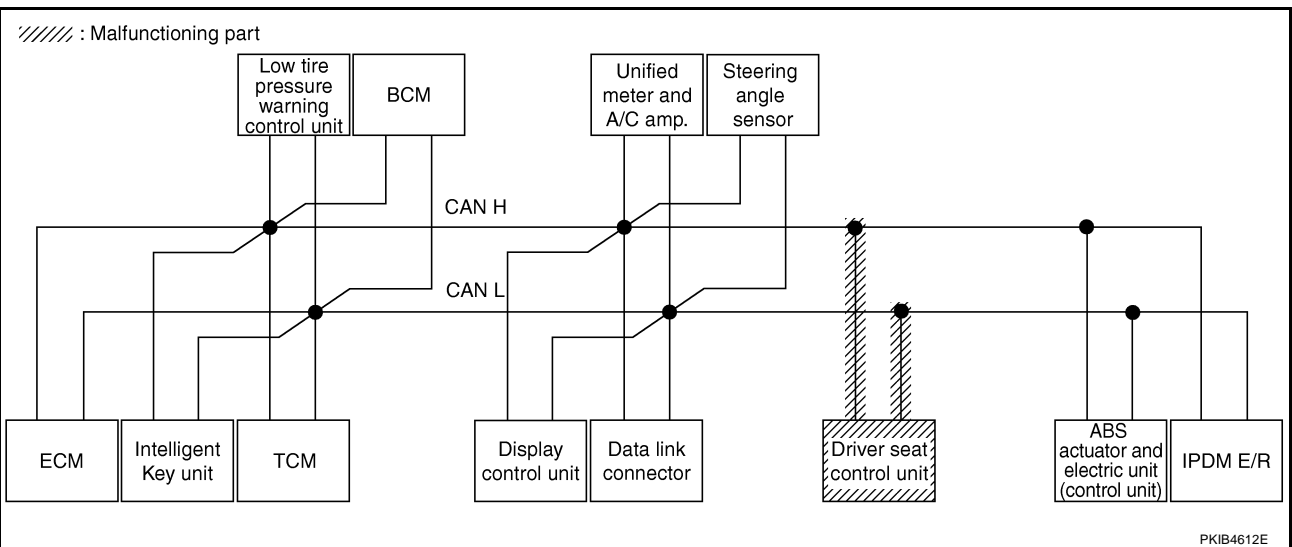
PKIB4611E

## Case 13

Check driver seat control unit circuit. Refer to [LAN-218, "Driver Seat Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4809E



# CAN SYSTEM (TYPE 5)

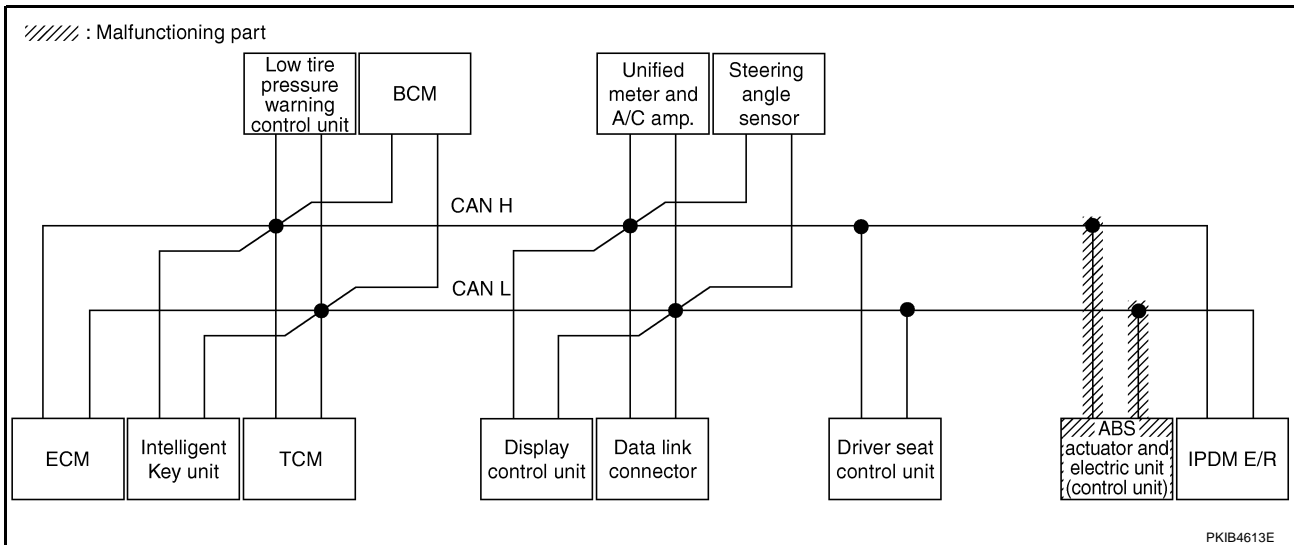
[CAN]

## Case 14

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-218, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS					
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4810E



PKIB4613E



# CAN SYSTEM (TYPE 5)

[CAN]

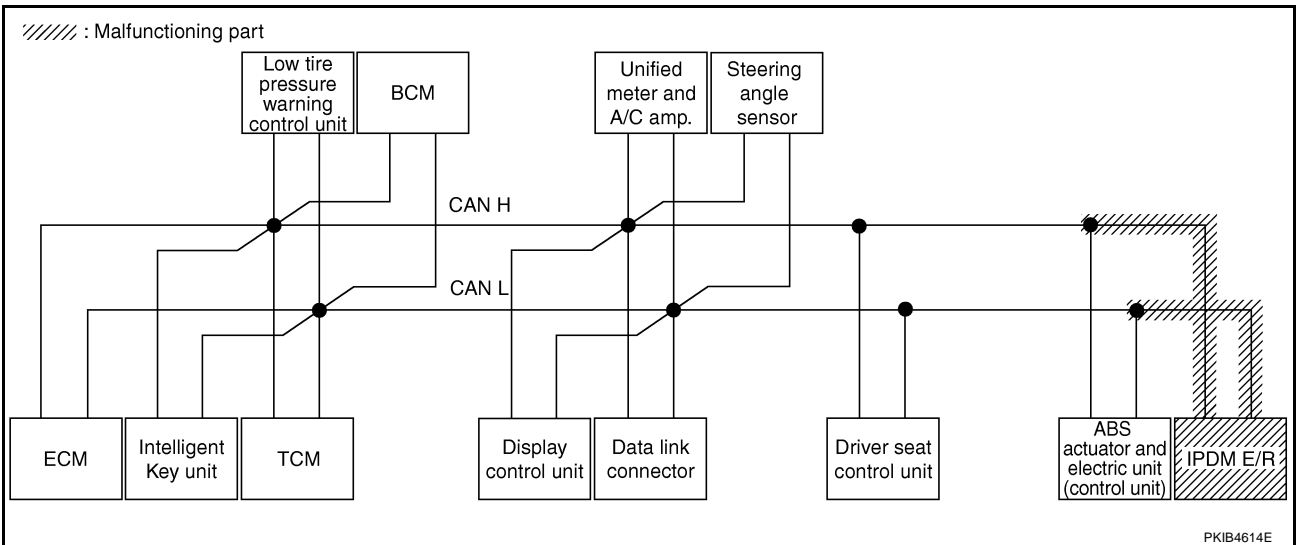
## Case 15

Check IPDM E/R circuit. Refer to [LAN-219, "IPDM E/R Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4811E



PKIB4614E

LAN

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 16

Case 20: Check CAN communication circuit. Refer to [LAN-219, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			
ENGINE	—	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication <sup>✓</sup>	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication <sup>✓</sup>	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—
AIR PRESSURE MONITOR	No indication <sup>✓</sup>	NG	UNKW <sup>✓</sup> N	—	—	—	—	—	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication <sup>✓</sup>	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—
METER A/C AMP	No indication <sup>✓</sup>	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication <sup>✓</sup>	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG <sup>✓</sup>	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication <sup>✓</sup>	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	UNKW <sup>✓</sup> N	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4812E

## Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-224, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			
ENGINE	—	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKW <sup>✓</sup> N	—	—	—	—	—	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—
METER A/C AMP	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	UNKW <sup>✓</sup> N	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4813E

## Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-224, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	VDC/TCS /ABS			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4814E

## Inspection Between TCM and Data Link Connector Circuit

AKS00AEM

### 1. CHECK HARNESS FOR OPEN CIRCUIT

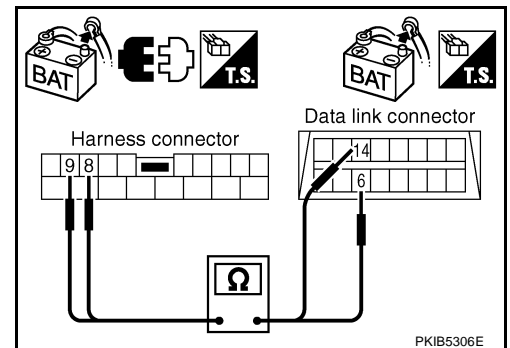
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00AEM

### 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 M9
  - Harness connector B2

OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

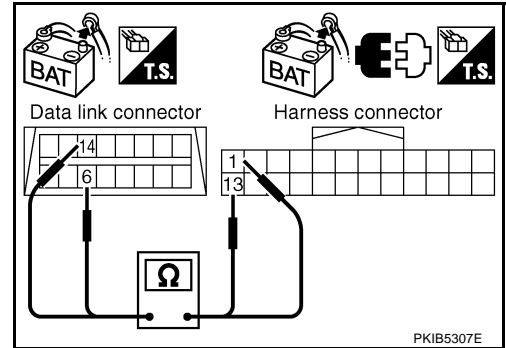
**6 (L) - 1 (L) : Continuity should exist.**

**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

OK >> GO TO 3.

NG >> Repair harness.



## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

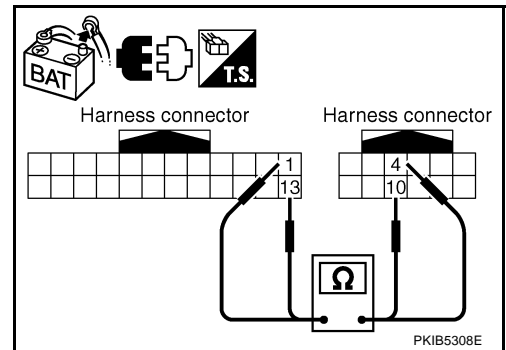
**1 (L) - 4 (L) : Continuity should exist.**

**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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

NG >> Repair harness.



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

AKS00CHP

### 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 B4
  - Harness connector E105

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

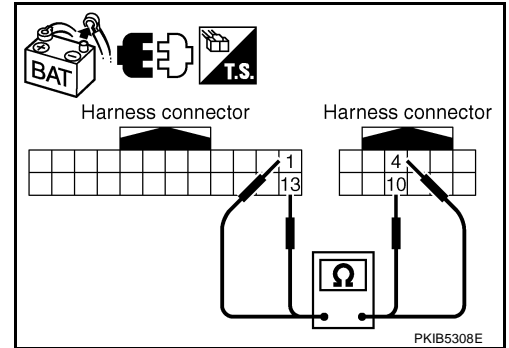
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



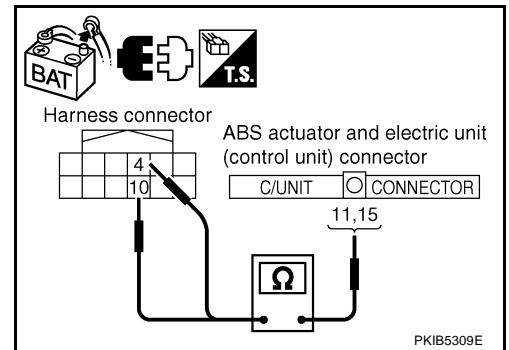
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**4 (L) - 11 (L) : Continuity should exist.**  
**10 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## ECM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

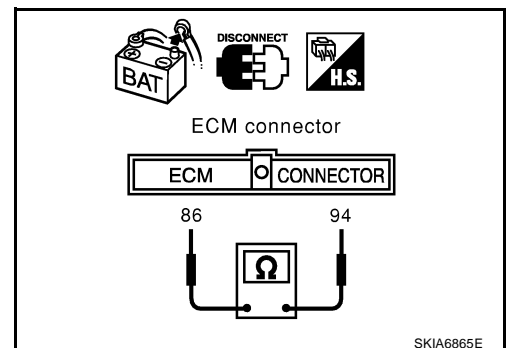
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

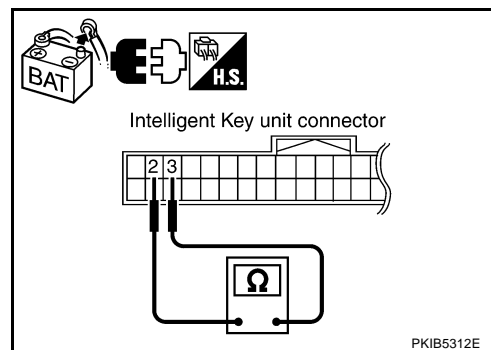
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.



AKS00AEP

## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

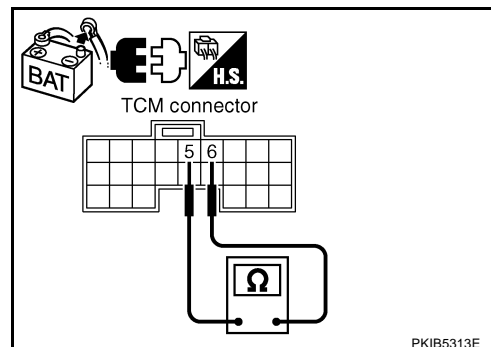
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM and BCM.



## Low Tire Pressure Warning Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of low tire pressure warning 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.

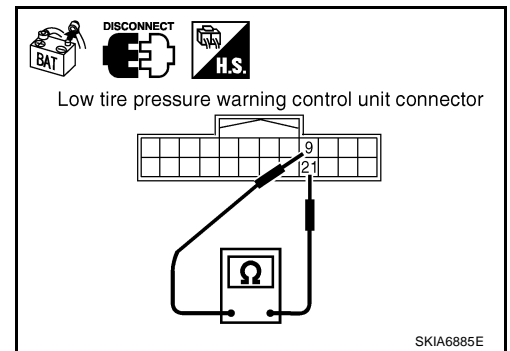
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect low tire pressure warning control unit connector.
2. Check resistance between low tire pressure warning control unit harness connector M81 terminals 9 (L) and 21 (Y).

**9 (L) - 21 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace low tire pressure warning control unit.  
 NG >> Repair harness between low tire pressure warning control unit and BCM.



AKS00AET

## BCM Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

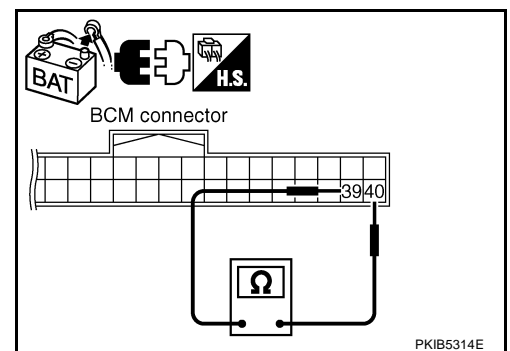
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#) .  
 NG >> Repair harness between BCM and harness connector M82.



## Display Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

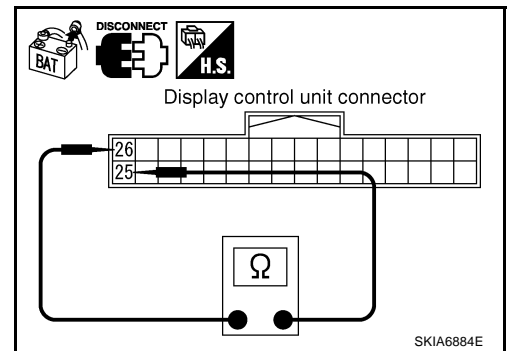
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display control unit connector.
2. Check resistance between display control unit harness connector M43 terminals 25 (L) and 26 (Y).

**25 (L) - 26 (Y) : Approx. 54 - 66Ω**

#### OK or NG

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



## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

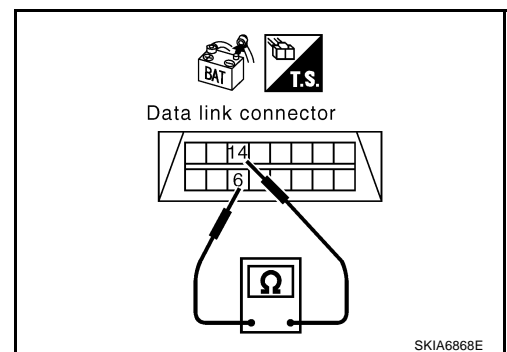
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
NG >> Repair harness between data link connector and unified meter and A/C amp.





**Unified Meter and A/C Amp. Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

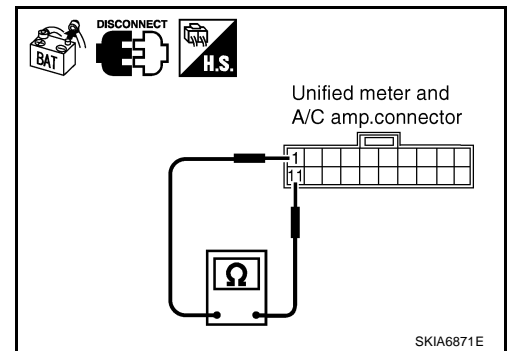
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.

**Steering Angle Sensor Circuit Inspection****1. CHECK CONNECTOR**

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
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.

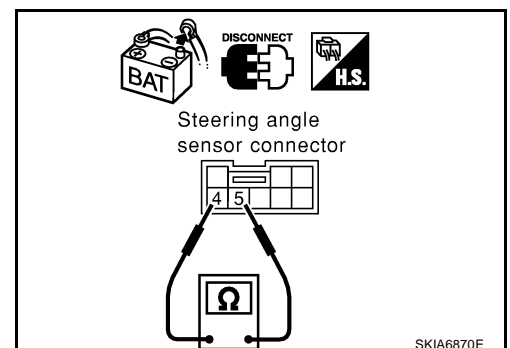
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect steering angle sensor connector.
2. Check resistance between steering angle sensor harness connector M33 terminals 4 (L) and 5 (Y).

**4 (L) - 5 (Y) : Approx. 54 - 66Ω**

OK or NG

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## Driver Seat Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

OK or NG

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

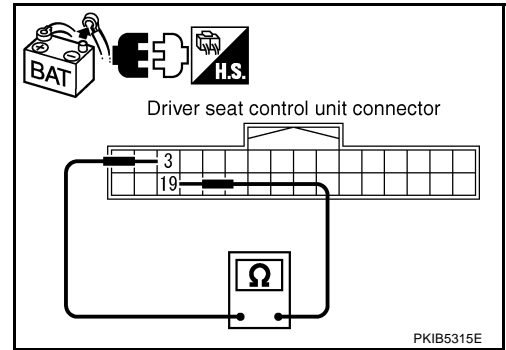
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

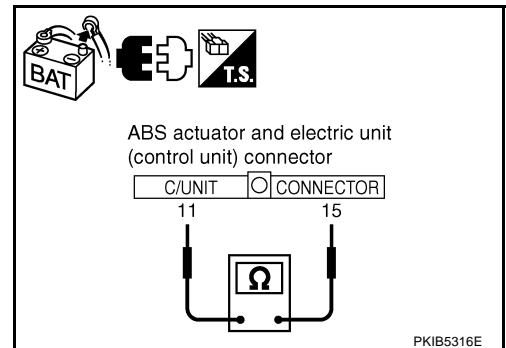
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

OK or NG

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



**IPDM E/R Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

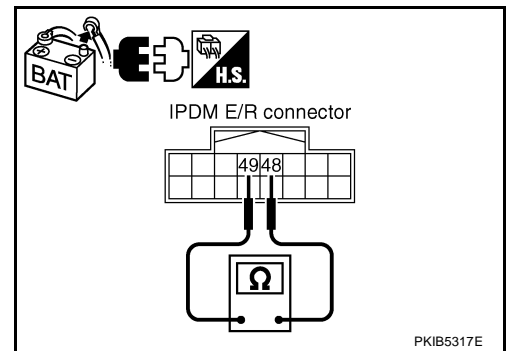
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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

**48 (L) - 49 (Y) : Approx. 108 - 132Ω**

OK or NG

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

**CAN Communication Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - Low tire pressure warning control unit connector
  - BCM connector
  - Display control unit connector
  - Unified meter and A/C amp. connector
  - Steering angle sensor connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

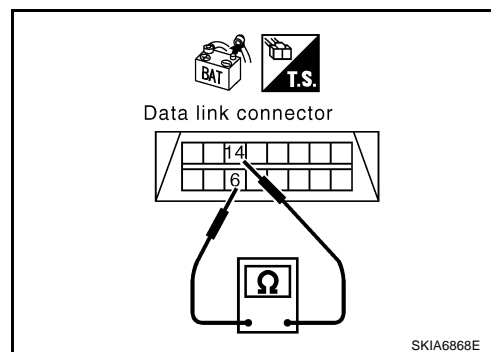
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

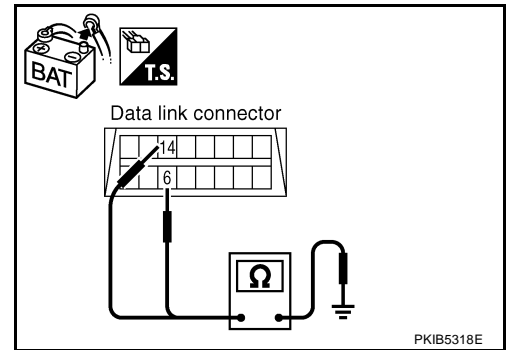
**14 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 4. CHECK HARNESS FOR SHORT CIRCUIT

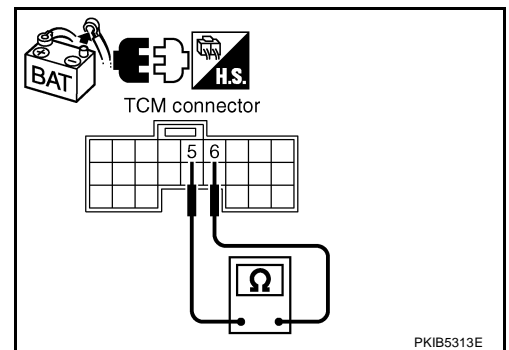
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

#### OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



### 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

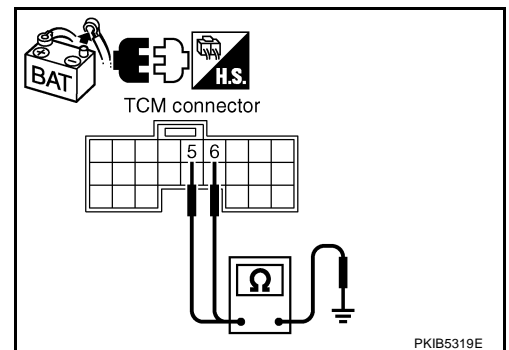
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



## 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

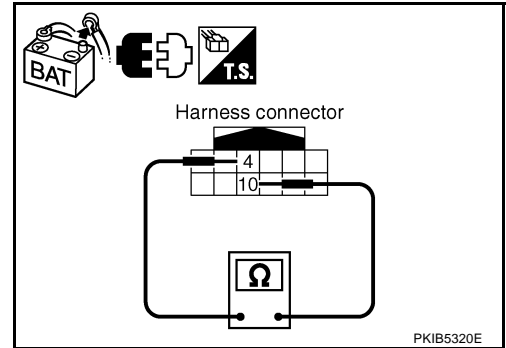
**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 7.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

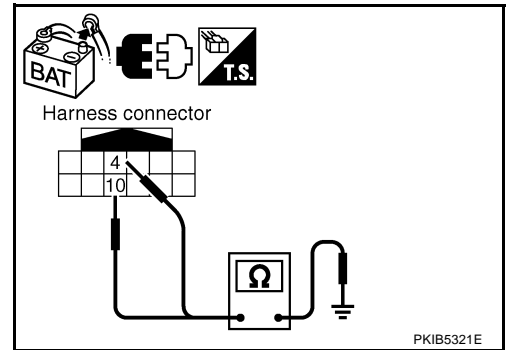
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

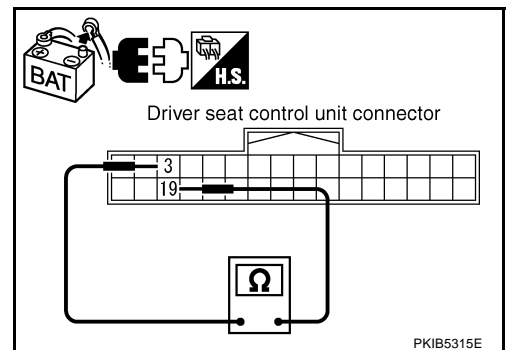
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

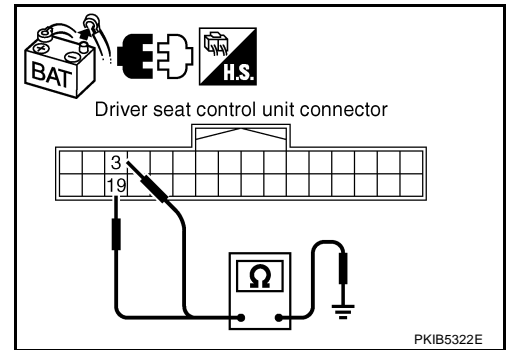
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector and IPDM E/R connector.
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

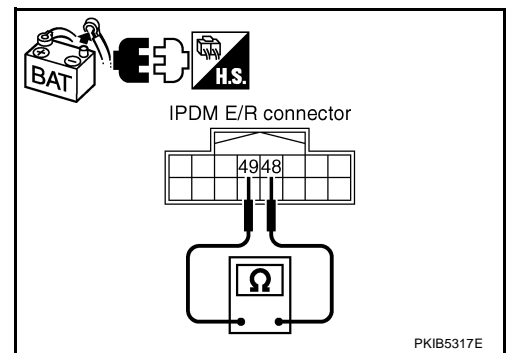
**48 (L) - 49 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

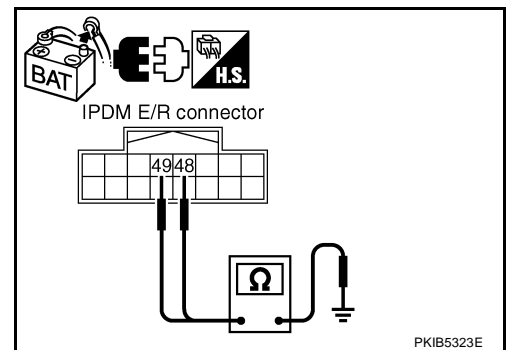
**49 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

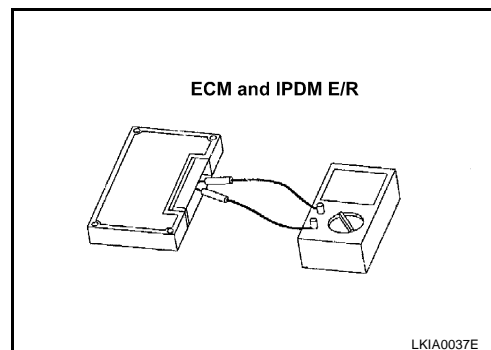
1. Remove ECM and IPDM E/R from vehicle.
2. Check resistance between ECM terminals 94 and 86.
3. Check resistance between IPDM E/R terminals 48 and 49.

**94 - 86** : **Approx. 108 – 132 Ω**

**48 - 49** : **Approx. 108 – 132 Ω**

### OK or NG

- OK >> GO TO 13.  
 NG >> Replace ECM and/or IPDM E/R.



## 13. CHECK SYMPTOM

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

### OK or NG

- OK >> GO TO 14.  
 NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

## IPDM E/R Ignition Relay Circuit Inspection

AKS00CHU

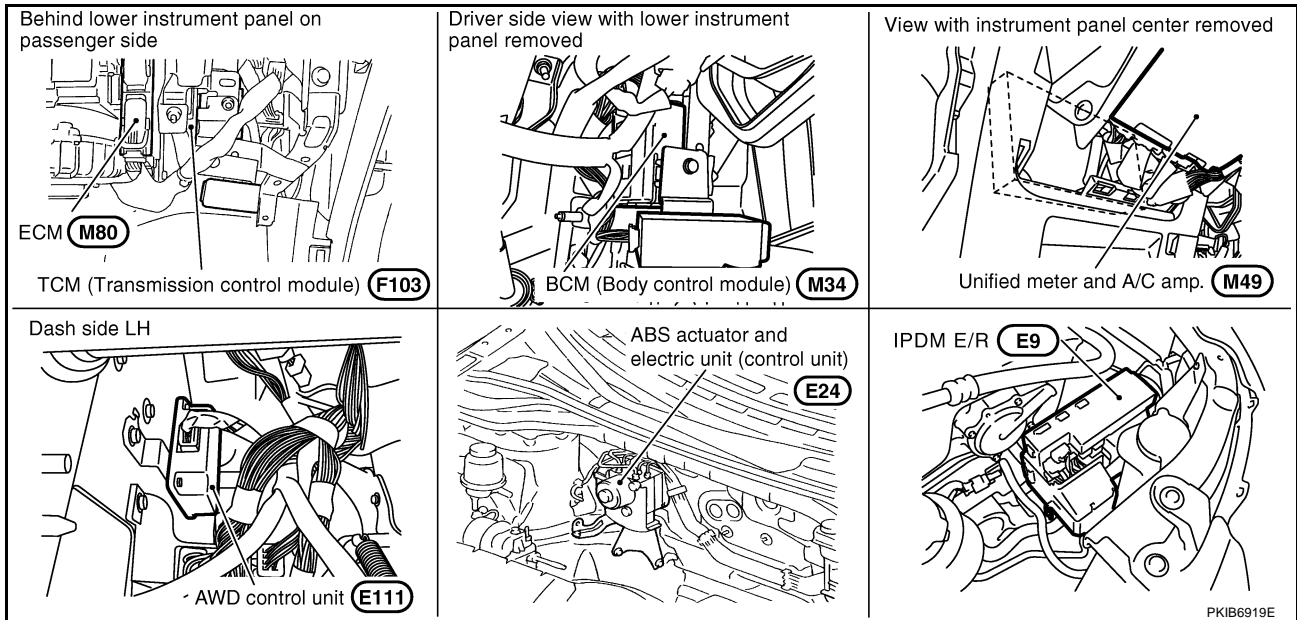
Check the following. If no malfunction is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to [PG-27, "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" "](#).



## CAN SYSTEM (TYPE 6)

### Component Parts and Harness Connector Location



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

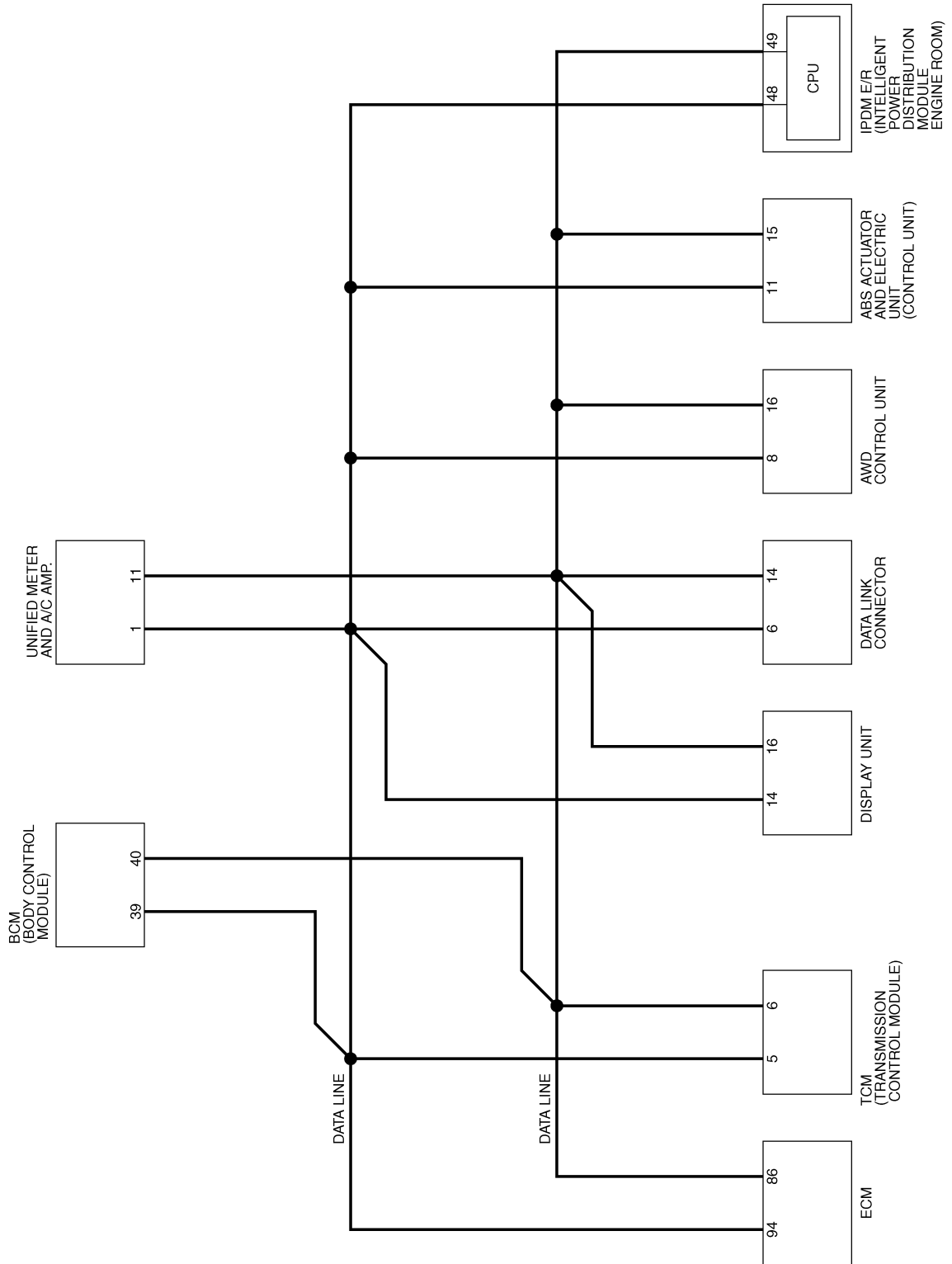
LAN

# CAN SYSTEM (TYPE 6)

[CAN]

## Schematic

AKS00AF3



TKWB0850E

# CAN SYSTEM (TYPE 6)

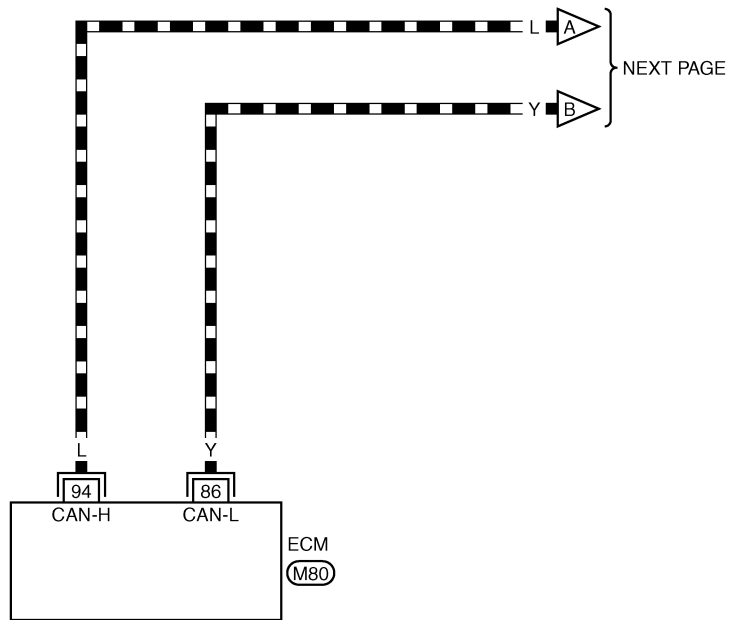
[CAN]

## Wiring Diagram - CAN -

AKS00AF4

### LAN-CAN-25

▬ : DATA LINE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

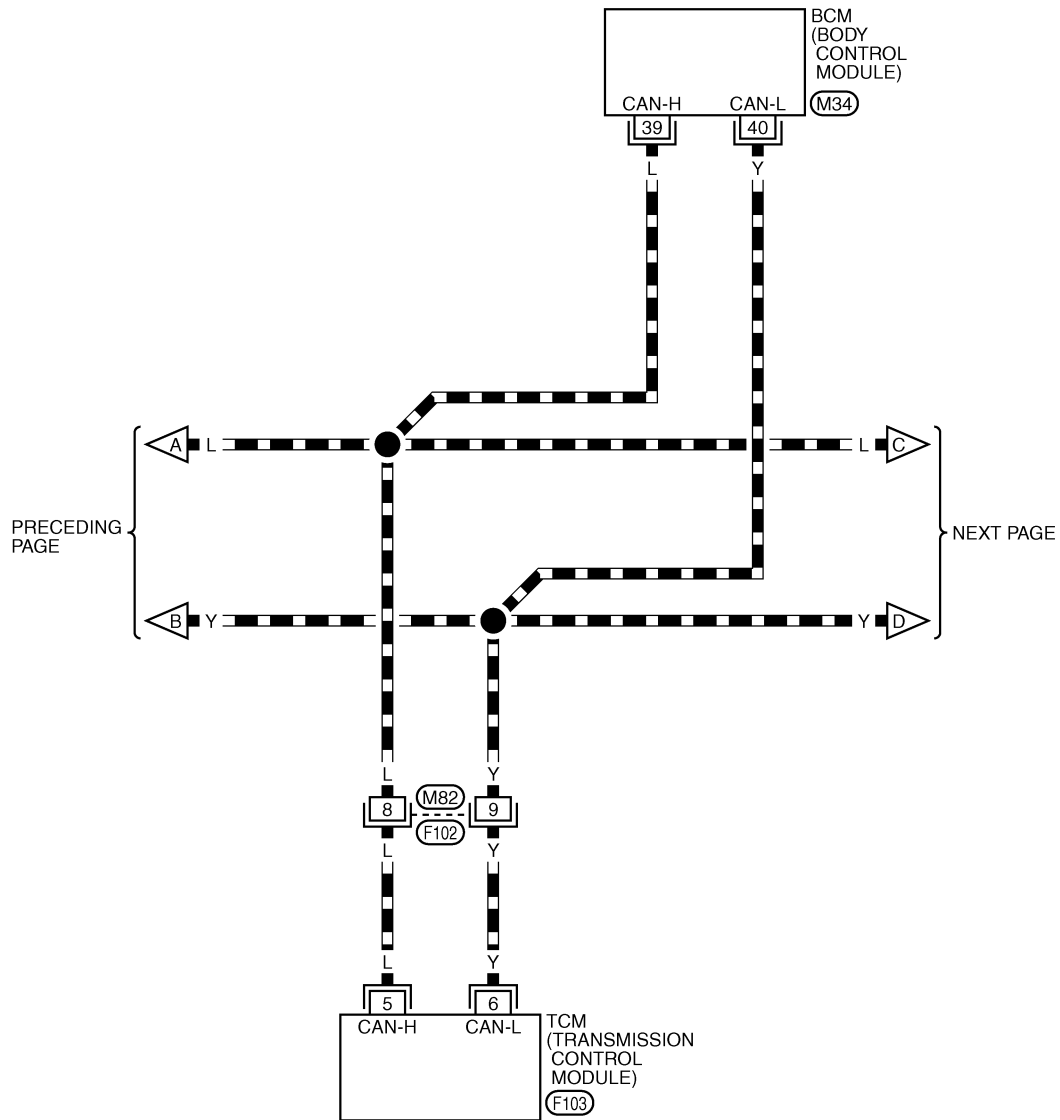
TKWB0851E

# CAN SYSTEM (TYPE 6)

[CAN]

## LAN-CAN-26

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102) W	

REFER TO THE FOLLOWING.  
(M34), (F103) -ELECTRICAL  
UNITS

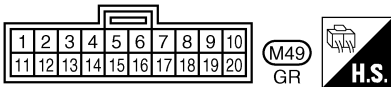
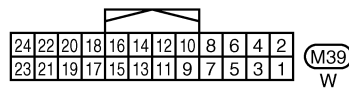
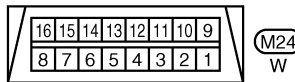
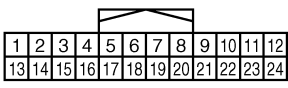
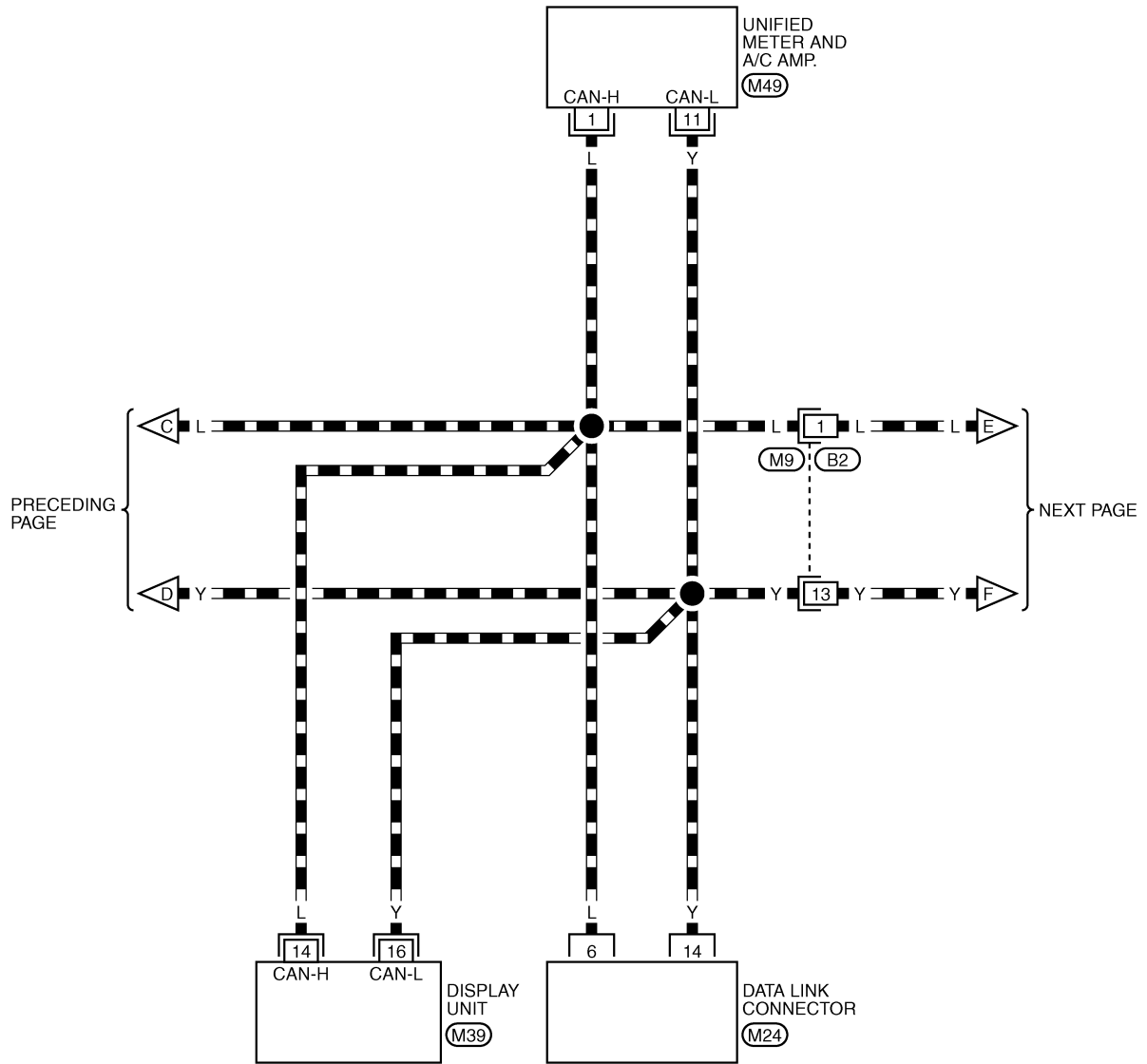
TKWB0852E

# CAN SYSTEM (TYPE 6)

[CAN]

## LAN-CAN-27

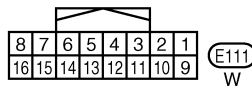
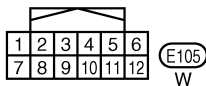
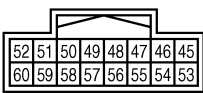
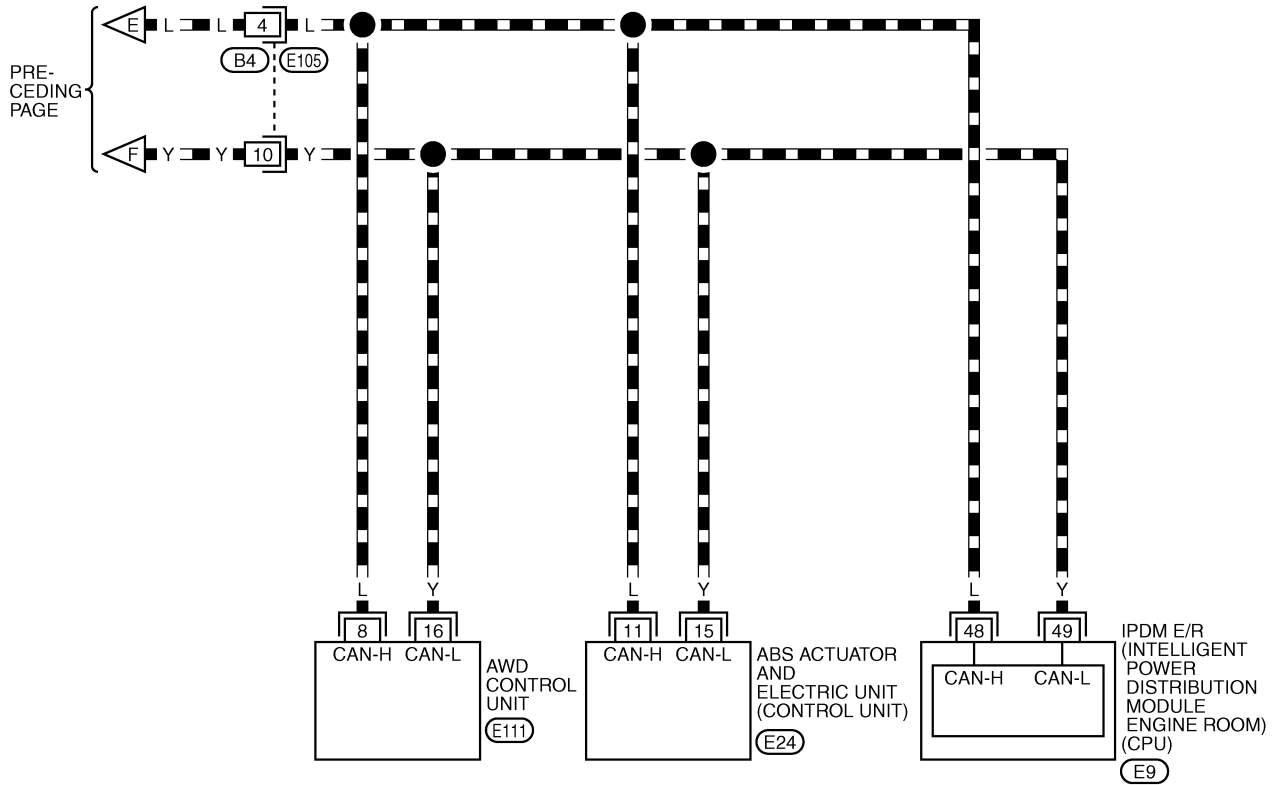
▬ : DATA LINE



TKWB0853E

## LAN-CAN-28

▬ : DATA LINE



REFER TO THE FOLLOWING.

(E24) -ELECTRICAL UNITS

# CAN SYSTEM (TYPE 6)

[CAN]

AKS00AF5

## Check Sheet

**NOTE:**

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	—
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4718E

# CAN SYSTEM (TYPE 6)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

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

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

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

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4719E



# CAN SYSTEM (TYPE 6)

[CAN]

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

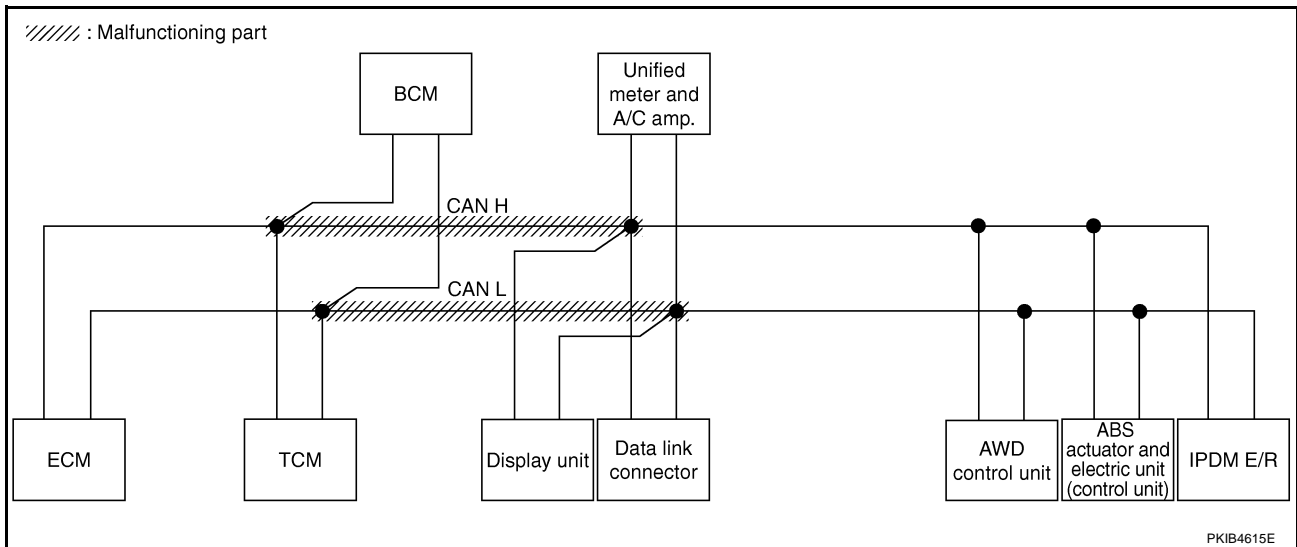
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-246, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4815E



PKIB4615E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 6)

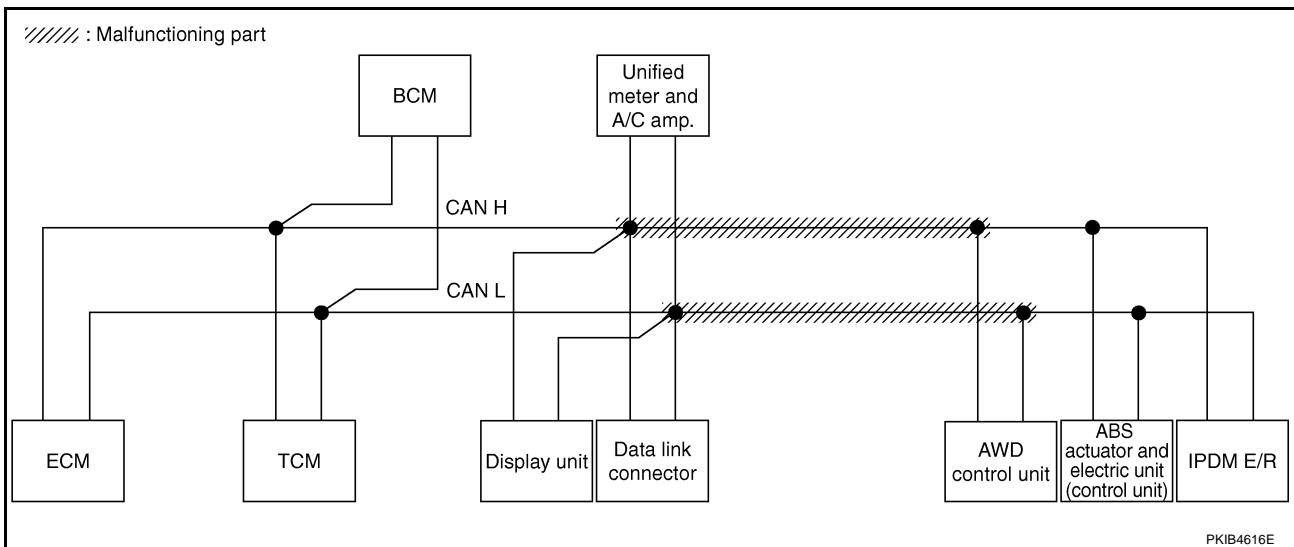
[CAN]

## Case 2

Check harness between data link connector and AWD control unit. Refer to [LAN-246, "Inspection Between Data Link Connector and AWD Control Unit Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4816E



PKIB4616E

# CAN SYSTEM (TYPE 6)

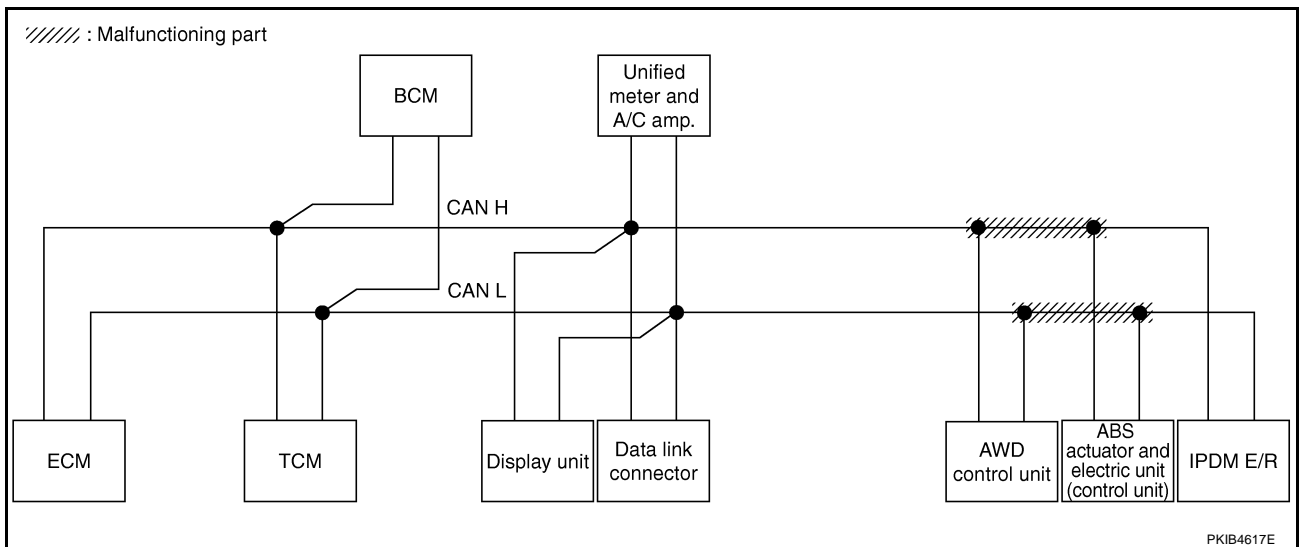
[CAN]

## Case 3

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to [LAN-248](#), "Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										IPDM E/R
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4817E



# CAN SYSTEM (TYPE 6)

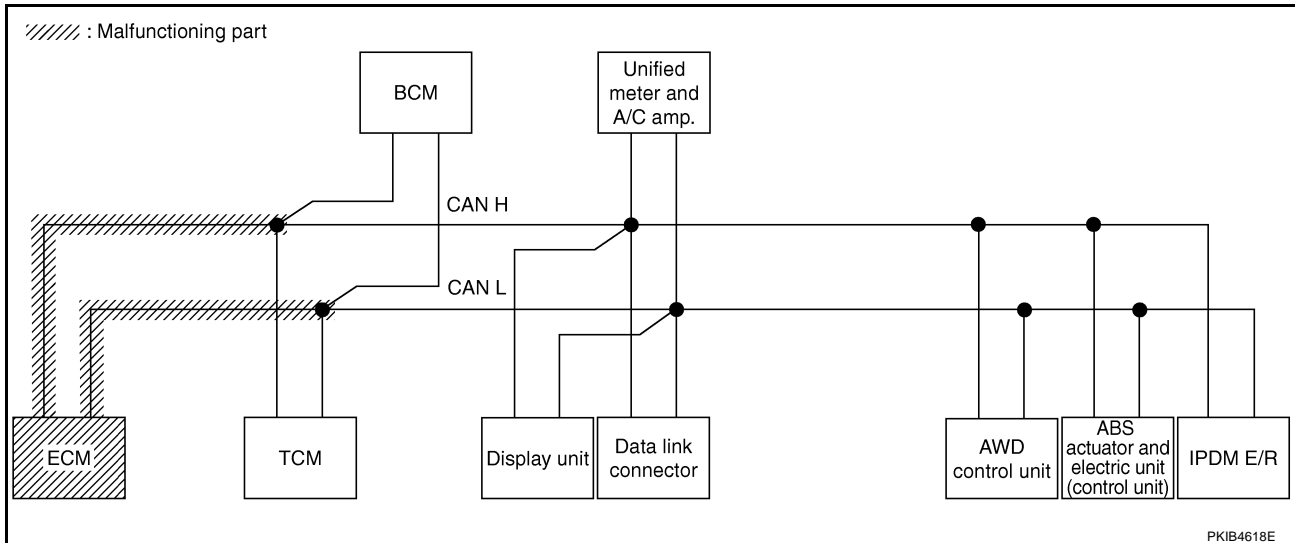
[CAN]

## Case 4

Check ECM circuit. Refer to [LAN-248, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	—	UNKWN ✓	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓		
TRANSMISSION	No indication	NG	UNKWN ✓	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—		
BCM	No indication	NG	UNKWN ✓	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—		
Display unit	—	NG	UNKWN ✓	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—		
METER A/C AMP	No indication	—	UNKWN ✓	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—		
ALL MODE AWD/4WD	—	NG	UNKWN ✓	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100) ✓	—		
ABS	—	NG	UNKWN ✓	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—		
IPDM E/R	No indication	—	UNKWN ✓	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—		

PKIB4818E



PKIB4618E

# CAN SYSTEM (TYPE 6)

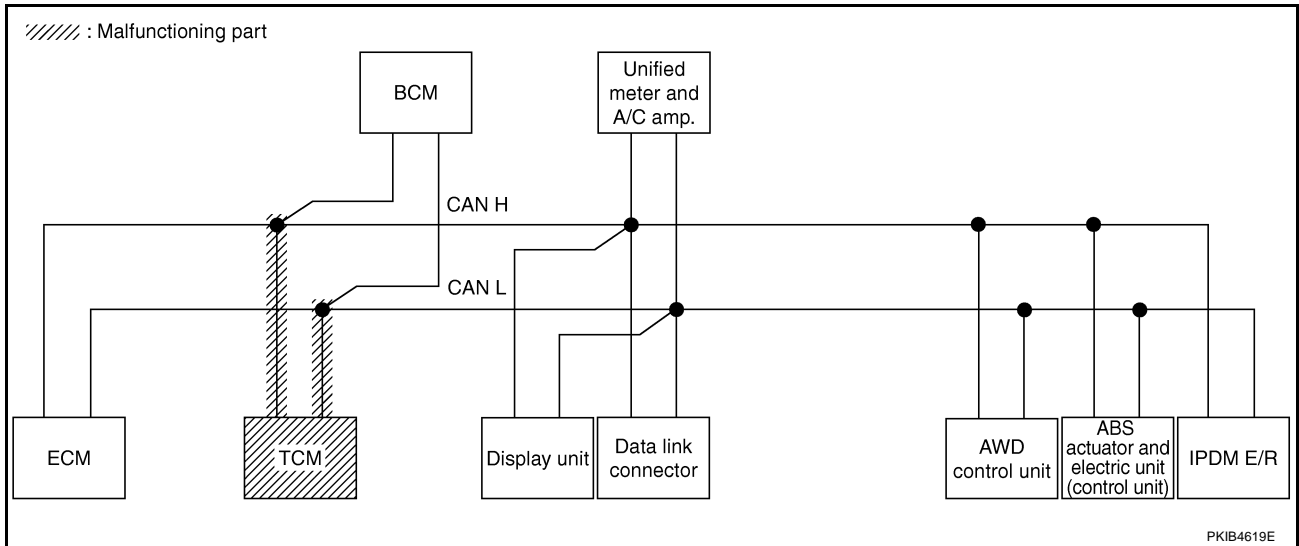
[CAN]

## Case 5

Check TCM circuit. Refer to [LAN-249, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4819E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 6)

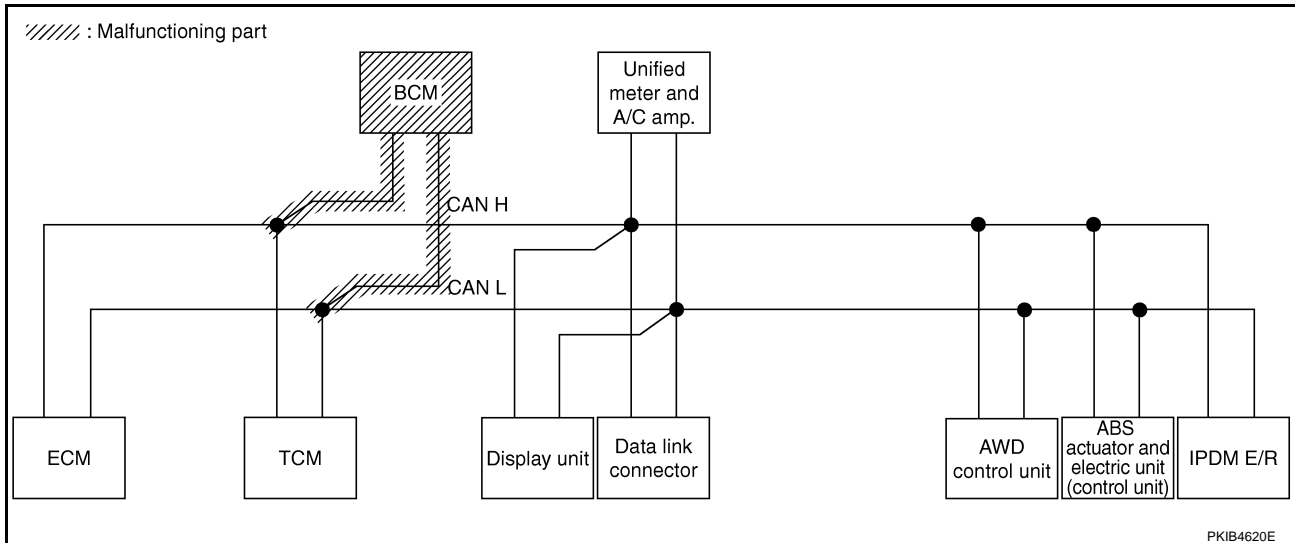
[CAN]

## Case 6

Check BCM circuit. Refer to [LAN-249, "BCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4820E



# CAN SYSTEM (TYPE 6)

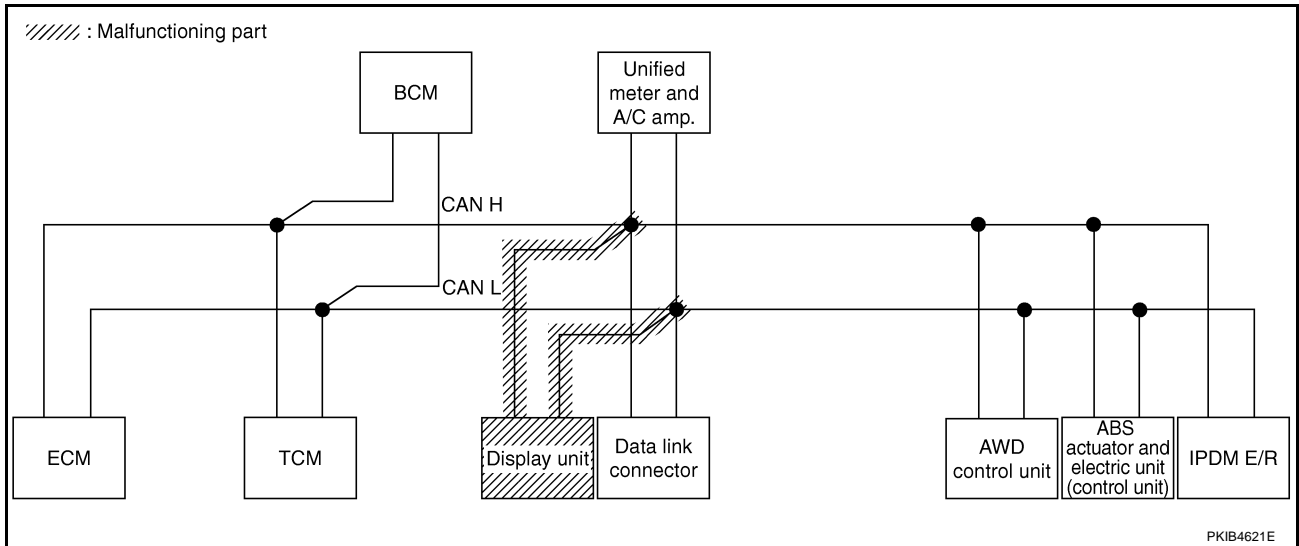
[CAN]

## Case 7

Check display unit circuit. Refer to [LAN-250, "Display Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4821E



PKIB4621E

# CAN SYSTEM (TYPE 6)

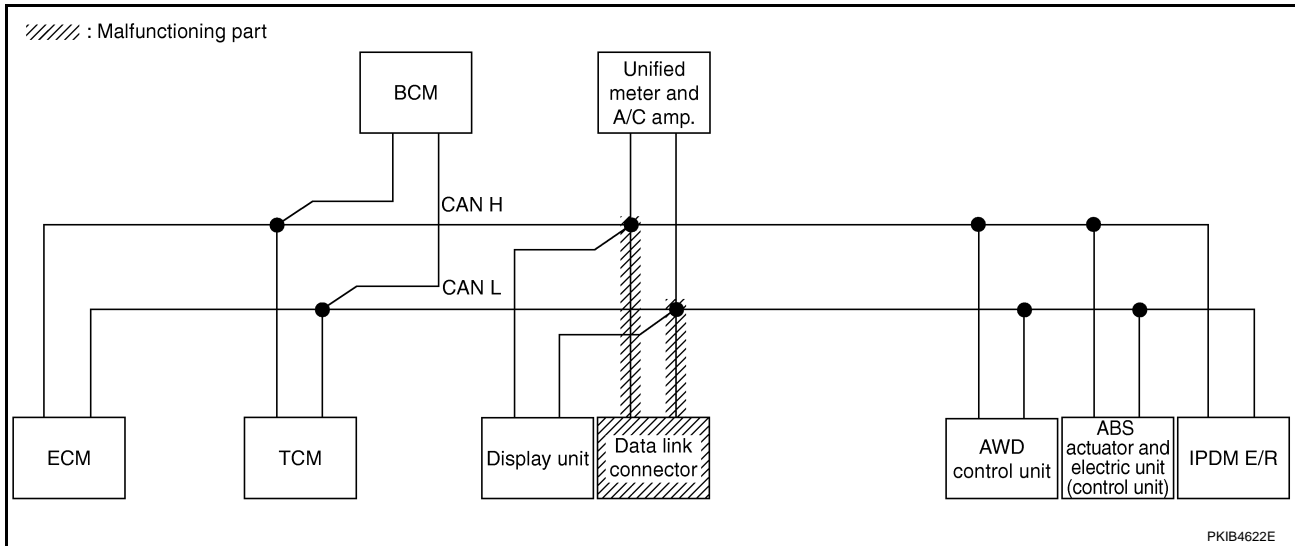
[CAN]

## Case 8

Check data link connector circuit. Refer to [LAN-250, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	N <sub>indication</sub> ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	N <sub>indication</sub> ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	N <sub>indication</sub> ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	N <sub>indication</sub> ✓	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4822E





# CAN SYSTEM (TYPE 6)

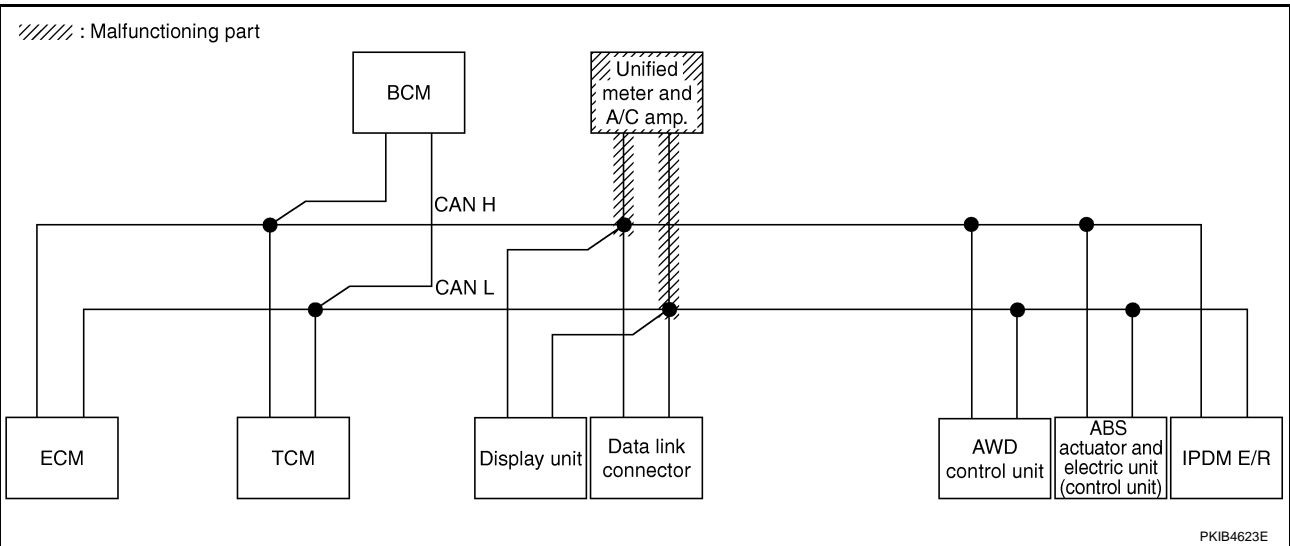
[CAN]

## Case 9

Check unified meter and A/C amp. circuit. Refer to [LAN-251, "Unified Meter and A/C Amp. Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4823E



# CAN SYSTEM (TYPE 6)

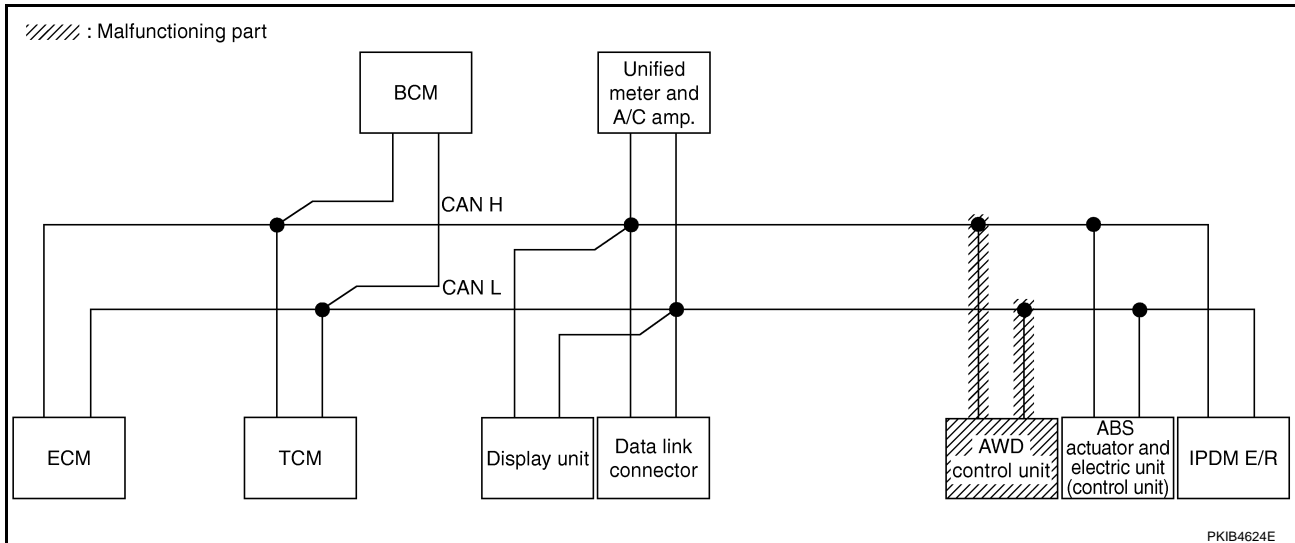
[CAN]

## Case 10

Check AWD control unit circuit. Refer to [LAN-251, "AWD Control Unit Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4824E



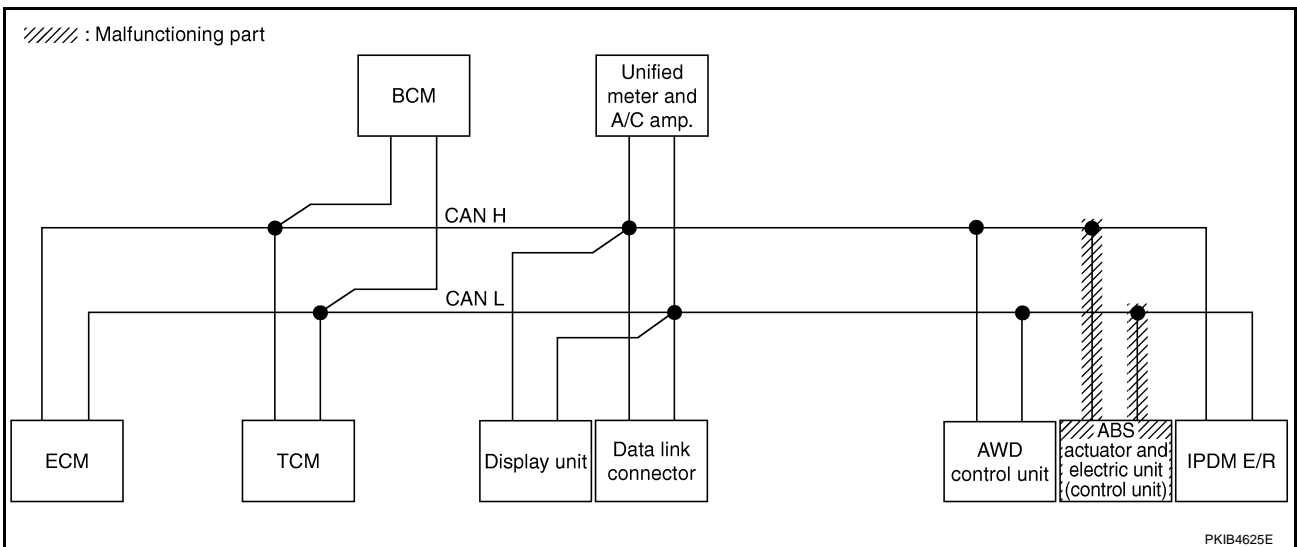
PKIB4624E

## Case 11

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-252, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4825E



# CAN SYSTEM (TYPE 6)

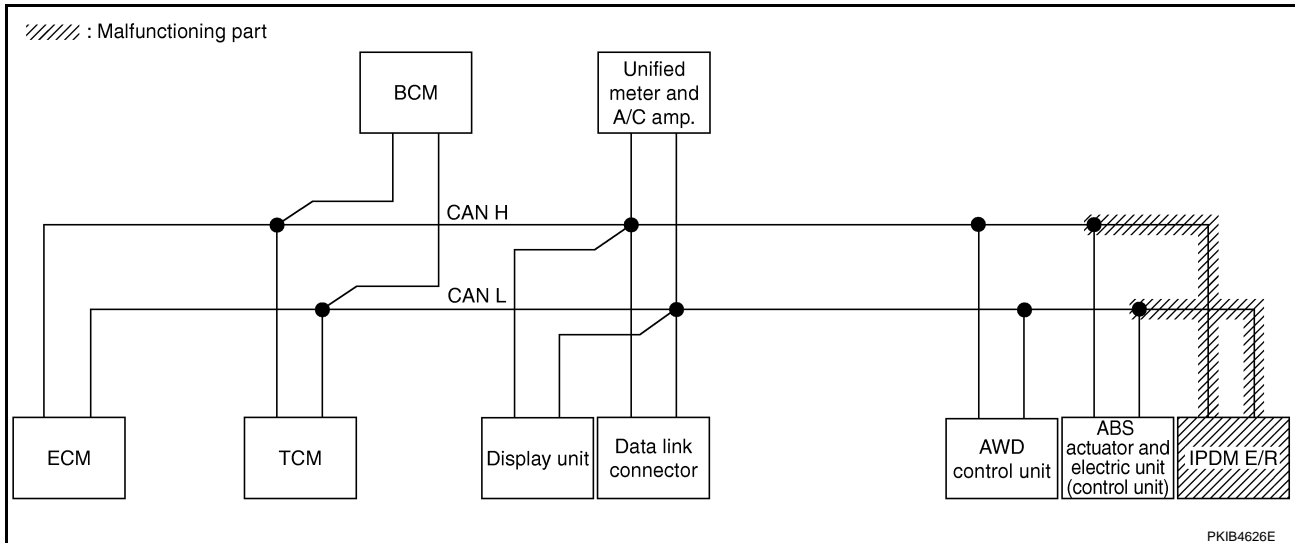
[CAN]

## Case 12

Check IPDM E/R circuit. Refer to [LAN-252, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										IPDM E/R
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4826E



# CAN SYSTEM (TYPE 6)

[CAN]

## Case 13

Check CAN communication circuit. Refer to [LAN-253, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4827E

## Case 14

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-257, "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	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6343E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 15

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-257, "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	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6344E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CJZ

### 1. CHECK HARNESS FOR OPEN CIRCUIT

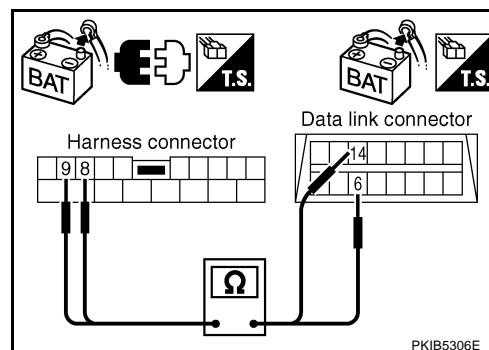
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and AWD Control Unit Circuit

AKS00CK0

### 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 M9
  - Harness connector B2
  - Harness connector B4
  - Harness connector E105

#### OK or NG

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

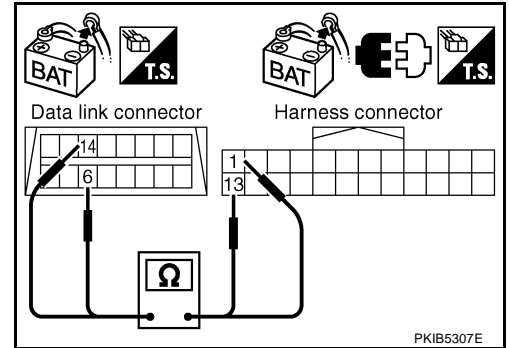
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

6 (L) - 1 (L) : Continuity should exist.  
14 (Y) - 13 (Y) : Continuity should exist.

OK or NG

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



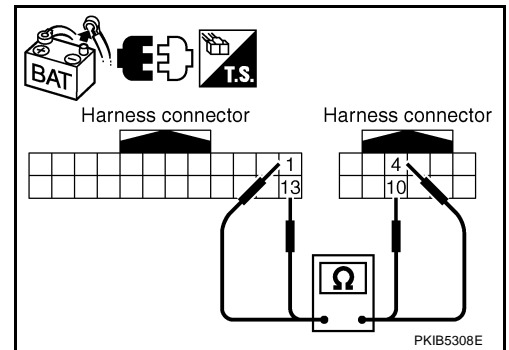
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

1 (L) - 4 (L) : Continuity should exist.  
13 (Y) - 10 (Y) : Continuity should exist.

OK or NG

- OK >> GO TO 4.  
 NG >> Repair harness.



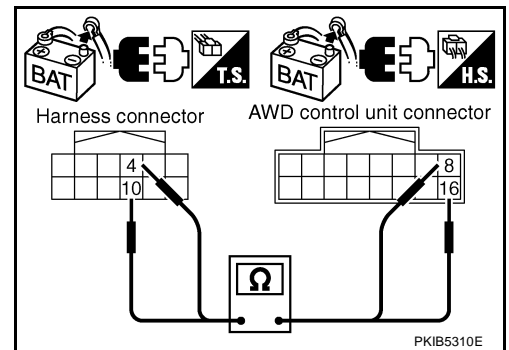
## 4. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and AWD control unit harness connector E111 terminals 8 (L), 16 (Y).

4 (L) - 8 (L) : Continuity should exist.  
10 (Y) - 16 (Y) : Continuity should exist.

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

## Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit

AKS00CK1

### 1. CHECK CONNECTOR

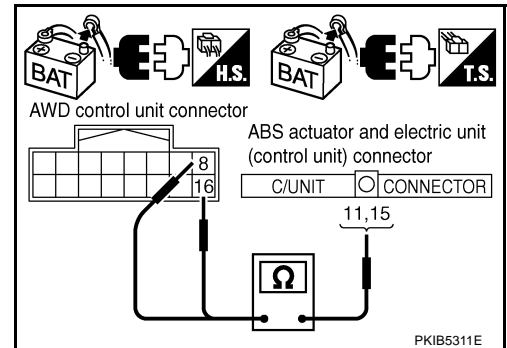
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect following connectors.
  - ECM
  - AWD control unit
  - ABS actuator and electric unit (control unit)
4. Check continuity between AWD control unit harness connector E111 terminals 8 (L), 16 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**8 (L) - 11 (L) : Continuity should exist.**

**16 (Y) - 15 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



## ECM Circuit Inspection

AKS00CK2

### 1. CHECK CONNECTOR

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

#### OK or NG

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

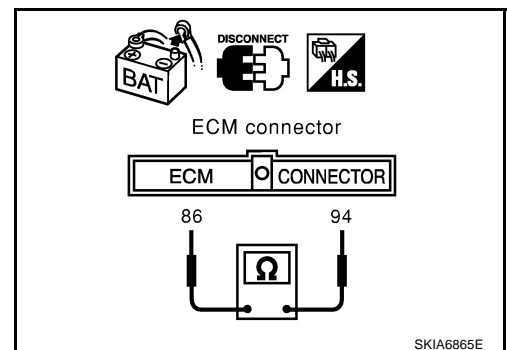
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

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

#### OK or NG

- OK >> Replace ECM.
- NG >> Repair harness between ECM and BCM.





**TCM Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

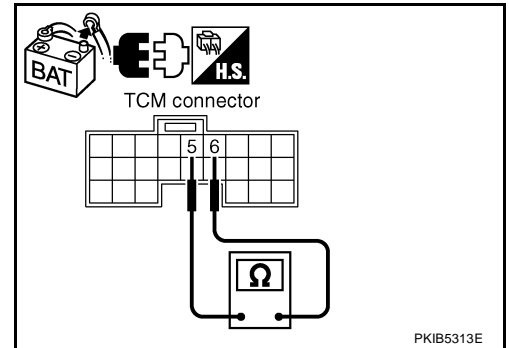
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM and BCM.

**BCM Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

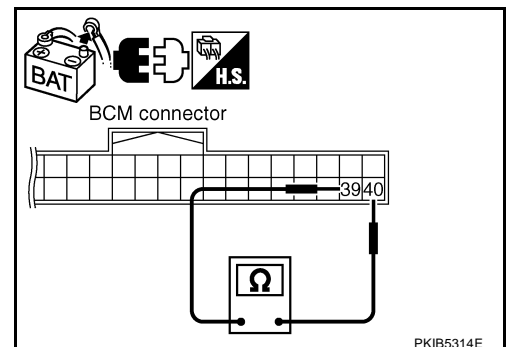
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#) .  
 NG >> Repair harness between BCM and harness connector M82.



A

B

C

D

E

F

G

H

I

J

LAN

L

M

## Display Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

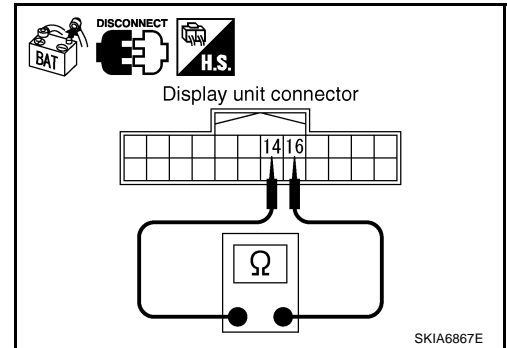
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace display unit.  
NG >> Repair harness between display unit and data link connector.



## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

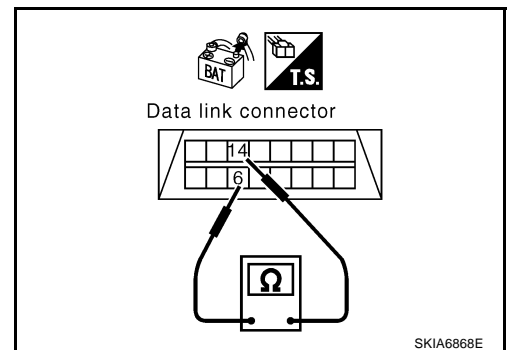
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
NG >> Repair harness between data link connector and unified meter and A/C amp.



**Unified Meter and A/C Amp. Circuit Inspection****1. CHECK CONNECTOR**

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

OK or NG

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

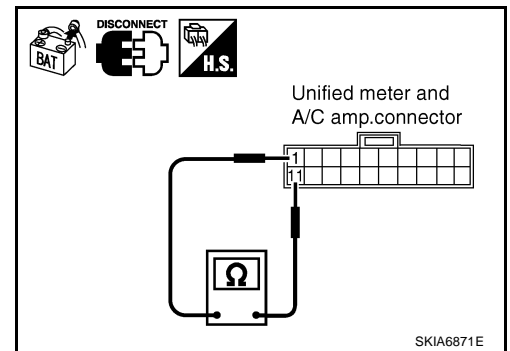
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.

**AWD Control Unit Circuit Inspection****1. CHECK CONNECTOR**

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of 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.

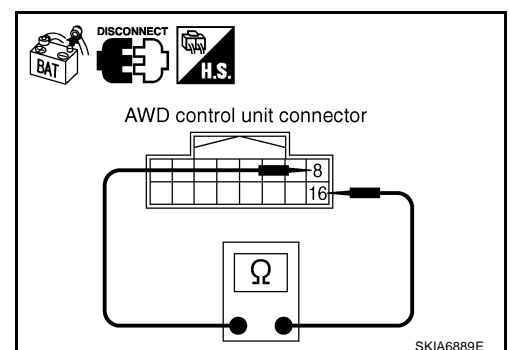
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector E111 terminals 8 (L) and 16 (Y).

**8 (L) - 16 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace AWD control unit.  
 NG >> Repair harness between AWD control unit and IPDM E/R.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CK9

### 1. CHECK CONNECTOR

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

OK or NG

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

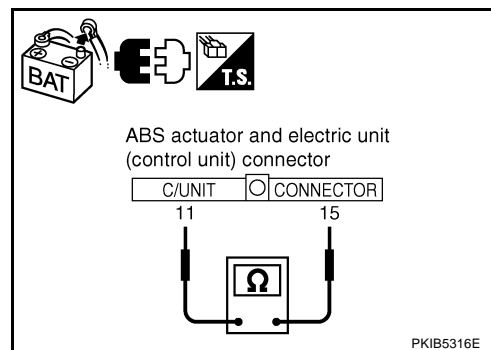
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

OK or NG

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



## IPDM E/R Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

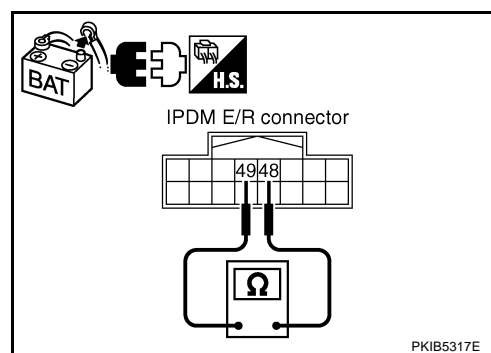
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**48 (L) - 49 (Y) : Approx. 108 - 132Ω**

OK or NG

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



## CAN Communication Circuit Inspection

### 1. CHECK CONNECTOR

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

#### OK or NG

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

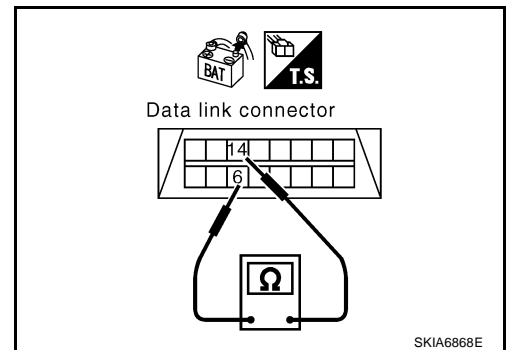
### 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Harness connector M82
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

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

#### OK or NG

- OK >> GO TO 3.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between data link connector and ECM
  - Harness between data link connector and harness connector M82
  - Harness between data link connector and BCM
  - Harness between data link connector and display unit
  - Harness between data link connector and unified meter and A/C amp.
  - Harness between data link connector and harness connector M9



### 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

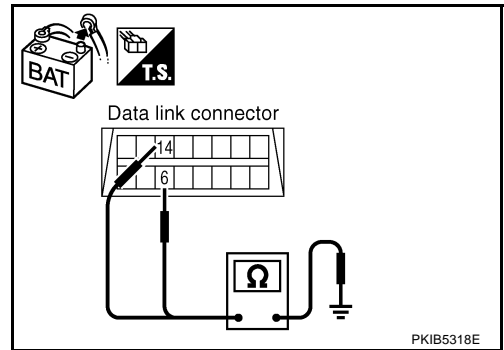
**14 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



### 4. CHECK HARNESS FOR SHORT CIRCUIT

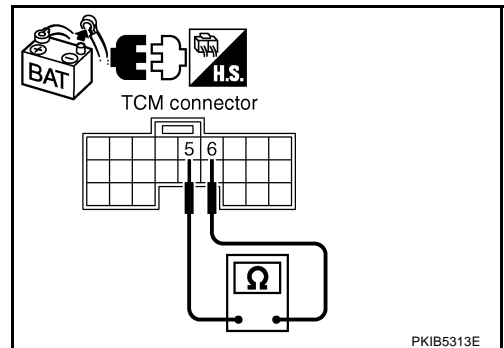
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



### 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

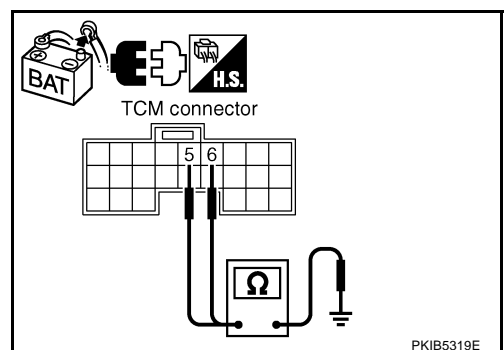
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



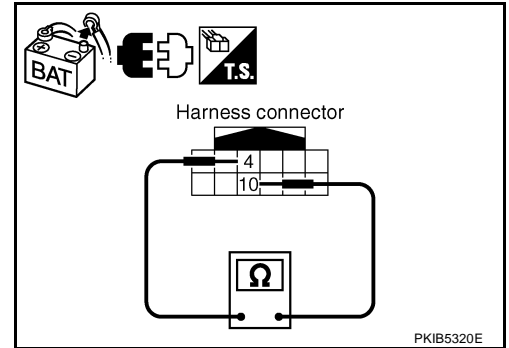
## 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

- OK >> GO TO 7.  
 NG >> Repair harness between harness connector B2 and harness connector B4.



## 7. CHECK HARNESS FOR SHORT CIRCUIT

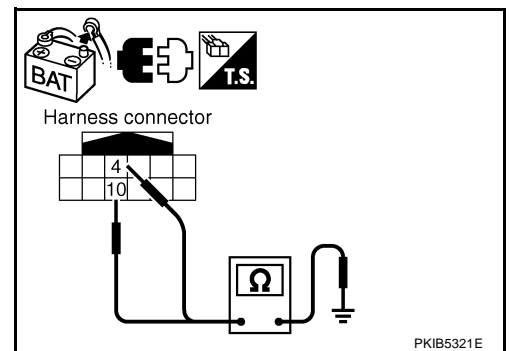
- Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

- OK >> GO TO 8.  
 NG >> Repair harness between harness connector B2 and harness connector B4.



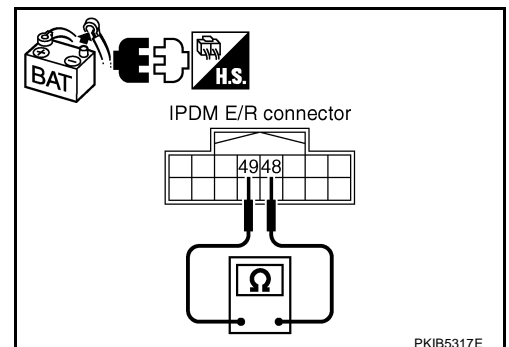
## 8. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - 4WD control unit connector
  - ABS actuator and electric unit (control unit) connector
  - IPDM E/R connector
2. Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

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

### OK or NG

- OK >> GO TO 9.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between IPDM E/R and AWD control unit
  - Harness between IPDM E/R and ABS actuator and electric unit (control unit)
  - Harness between IPDM E/R and harness connector E105



A  
B  
C  
D  
E  
F  
G  
H  
I  
J

LAN

L  
M

## 9. CHECK HARNESS FOR SHORT CIRCUIT

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

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

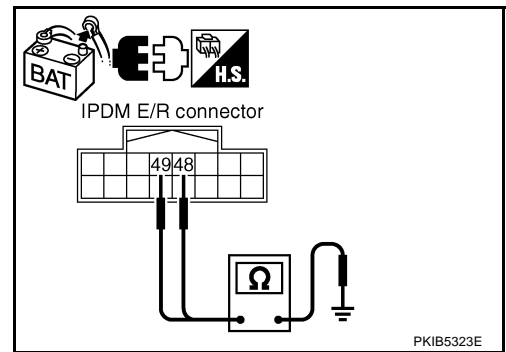
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 10.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 10. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86 : Approx. 108 – 132 Ω**

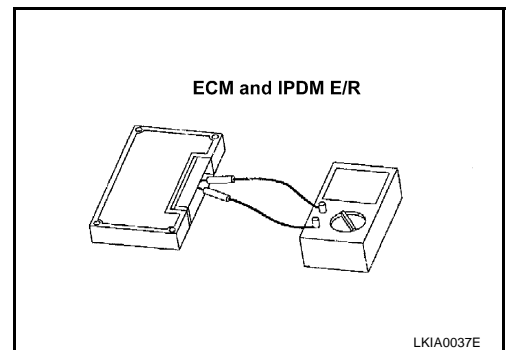
3. Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 11.

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



## 11. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 12.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)



## 12. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.

### **IPDM E/R Ignition Relay Circuit Inspection**

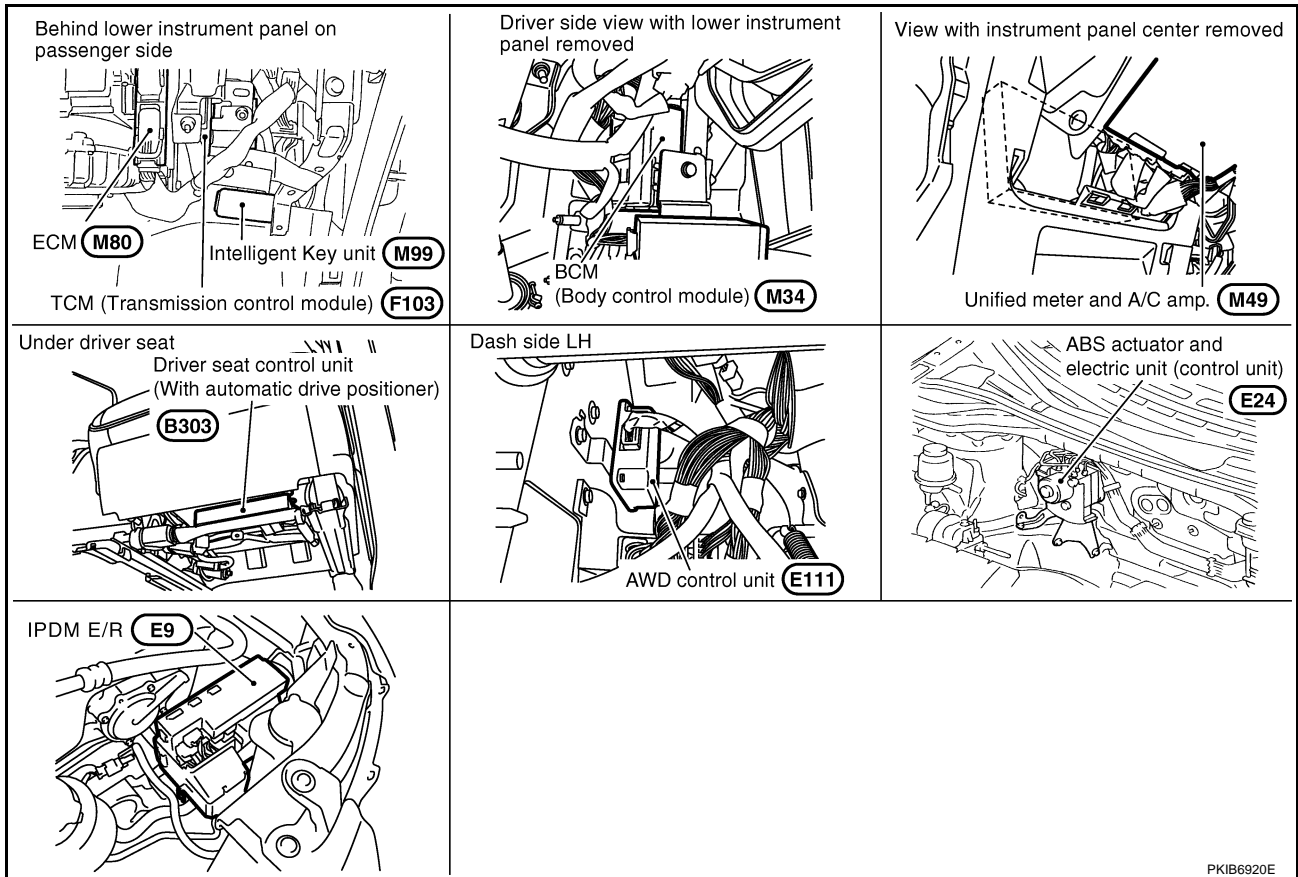
AKS00CKC

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

- IPDM E/R power supply circuit. Refer to [PG-27, "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" .](#)

## CAN SYSTEM (TYPE 7)

### Component Parts and Harness Connector Location

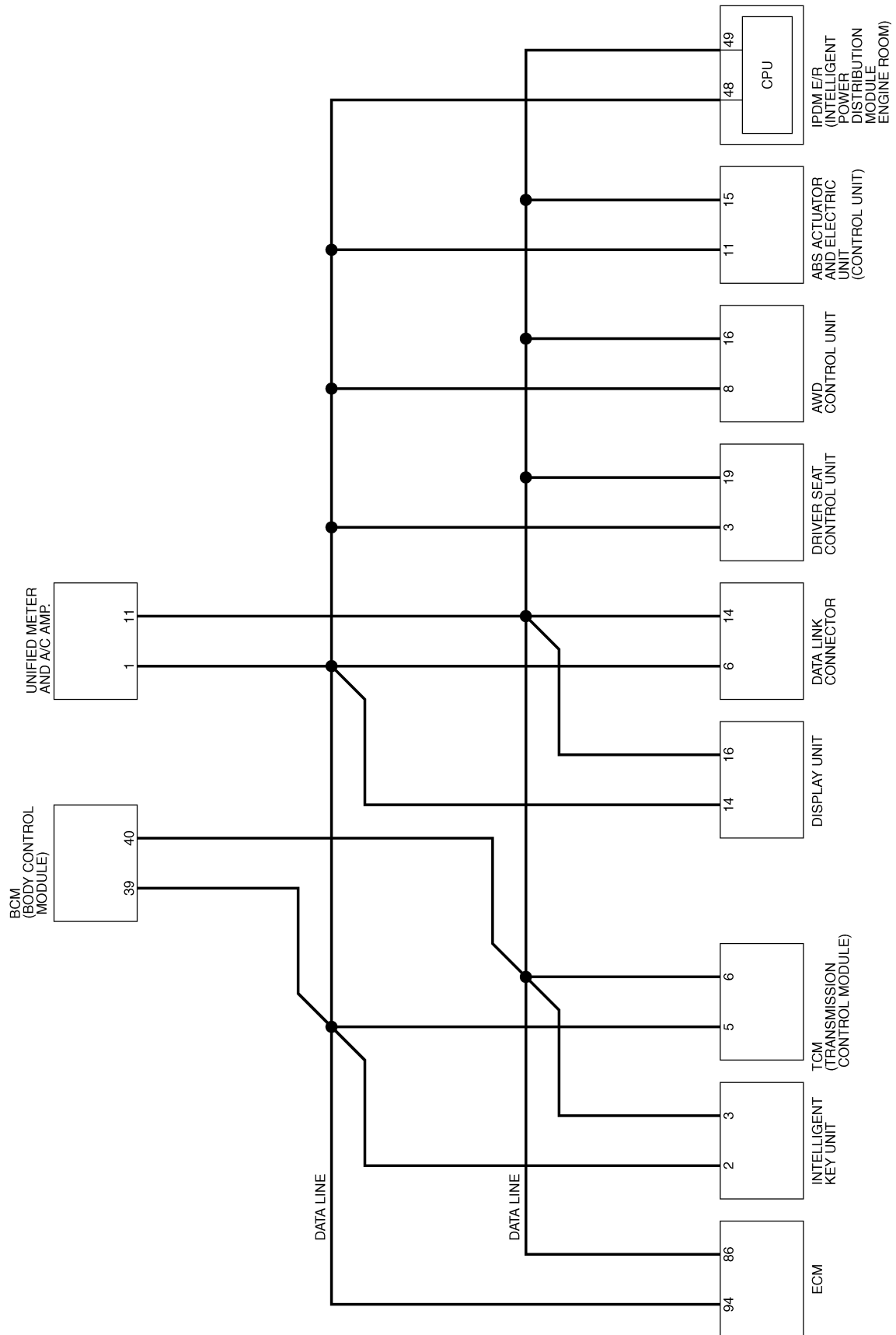


# CAN SYSTEM (TYPE 7)

[CAN]

## Schematic

AKS00AFN



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

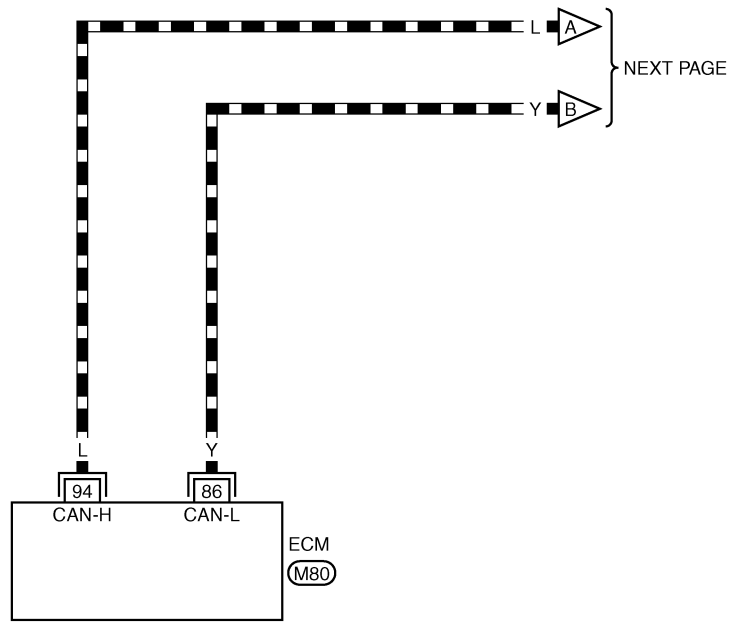
TKWB0855E

### Wiring Diagram - CAN -

AKS00AFO

### LAN-CAN-29

▬ : DATA LINE



REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

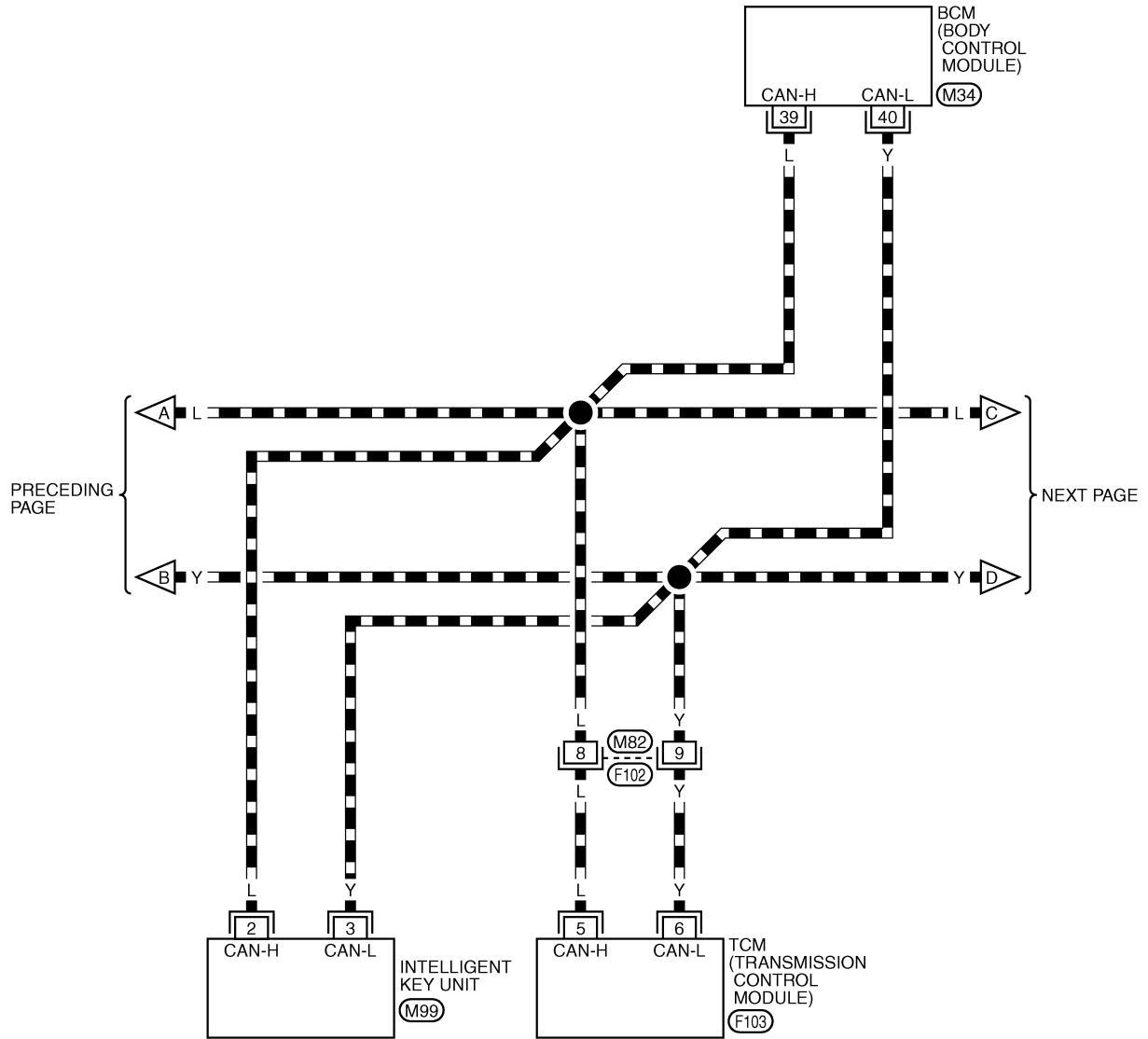
TKWB0856E

# CAN SYSTEM (TYPE 7)

[CAN]

## LAN-CAN-30

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102)	W

REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

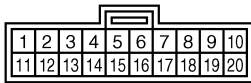
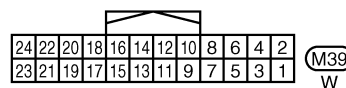
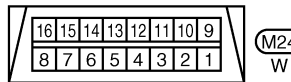
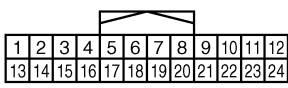
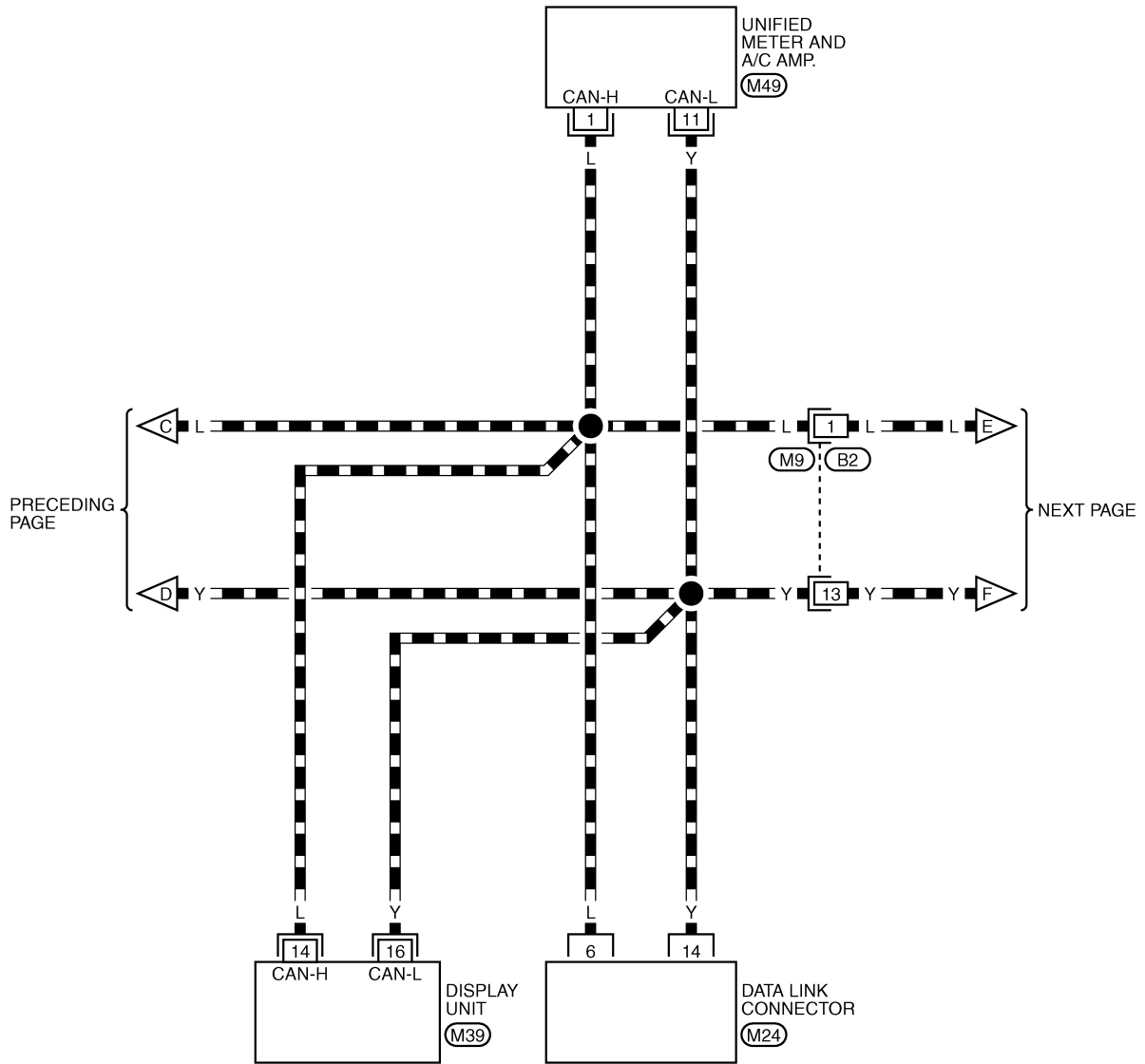
TKWB0857E

# CAN SYSTEM (TYPE 7)

[CAN]

## LAN-CAN-31

▬ : DATA LINE



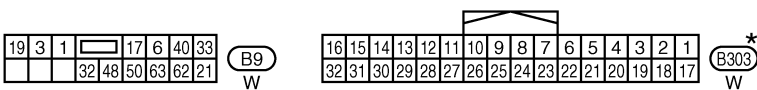
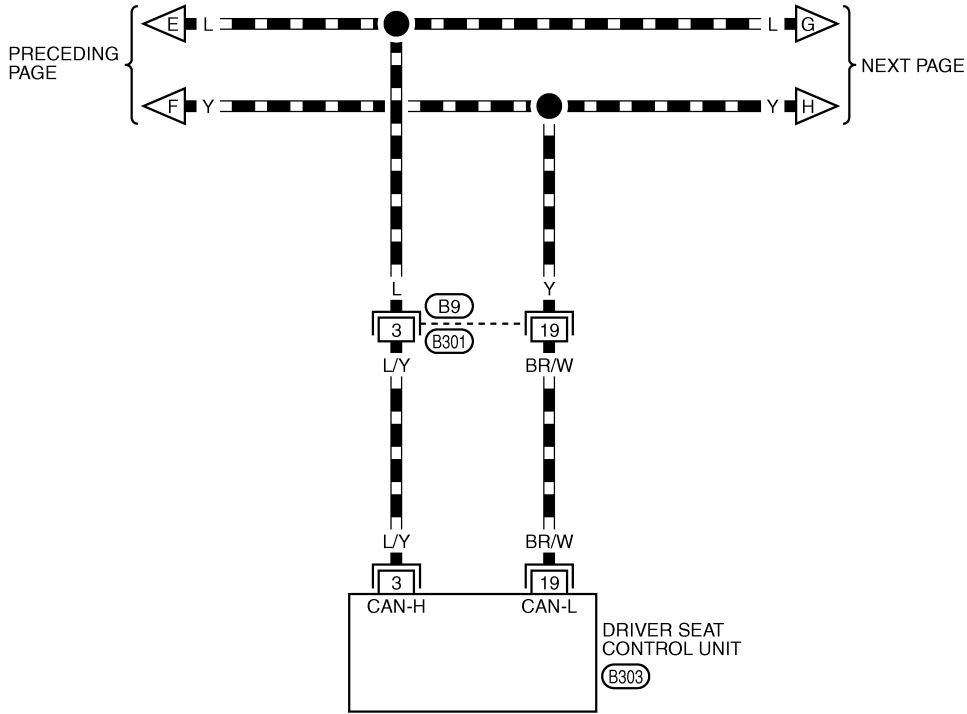
TKWB0858E

# CAN SYSTEM (TYPE 7)

[CAN]

LAN-CAN-32

▬ : DATA LINE



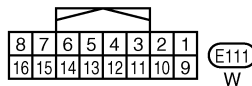
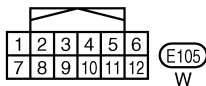
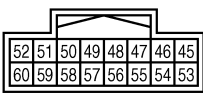
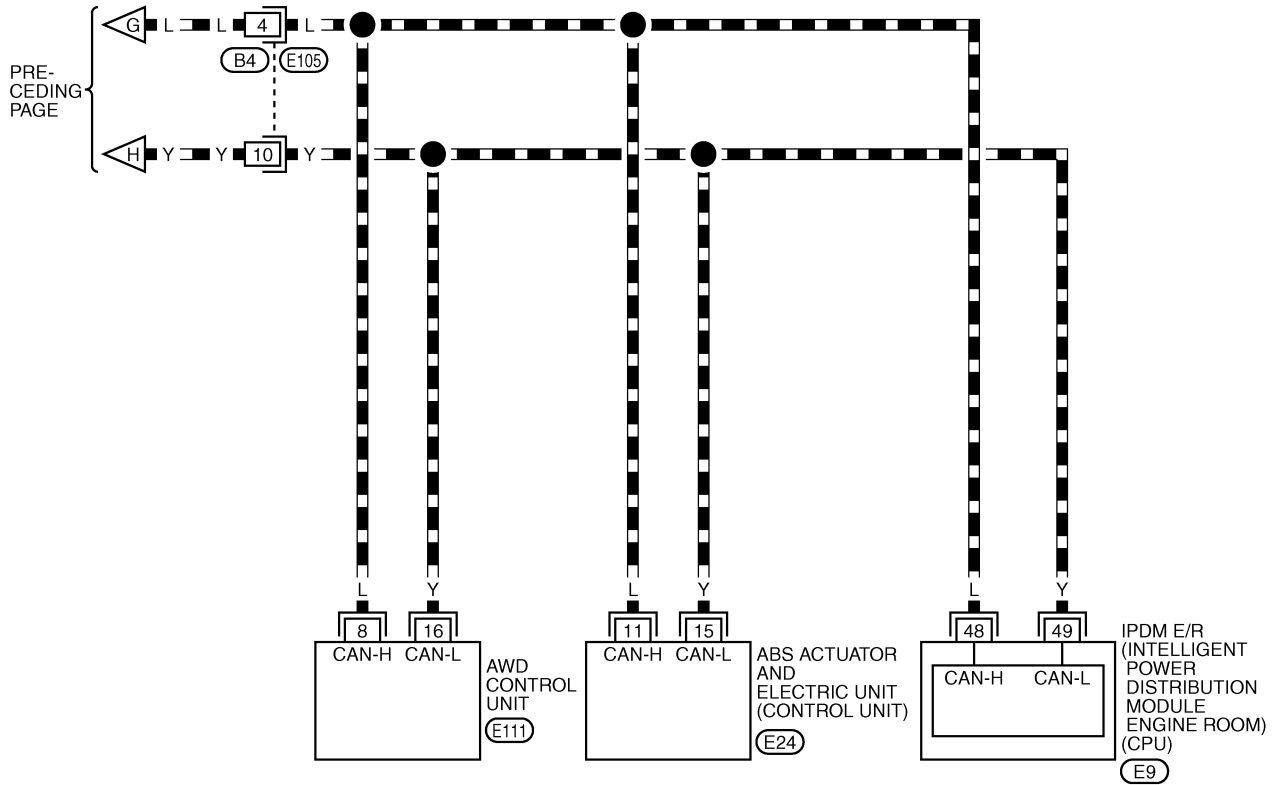
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

LAN

TKWB0859E

## LAN-CAN-33

▬ : DATA LINE



REFER TO THE FOLLOWING.

(E24) -ELECTRICAL UNITS



# CAN SYSTEM (TYPE 7)

[CAN]

AKS00ASI

## Check Sheet

**NOTE:**

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.

Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	—
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4720E

# CAN SYSTEM (TYPE 7)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

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

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4721E

# CAN SYSTEM (TYPE 7)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

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

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4722E

# CAN SYSTEM (TYPE 7)

[CAN]

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

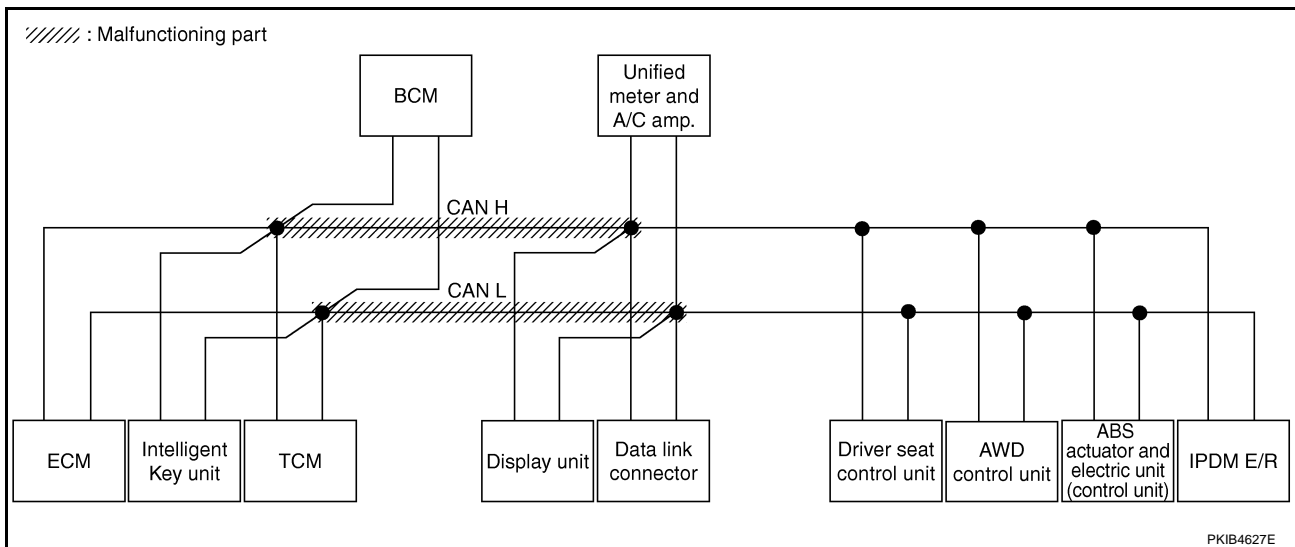
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-284, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4830E



PKIB4627E

# CAN SYSTEM (TYPE 7)

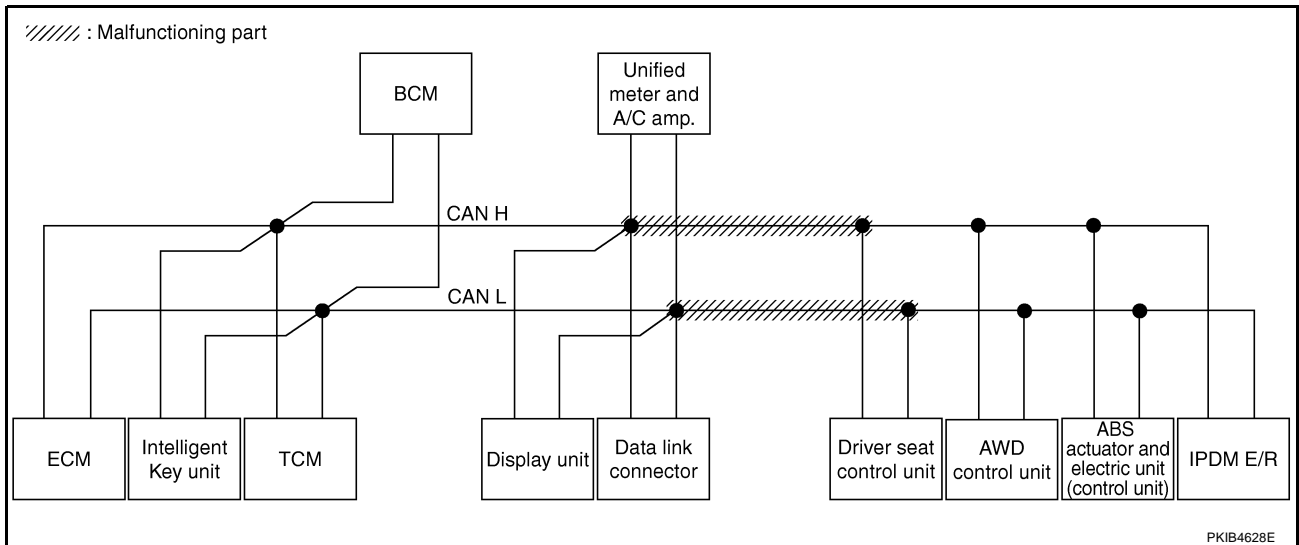
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-284, "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											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	✓	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	✓	✓	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	✓	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4831E



PKIB4628E

# CAN SYSTEM (TYPE 7)

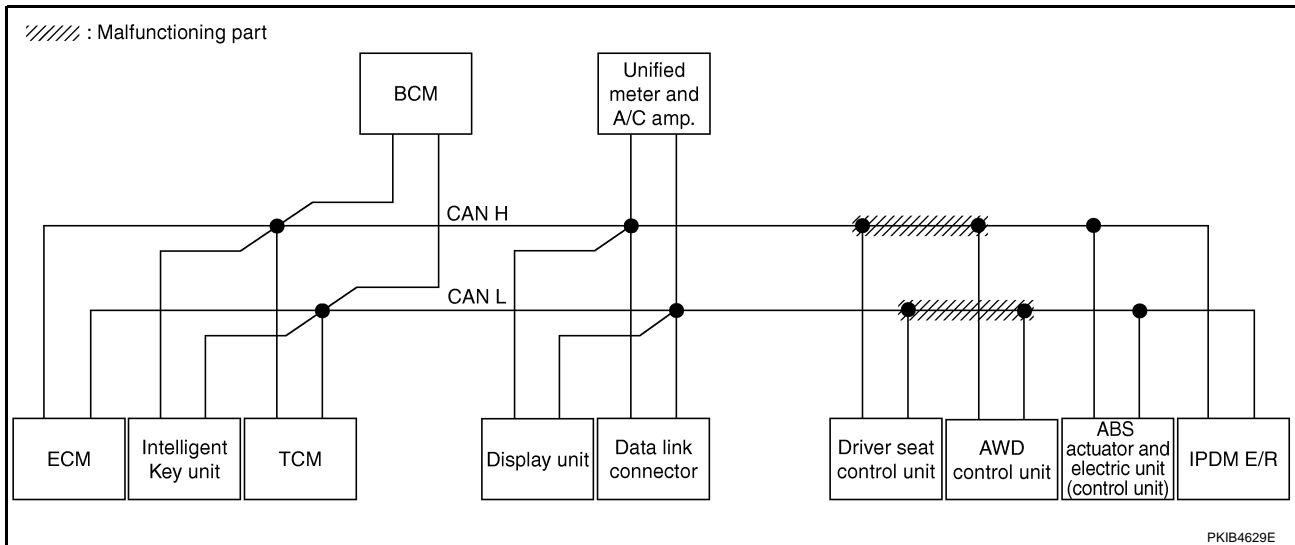
[CAN]

## Case 3

Check harness between driver seat control unit and AWD control unit. Refer to [LAN-285, "Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4832E



PKIB4629E

# CAN SYSTEM (TYPE 7)

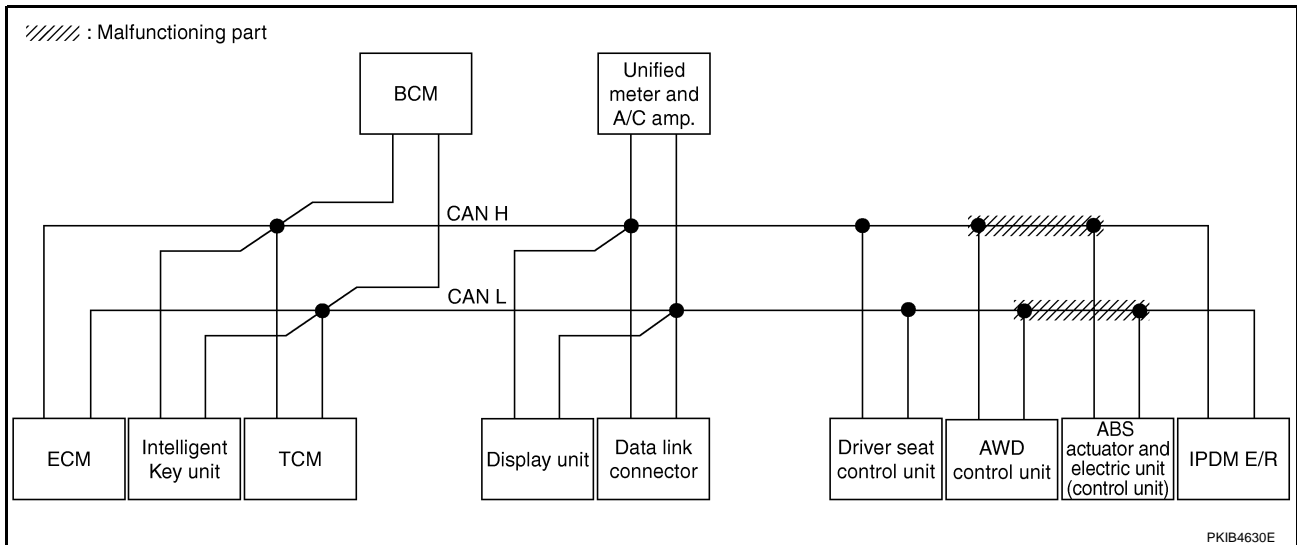
[CAN]

## Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to [LAN-286](#).  
"Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	✓	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4833E



PKIB4630E

# CAN SYSTEM (TYPE 7)

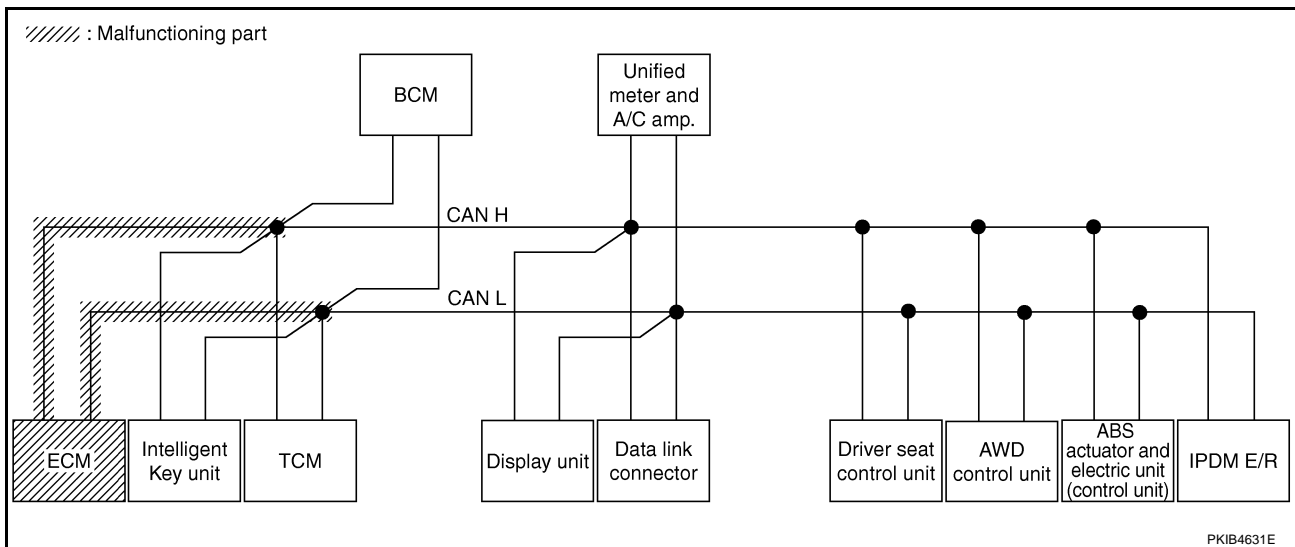
[CAN]

## Case 5

Check ECM circuit. Refer to [LAN-286, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)	
INTELLIGENT KEY	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—	
TRANSMISSION	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—	
BCM	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—	
METER A/C AMP	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—	
AUTO DRIVE POS.	No indication	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—	
ABS	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	
IPDM E/R	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	

PKIB4834E



PKIB4631E



# CAN SYSTEM (TYPE 7)

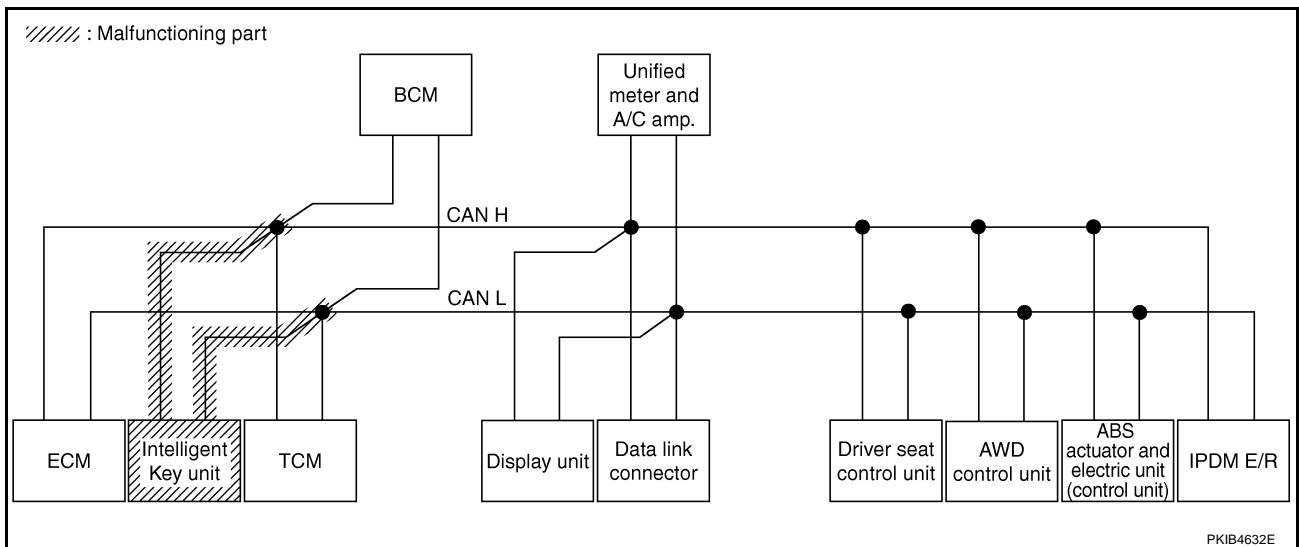
[CAN]

## Case 6

Check Intelligent Key unit circuit. Refer to [LAN-287, "Intelligent Key Unit Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4835E



# CAN SYSTEM (TYPE 7)

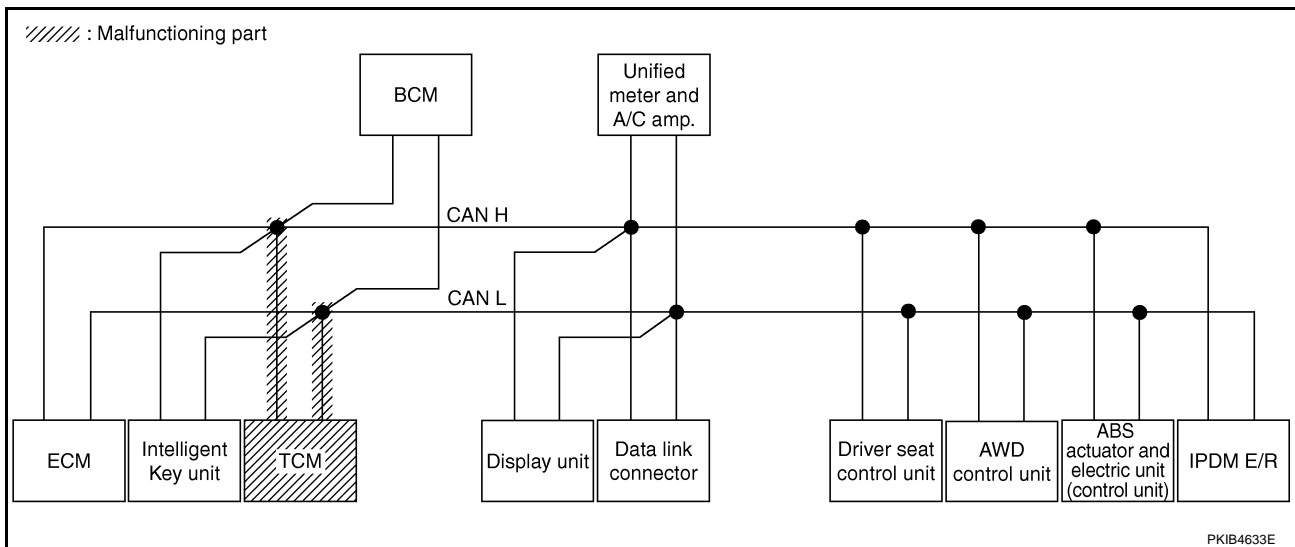
[CAN]

## Case 7

Check TCM circuit. Refer to [LAN-287, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4836E



PKIB4633E

# CAN SYSTEM (TYPE 7)

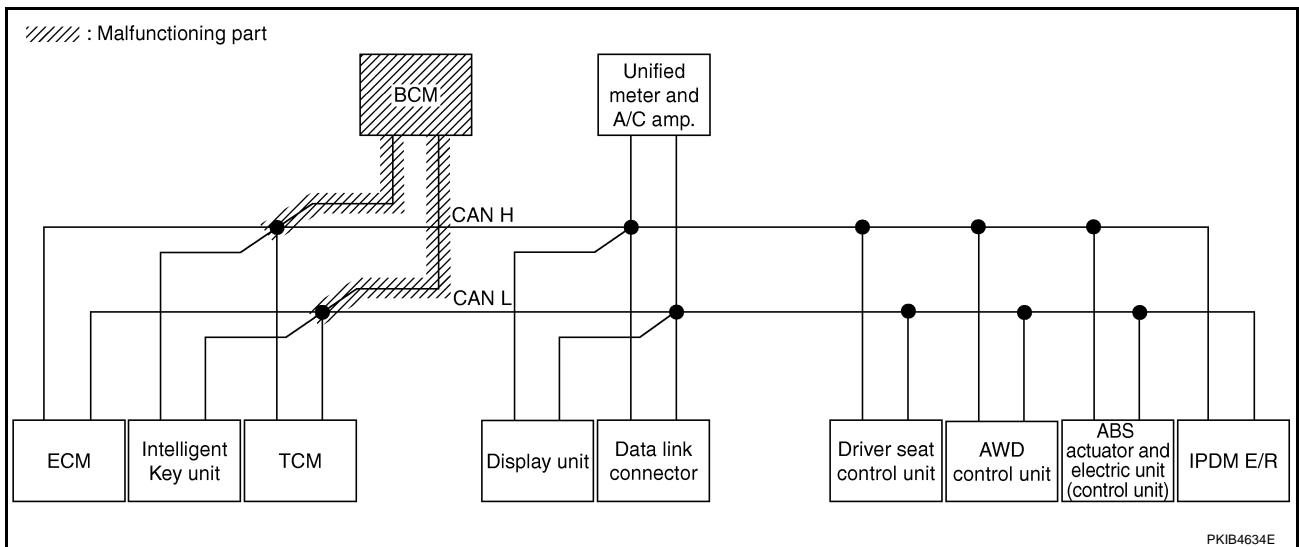
[CAN]

## Case 8

Check BCM circuit. Refer to [LAN-288, "BCM Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R				
ENGINE	—	NG	UNKWN	—	—	UNKWN	✓	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)		
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	✓	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—		
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—		
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—		
Display unit	—	NG	UNKWN	UNKWN	—	—	✓	—	UNKWN	—	—	UNKWN	—	—		
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	✓	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—		
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	✓	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—		
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—		
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	✓	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—		

PKIB4837E



PKIB4634E

# CAN SYSTEM (TYPE 7)

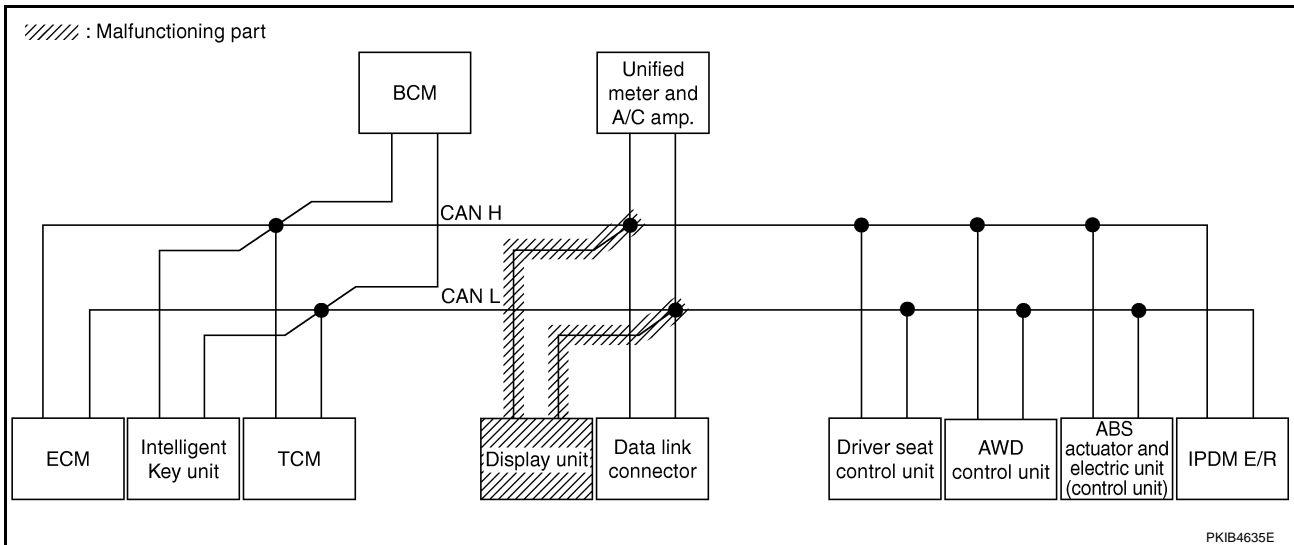
[CAN]

## Case 9

Check display unit circuit. Refer to [LAN-288, "Display Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4838E



PKIB4635E

# CAN SYSTEM (TYPE 7)

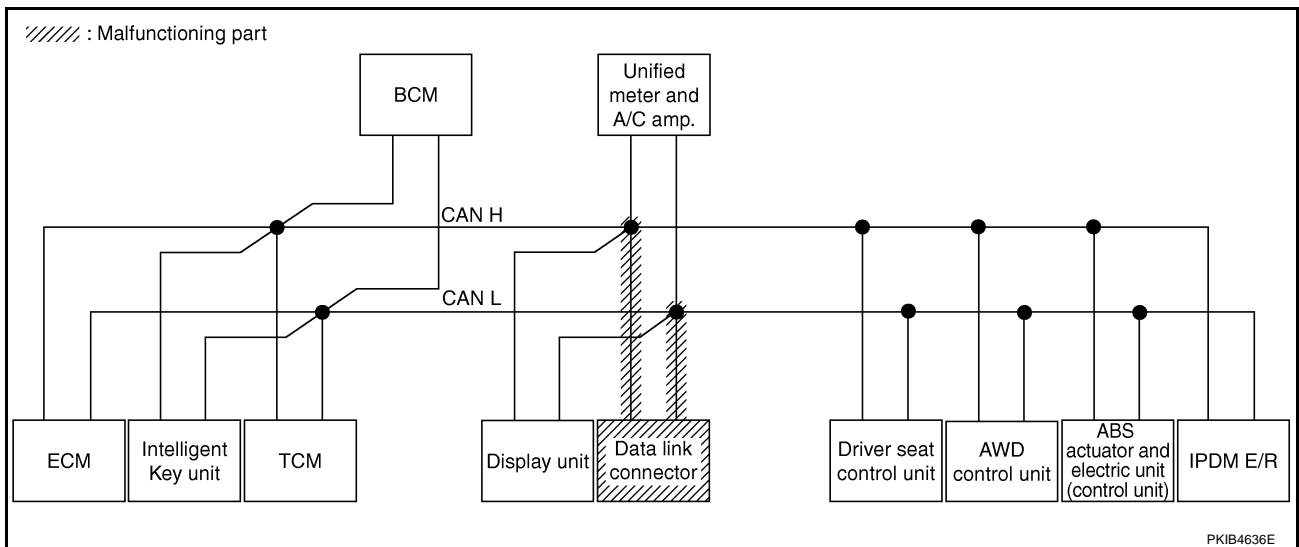
[CAN]

## Case 10

Check data link connector circuit. Refer to [LAN-289, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4839E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

LAN

# CAN SYSTEM (TYPE 7)

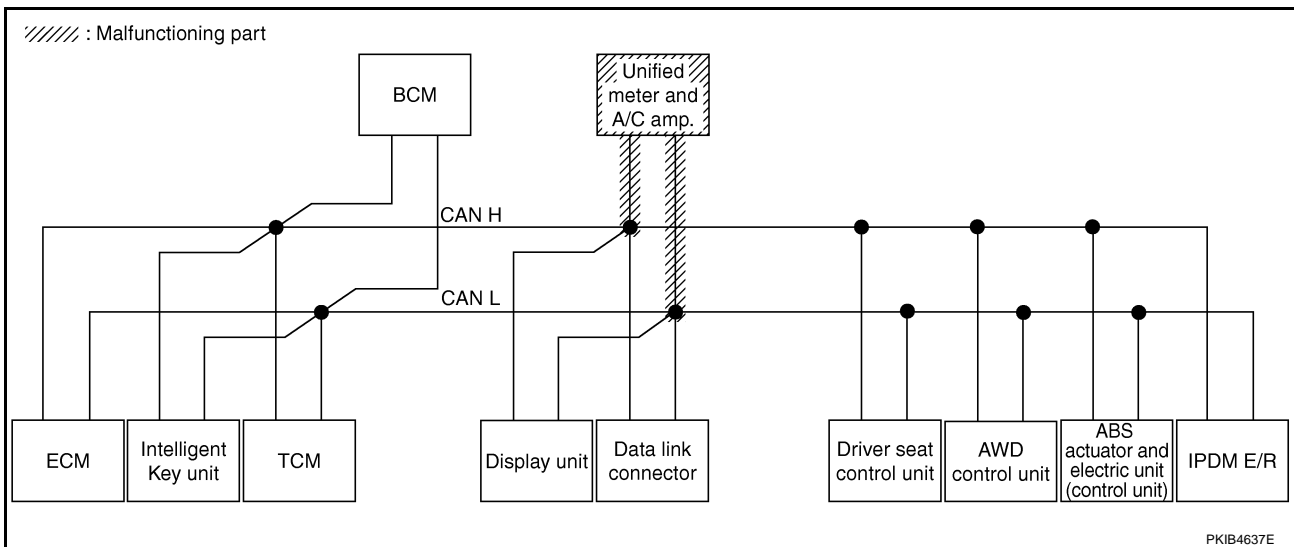
[CAN]

## Case 11

Check unified meter and A/C amp. circuit. Refer to [LAN-289, "Unified Meter and A/C Amp. Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4840E



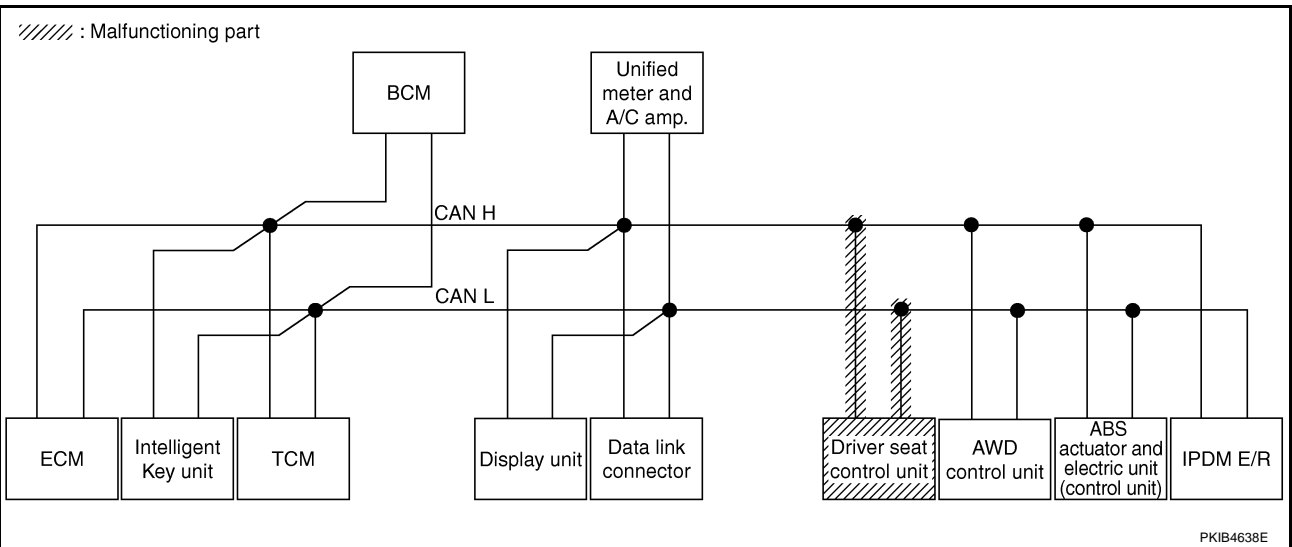
PKIB4637E

## Case 12

Check driver seat control unit circuit. Refer to [LAN-290, "Driver Seat Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4841E



# CAN SYSTEM (TYPE 7)

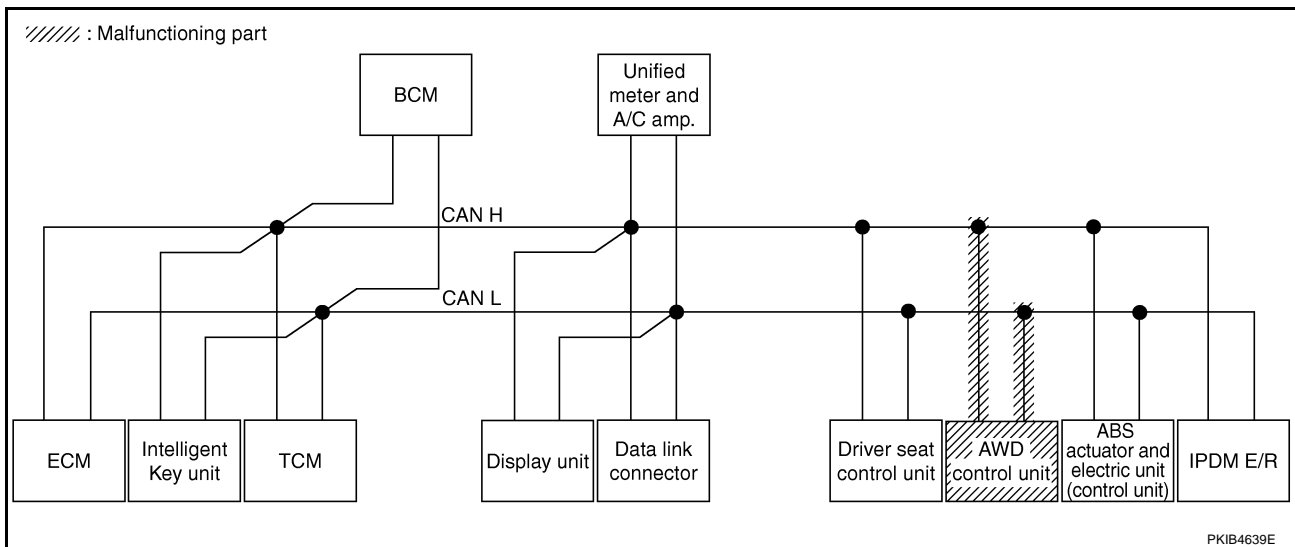
[CAN]

## Case 13

Check AWD control unit circuit. Refer to [LAN-290, "AWD Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4842E



PKIB4639E



# CAN SYSTEM (TYPE 7)

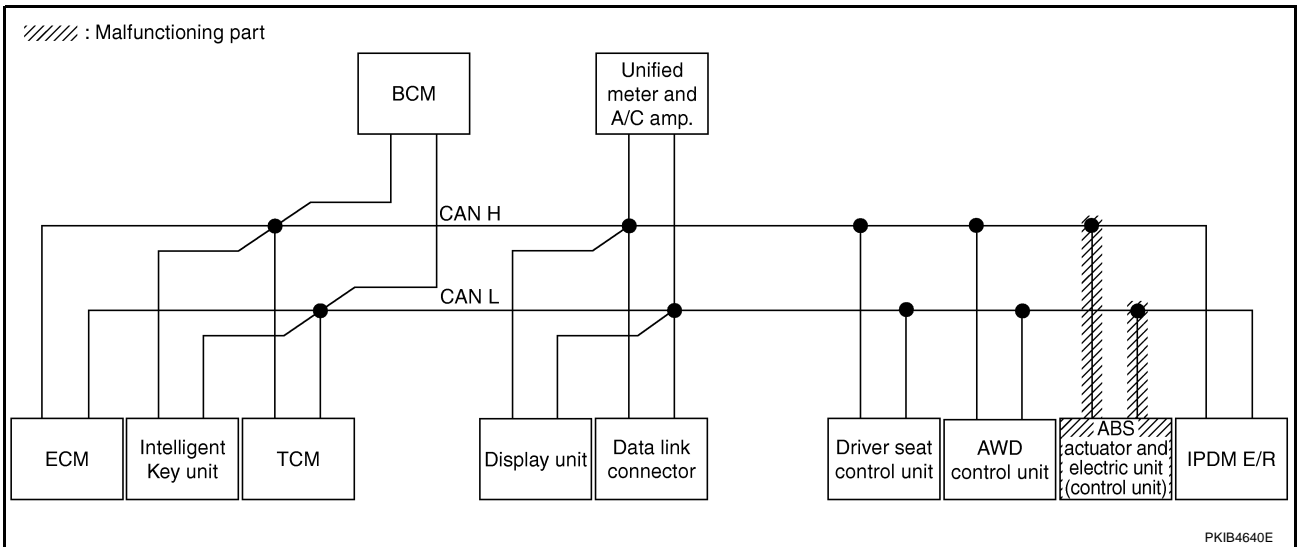
[CAN]

## Case 14

Case 21: Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-291, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	✓	UNKWN	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	✓	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4843E



PKIB4640E

# CAN SYSTEM (TYPE 7)

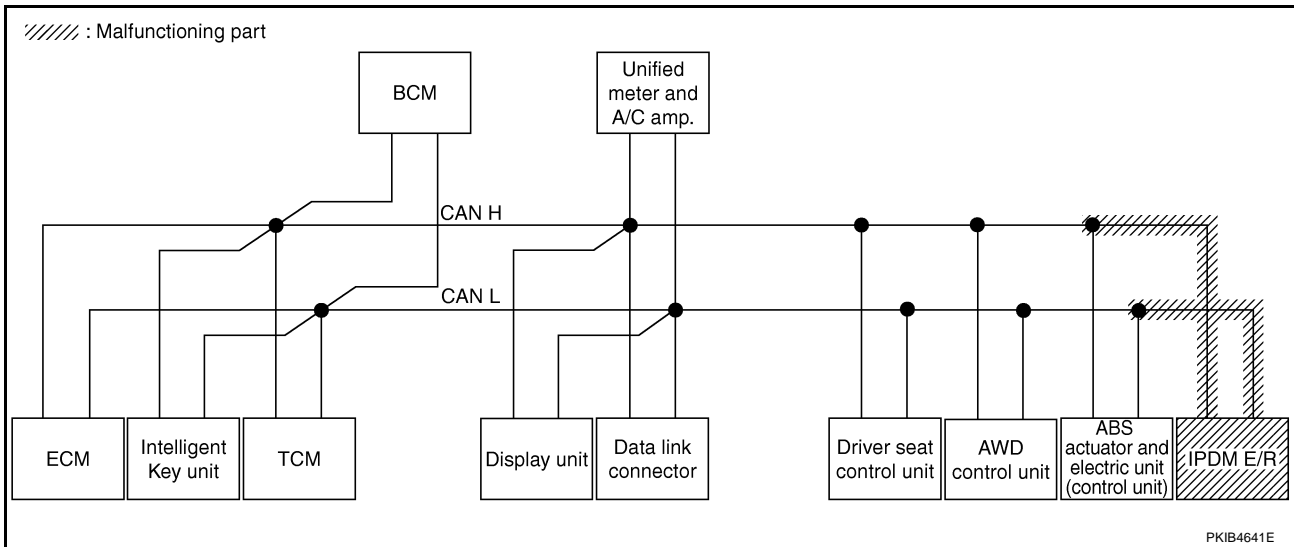
[CAN]

## Case 15

Check IPDM E/R circuit. Refer to [LAN-291, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN ✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4844E



PKIB4641E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 16

Check CAN communication circuit. Refer to [LAN-292, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	

PKIB4845E

## Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-297, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U101)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U100)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIC6345E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-297, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6346E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CJJ

### 1. CHECK HARNESS FOR OPEN CIRCUIT

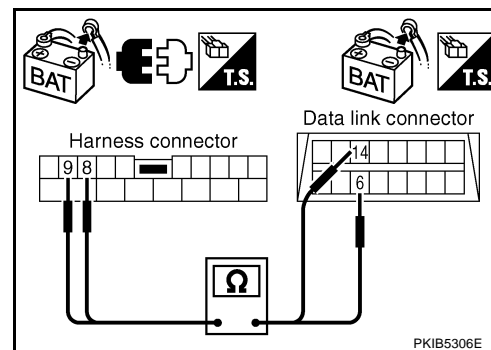
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



PKIB5306E

## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CJJ

### 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 M9
  - Harness connector B2

OK or NG

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

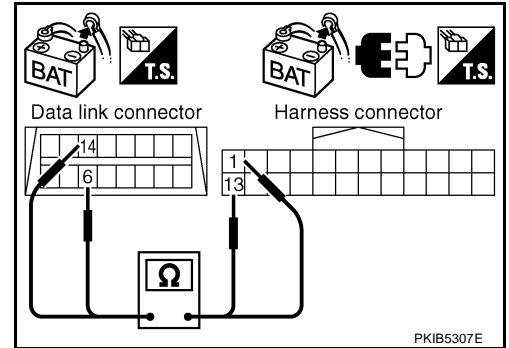
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

6 (L) - 1 (L) : Continuity should exist.  
14 (Y) - 13 (Y) : Continuity should exist.

OK or NG

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



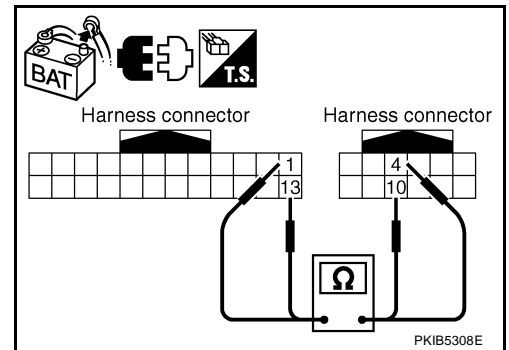
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

1 (L) - 4 (L) : Continuity should exist.  
13 (Y) - 10 (Y) : Continuity should exist.

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).  
 NG >> Repair harness.



## Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit AKS00C,JK

### 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 B4
  - Harness connector E105

OK or NG

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

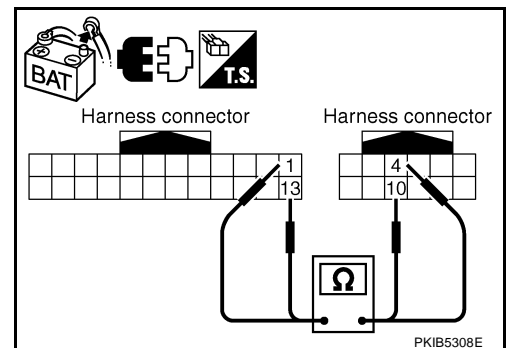
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

1 (L) - 4 (L) : Continuity should exist.  
13 (Y) - 10 (Y) : Continuity should exist.

OK or NG

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



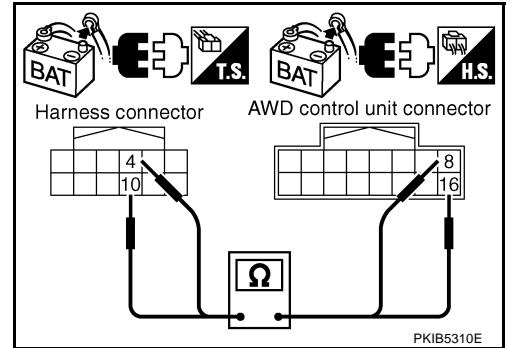
### 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and AWD control unit harness connector E111 terminals 8 (L), 16 (Y).

**4 (L) - 8 (L) : Continuity should exist.**  
**10 (Y) - 16 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness.



### Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit

AKS00CJL

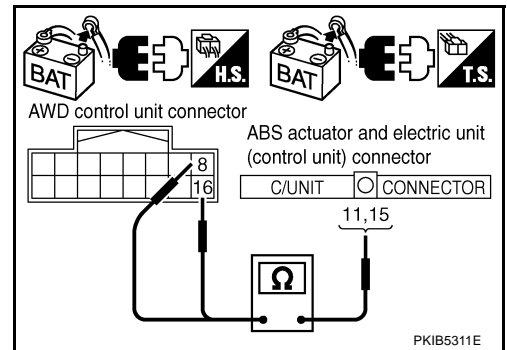
#### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect following connectors.
  - ECM
  - AWD control unit
  - ABS actuator and electric unit (control unit)
4. Check continuity between AWD control unit harness connector E111 terminals 8 (L), 16 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**8 (L) - 11 (L) : Continuity should exist.**  
**16 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness.



### ECM Circuit Inspection

AKS00CJM

#### 1. CHECK CONNECTOR

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

OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

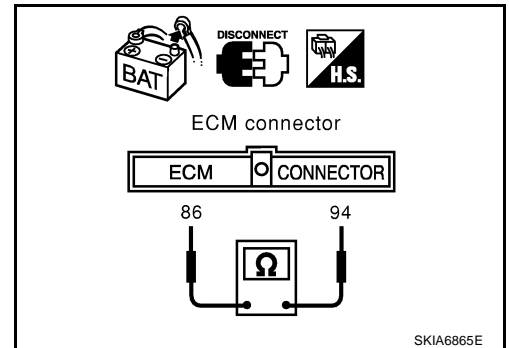
1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



AKS00C/JN

## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

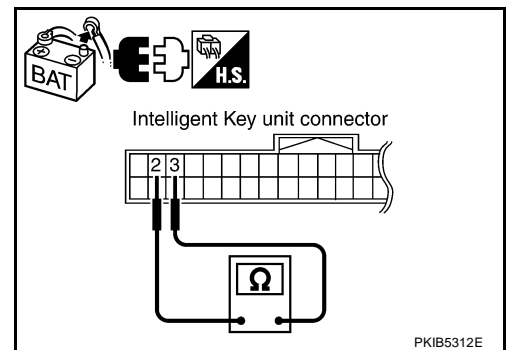
1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y)**

**: Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.



AKS00C/JO

## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

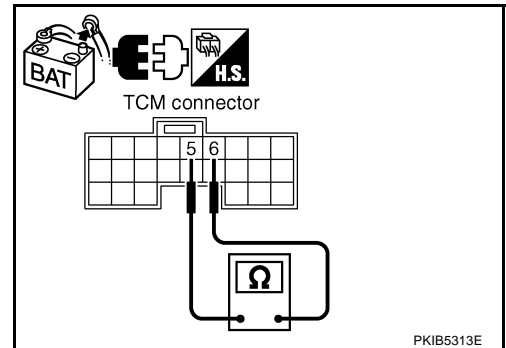
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM and BCM.



AKS00CJP

## BCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

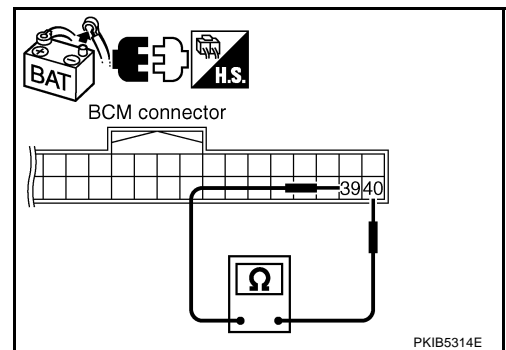
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#) .  
NG >> Repair harness between BCM and harness connector M82.



AKS00CJQ

## Display Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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



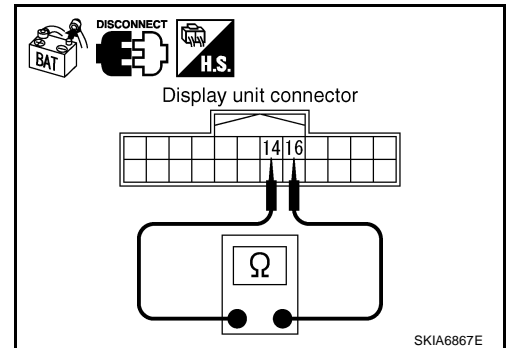
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace display unit.  
 NG >> Repair harness between display unit and data link connector.



AKS00CJR

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

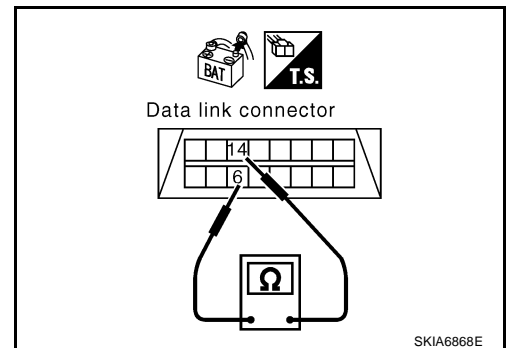
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness between data link connector and unified meter and A/C amp.



AKS00CJS

## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

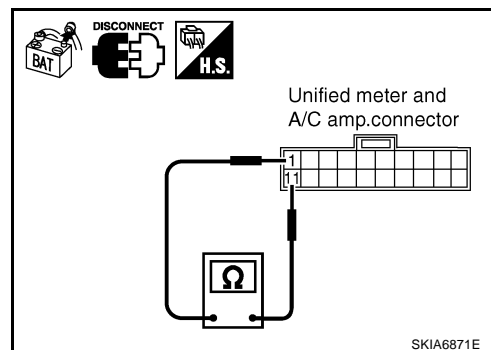
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.



AKS00CJT

## Driver Seat Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

### OK or NG

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

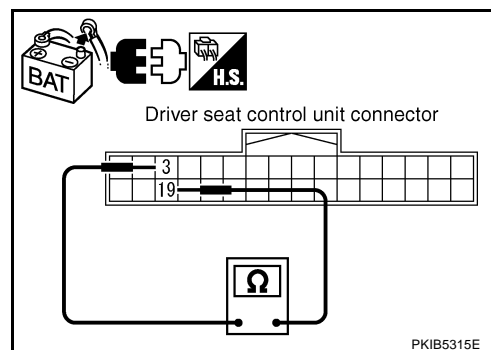
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



AKS00CJU

## AWD Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of 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.

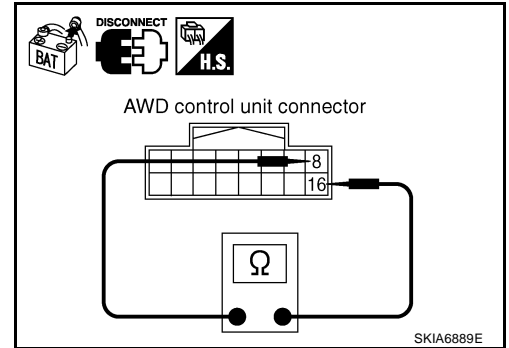
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector E111 terminals 8 (L) and 16 (Y).

**8 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace AWD control unit.  
 NG >> Repair harness between AWD control unit and IPDM E/R.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CJV

### 1. CHECK CONNECTOR

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

### OK or NG

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

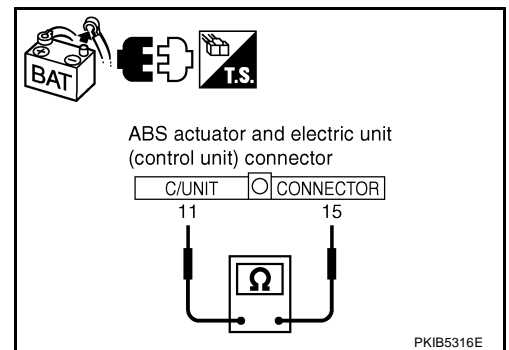
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



## IPDM E/R Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of IPDM E/R 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 IPDM E/R connector.
2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

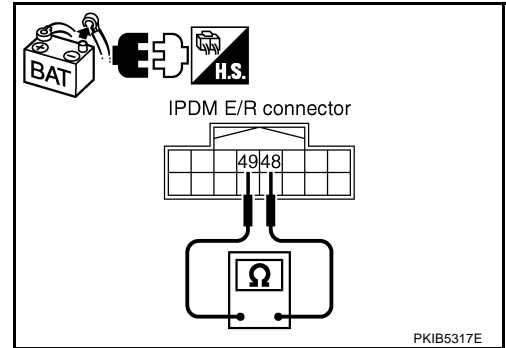
**48 (L) - 49 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

OK >> Replace IPDM E/R.

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



PKIB5317E

AKS00CJX

## CAN Communication Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

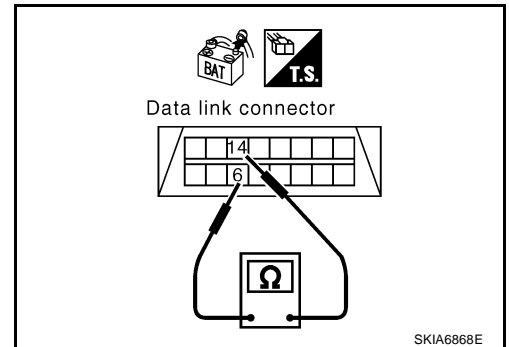
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



## 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

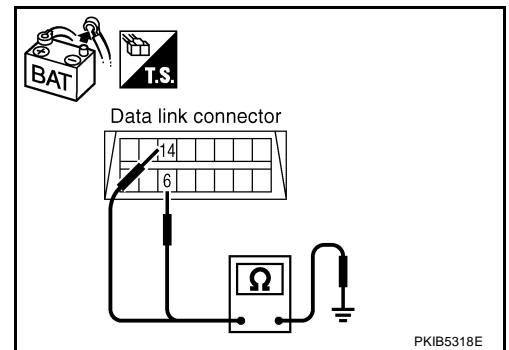
**14 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

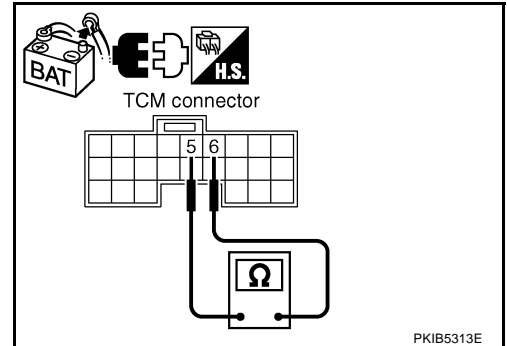
#### 4. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 5.  
 NG >> Repair harness between TCM and harness connector F102.



#### 5. CHECK HARNESS FOR SHORT CIRCUIT

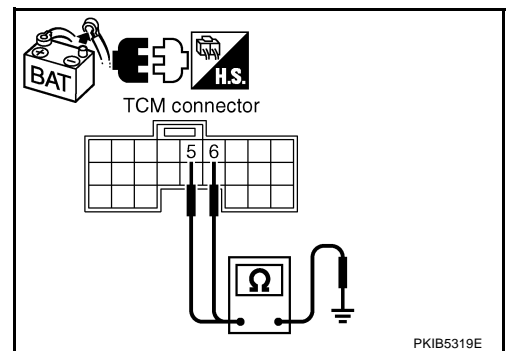
- Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

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

**6 (Y) - Ground : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 6.  
 NG >> Repair harness between TCM and harness connector F102.



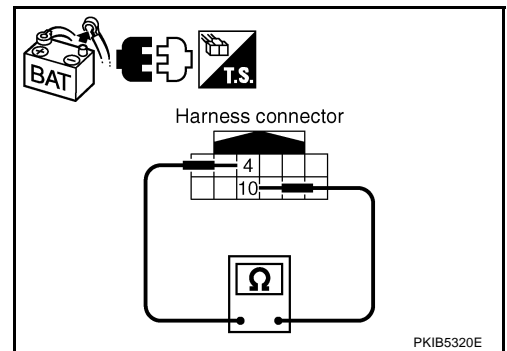
#### 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 7.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between harness connector B4 and harness connector B2
  - Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

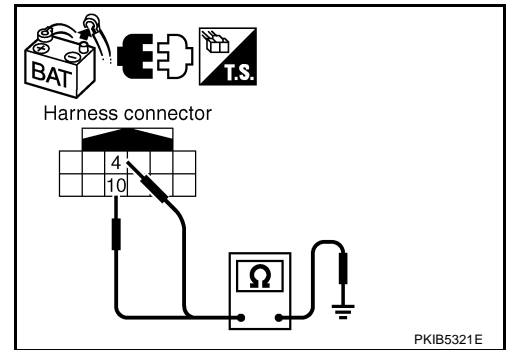
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

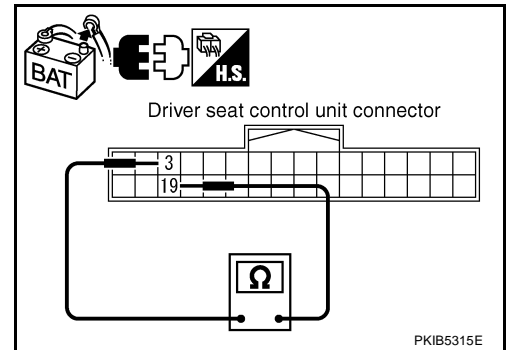
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

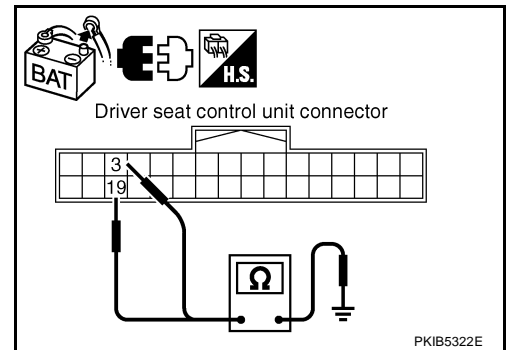
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

## 10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect following connectors.
  - 4WD control unit connector
  - ABS actuator and electric unit (control unit) connector
  - IPDM E/R connector
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

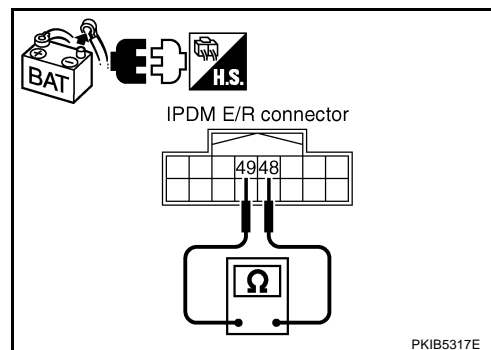
**48 (L) - 49 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

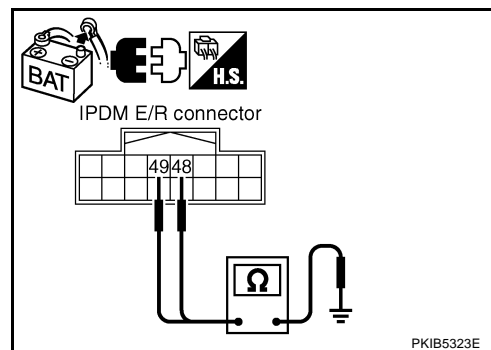
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86 : Approx. 108 – 132 Ω**

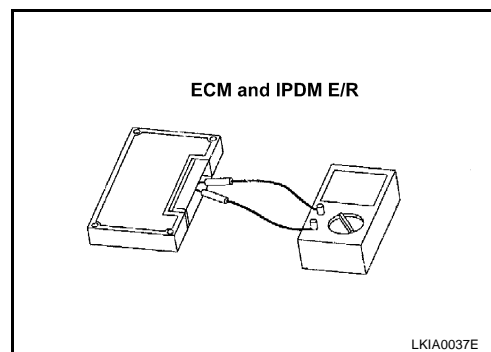
- Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 13.

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





## 13. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 14.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.

## IPDM E/R Ignition Relay Circuit Inspection

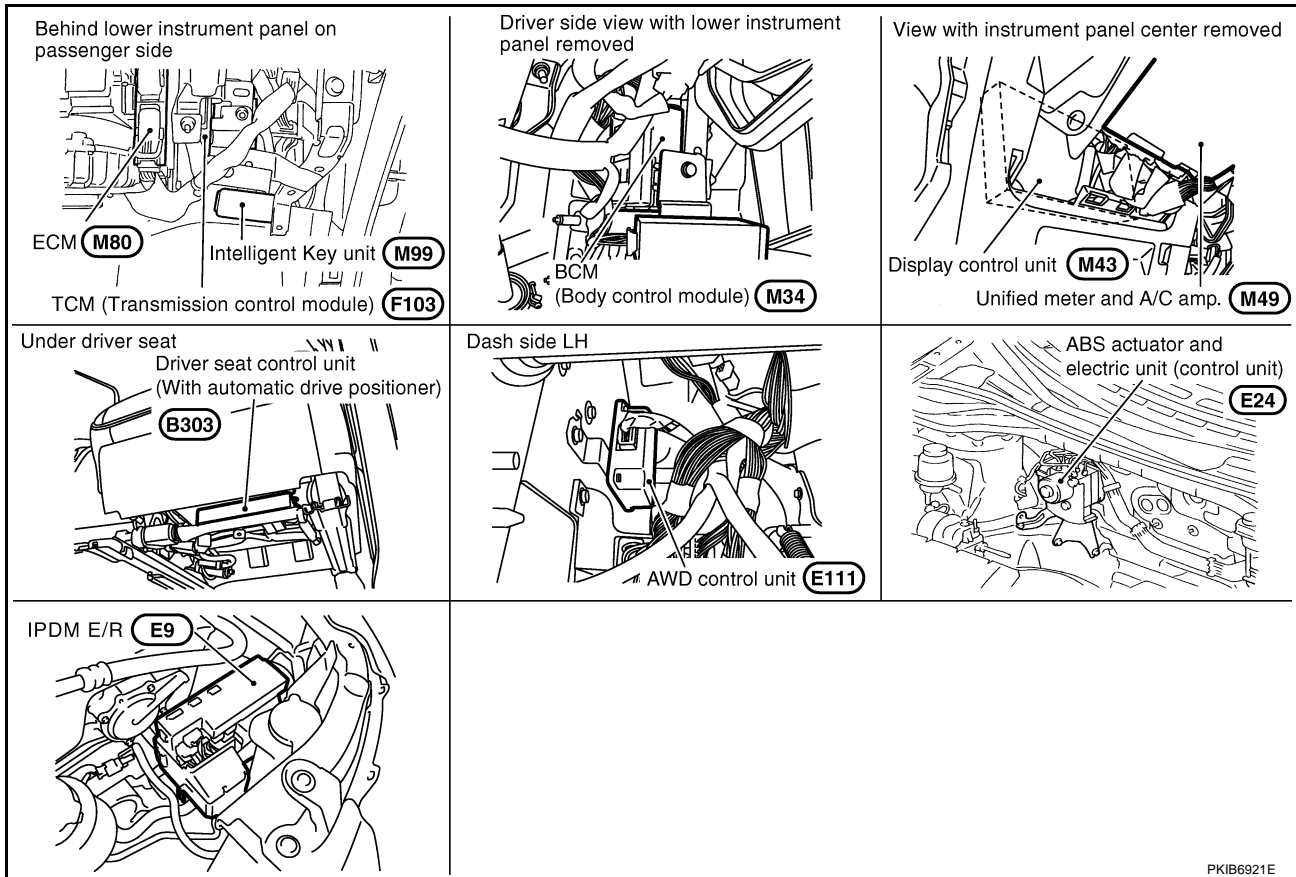
AKS00CJY

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

- IPDM E/R power supply circuit. Refer to [PG-27, "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" .](#)

## CAN SYSTEM (TYPE 8)

### Component Parts and Harness Connector Location

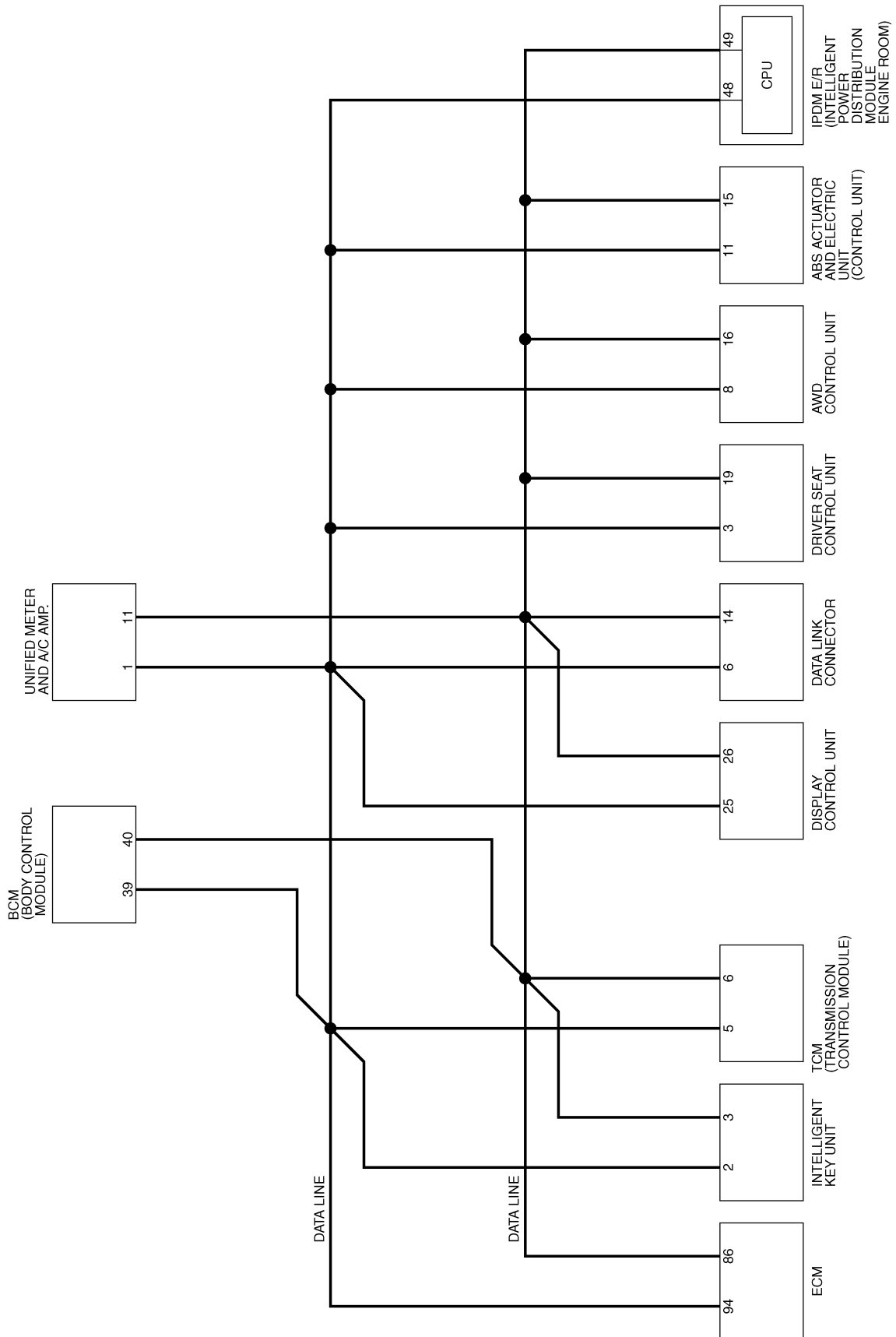


# CAN SYSTEM (TYPE 8)

[CAN]

## Schematic

AKS00AG9



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

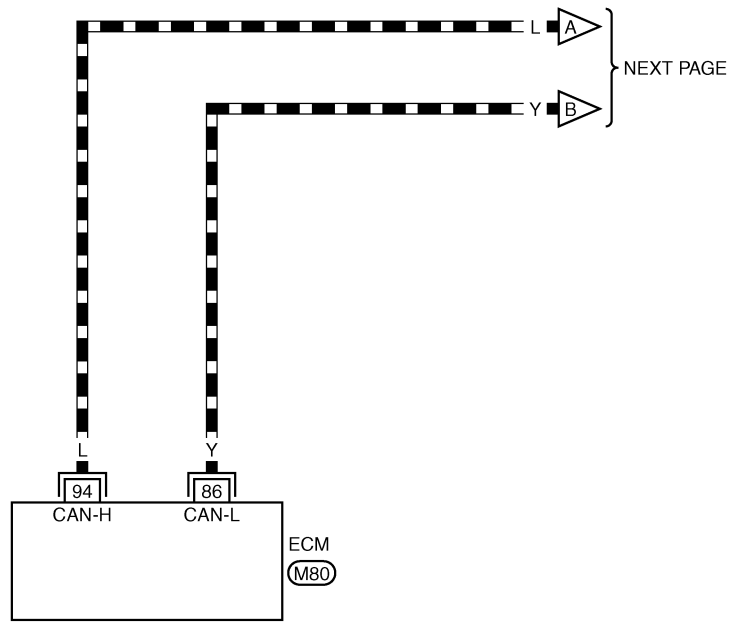
TKWB0861E

Wiring Diagram - CAN -

AKS00AGA

LAN-CAN-34

▬ : DATA LINE



REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

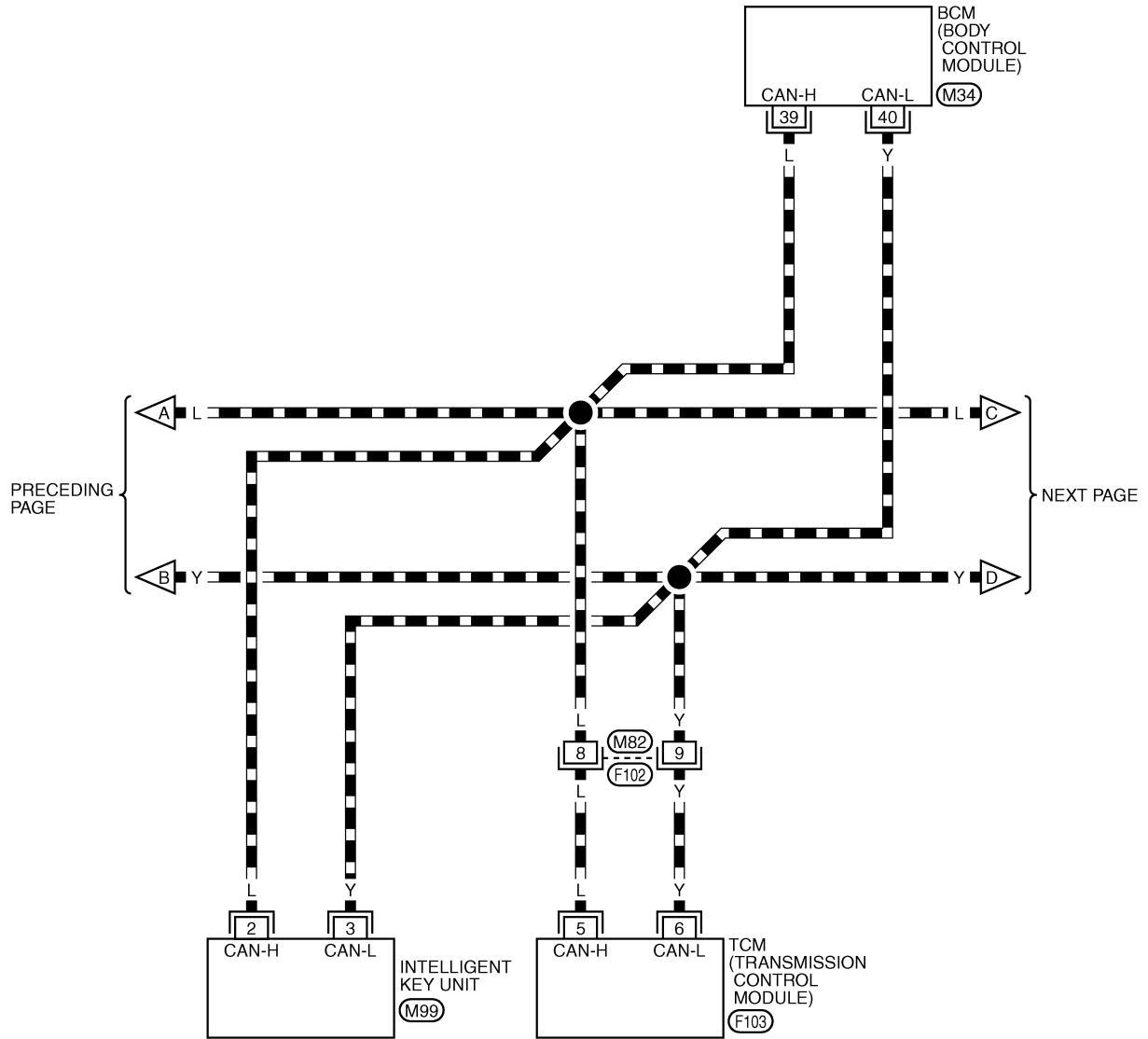
TKWB0862E

# CAN SYSTEM (TYPE 8)

[CAN]

## LAN-CAN-35

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	(F102)	W

REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

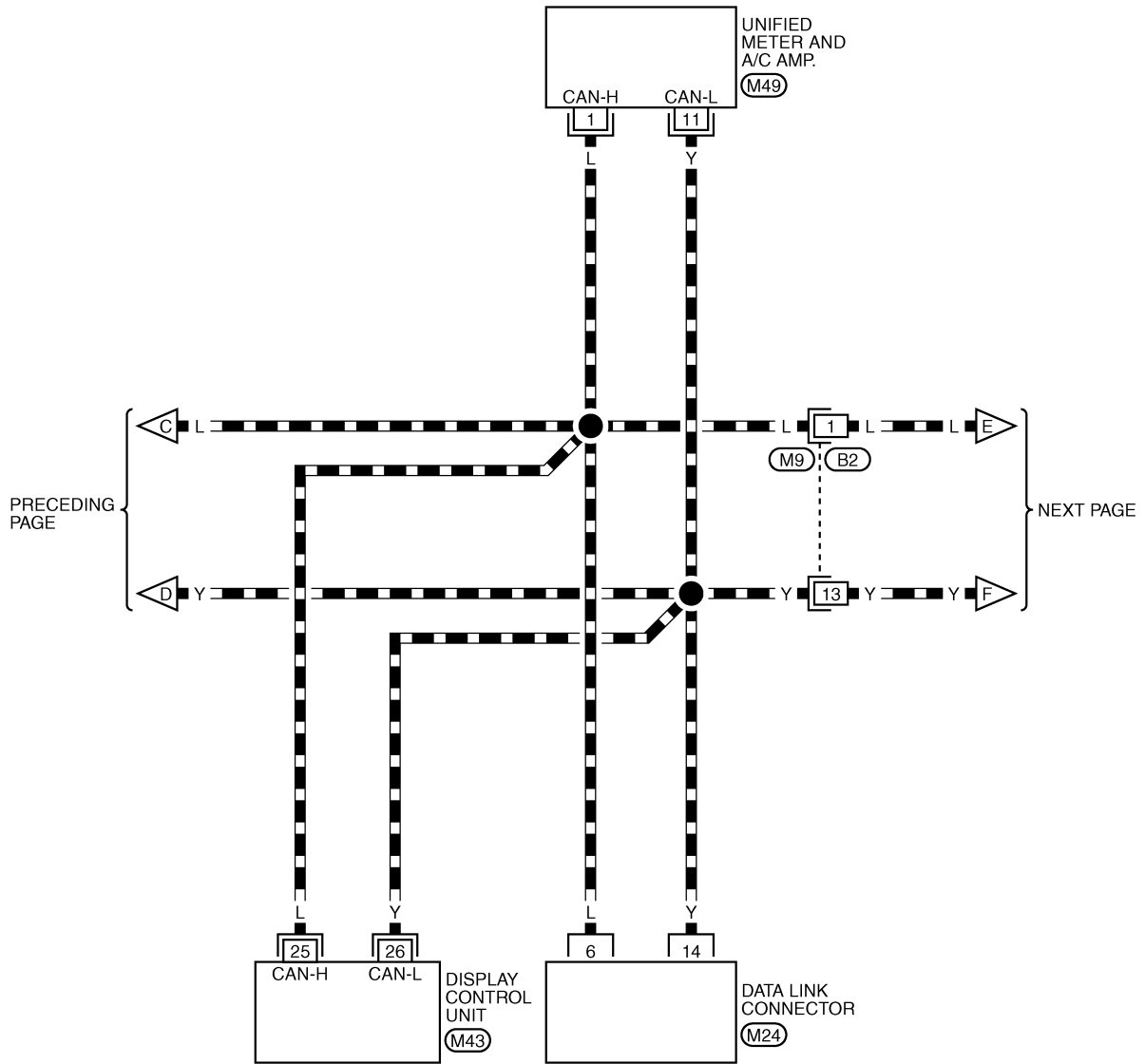
TKWB0863E

# CAN SYSTEM (TYPE 8)

[CAN]

## LAN-CAN-36

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24

M9  
W

16	15	14	13	12	11	10	9
8	7	6	5	4	3	2	1

M24  
W

56	54	52	50	48	46	44	42	40	38	36	34	32	30	28	26
55	53	51	49	47	45	43	41	39	37	35	33	31	29	27	25

M43  
W

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20

M49  
GR



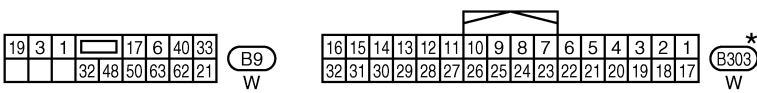
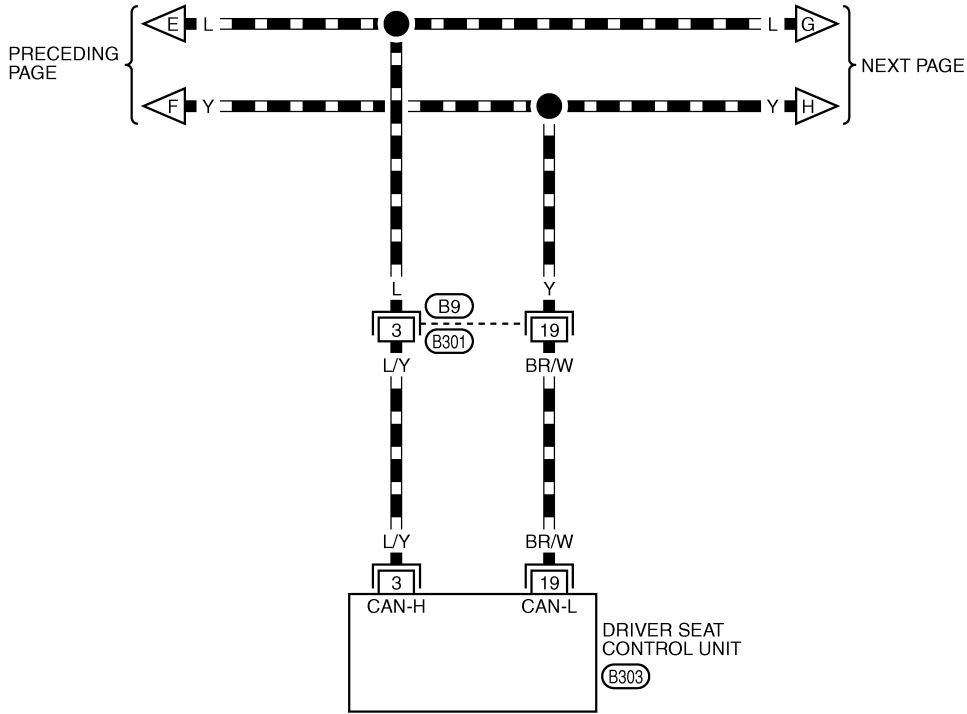
TKWB0864E

# CAN SYSTEM (TYPE 8)

[CAN]

LAN-CAN-37

▬ : DATA LINE

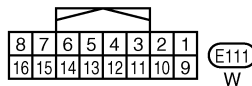
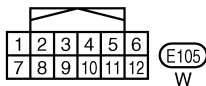
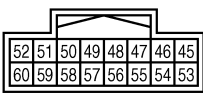
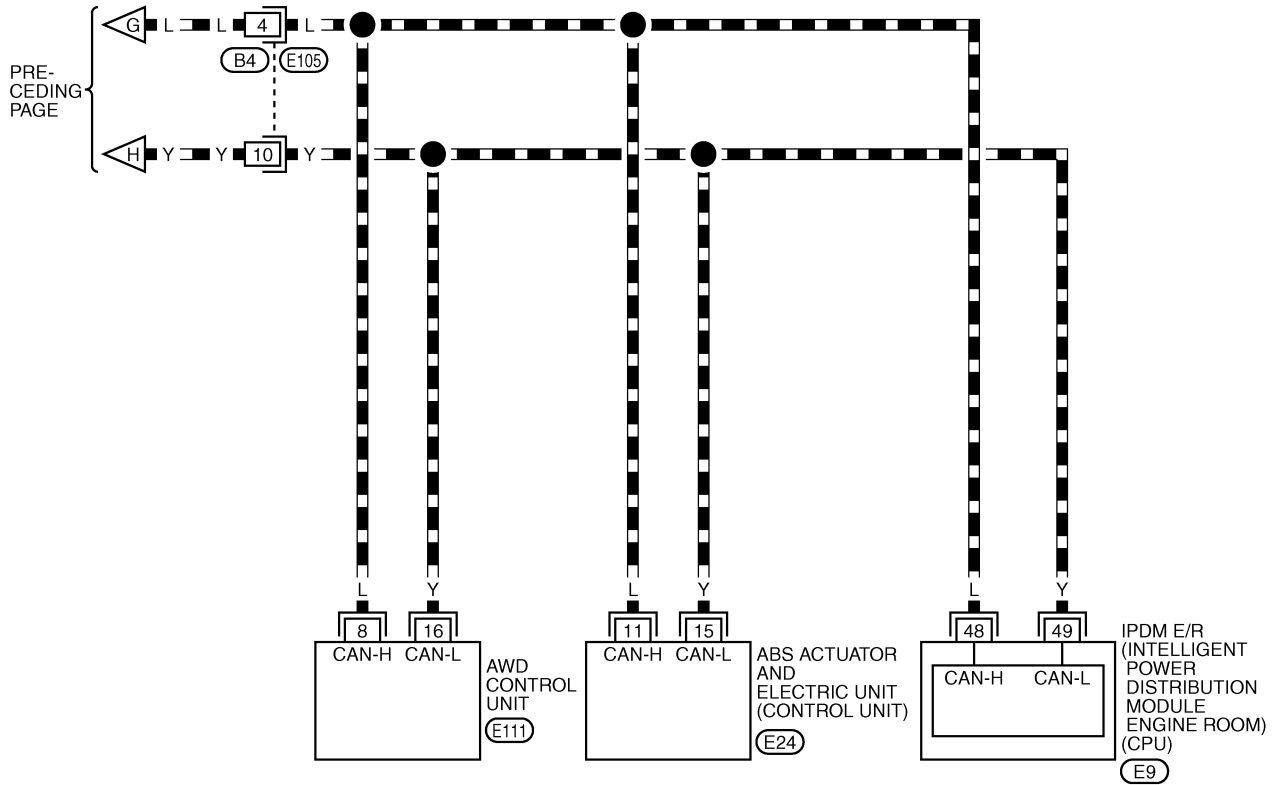


\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWB0865E

## LAN-CAN-38

▬ : DATA LINE



REFER TO THE FOLLOWING.

(E24) -ELECTRICAL UNITS



# CAN SYSTEM (TYPE 8)

[CAN]

AKS00AGB

## Check Sheet

**NOTE:**

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

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

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

PKIB4723E

# CAN SYSTEM (TYPE 8)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

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

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4721E

# CAN SYSTEM (TYPE 8)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

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

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4722E

# CAN SYSTEM (TYPE 8)

[CAN]

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

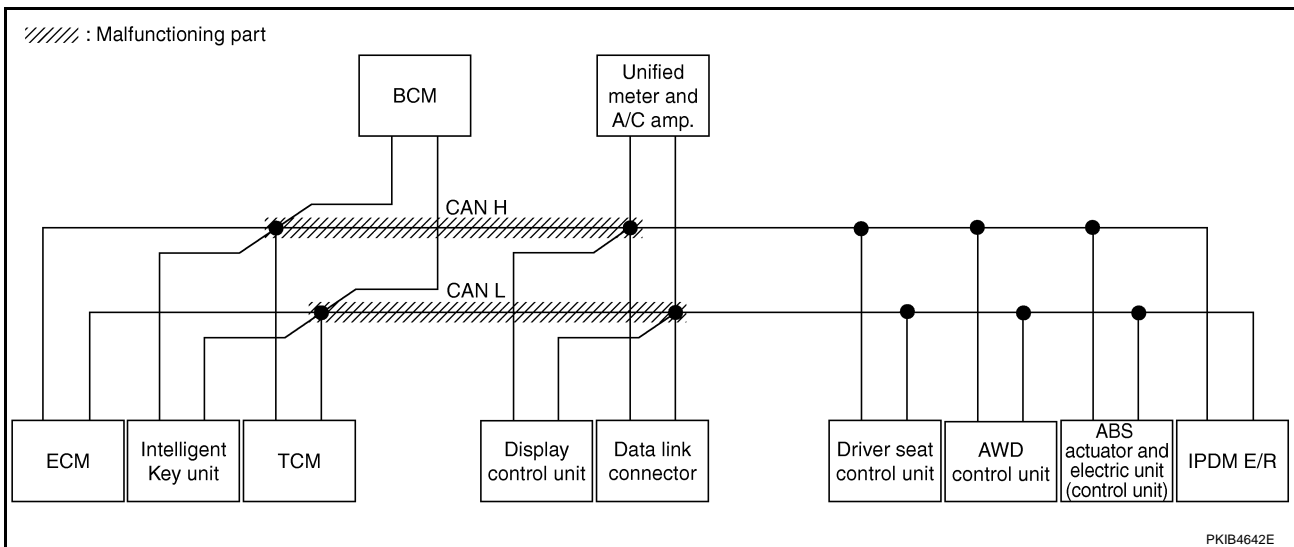
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-324, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4848E



PKIB4642E

# CAN SYSTEM (TYPE 8)

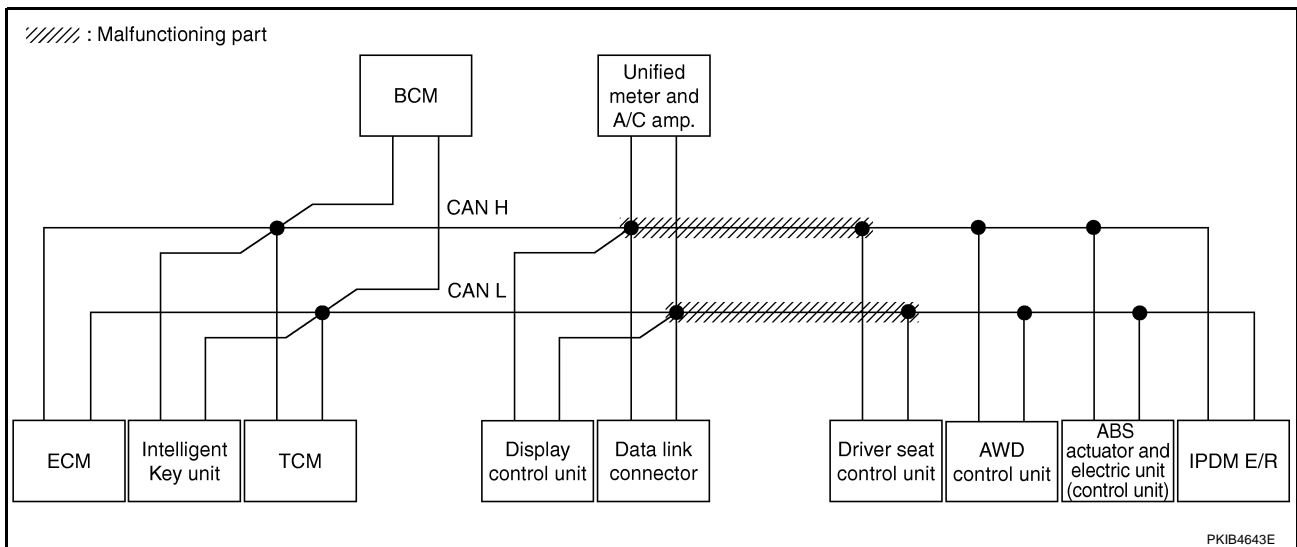
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-324, "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											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4849E



PKIB4643E

# CAN SYSTEM (TYPE 8)

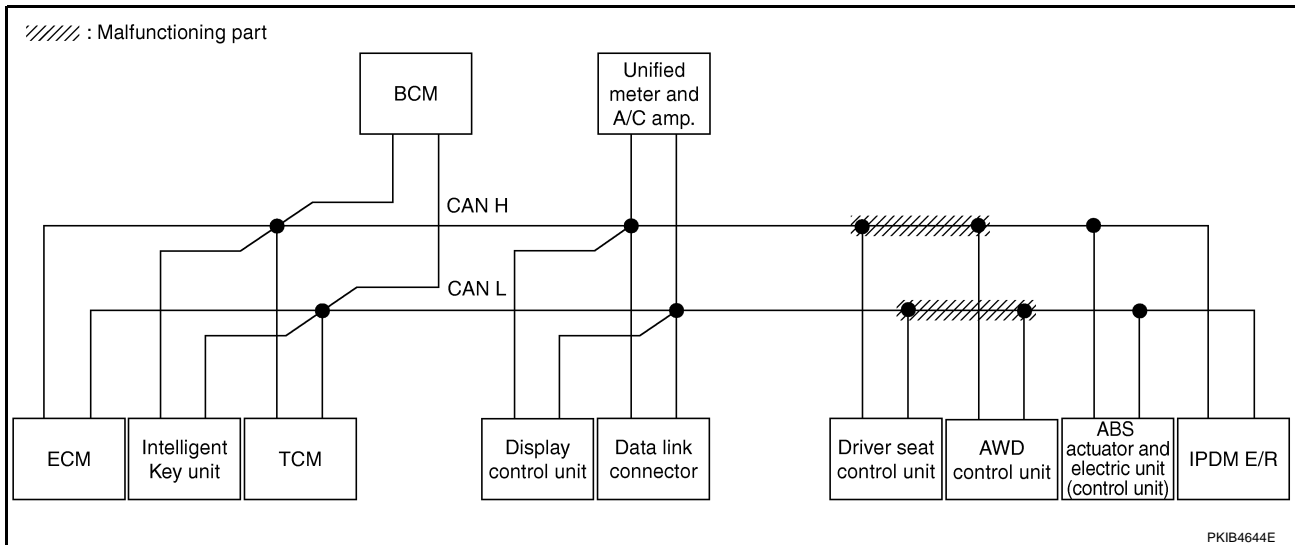
[CAN]

## Case 3

Check harness between driver seat control unit and AWD control unit. Refer to [LAN-325, "Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4850E



PKIB4644E

# CAN SYSTEM (TYPE 8)

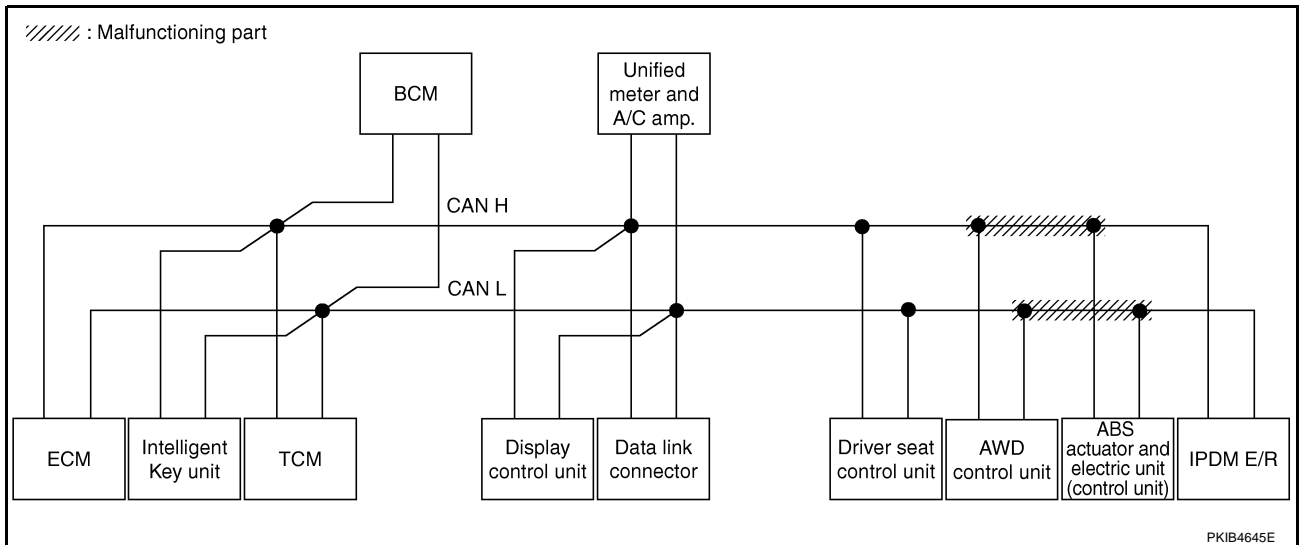
[CAN]

## Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to [LAN-326](#). "[Inspection Between AWD Control Unit and ABS Actuator and Electric Unit \(Control Unit\) Circuit](#)".

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4851E



PKIB4645E

# CAN SYSTEM (TYPE 8)

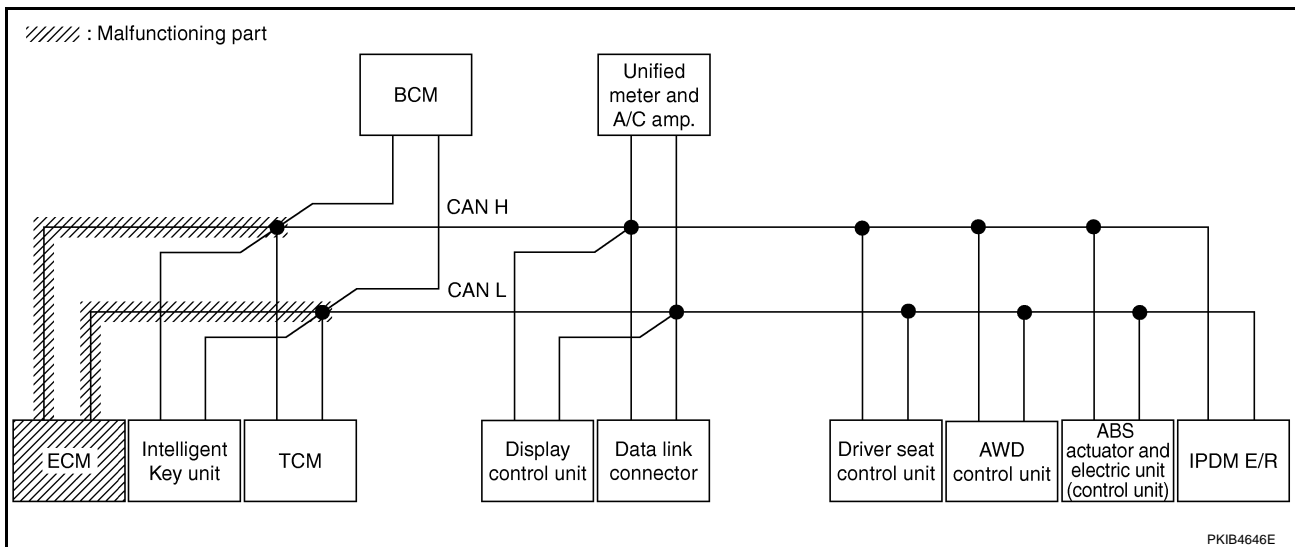
[CAN]

## Case 5

Check ECM circuit. Refer to [LAN-326, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U100)	CAN COMM CIRCUIT (U001)	
INTELLIGENT KEY	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—	
TRANSMISSION	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	CAN COMM CIRCUIT (U100)	—	
BCM	No indication	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—	
METER A/C AMP	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	CAN COMM CIRCUIT (U100)	—	
AUTO DRIVE POS.	No indication	NG	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	UNKW <sup>✓</sup> N	—	—	—	CAN COMM CIRCUIT (U100)	—	
ABS	—	NG	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	
IPDM E/R	No indication	—	UNKW <sup>✓</sup> N	UNKW <sup>✓</sup> N	—	—	UNKW <sup>✓</sup> N	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—	

PKIB4852E



PKIB4646E



# CAN SYSTEM (TYPE 8)

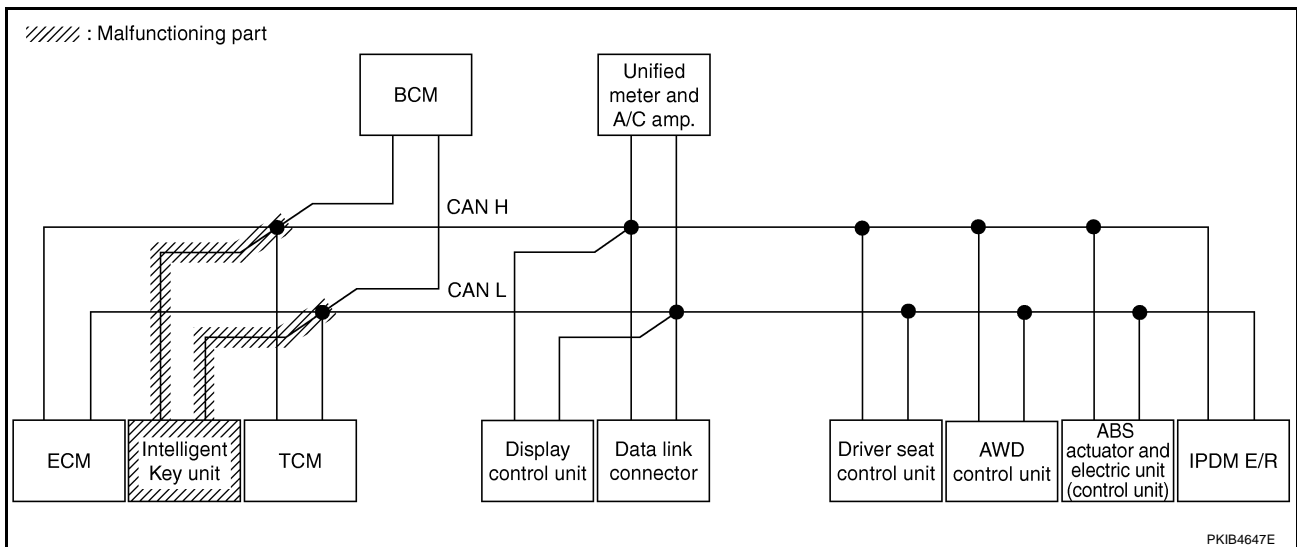
[CAN]

## Case 6

Check Intelligent Key unit circuit. Refer to [LAN-327, "Intelligent Key Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4853E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

# CAN SYSTEM (TYPE 8)

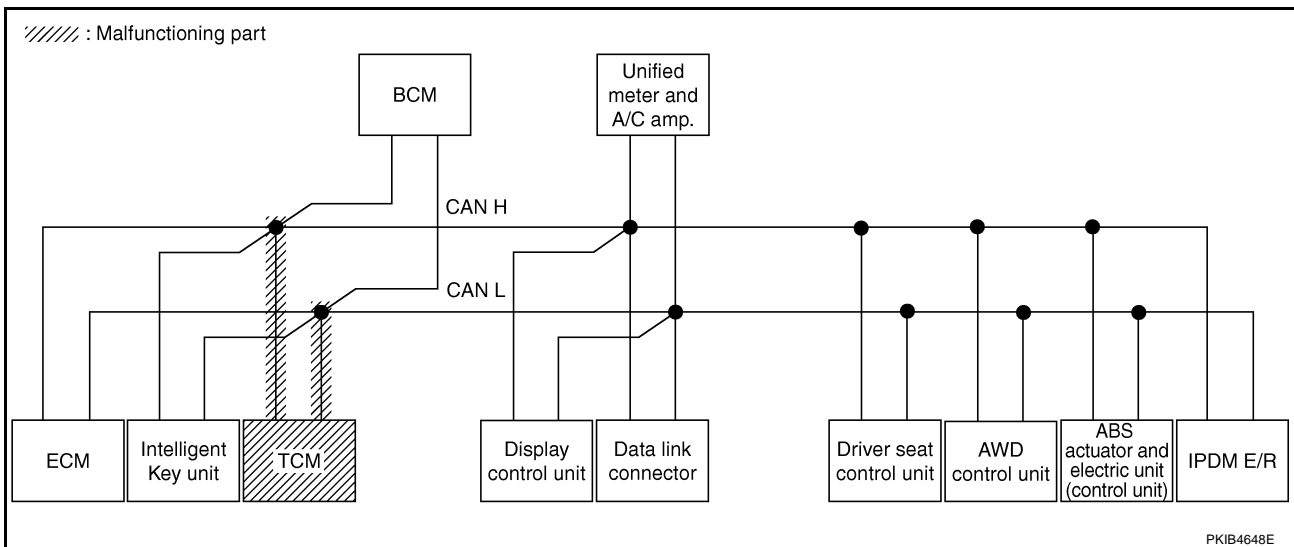
[CAN]

## Case 7

Check TCM circuit. Refer to [LAN-327, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4854E



PKIB4648E

# CAN SYSTEM (TYPE 8)

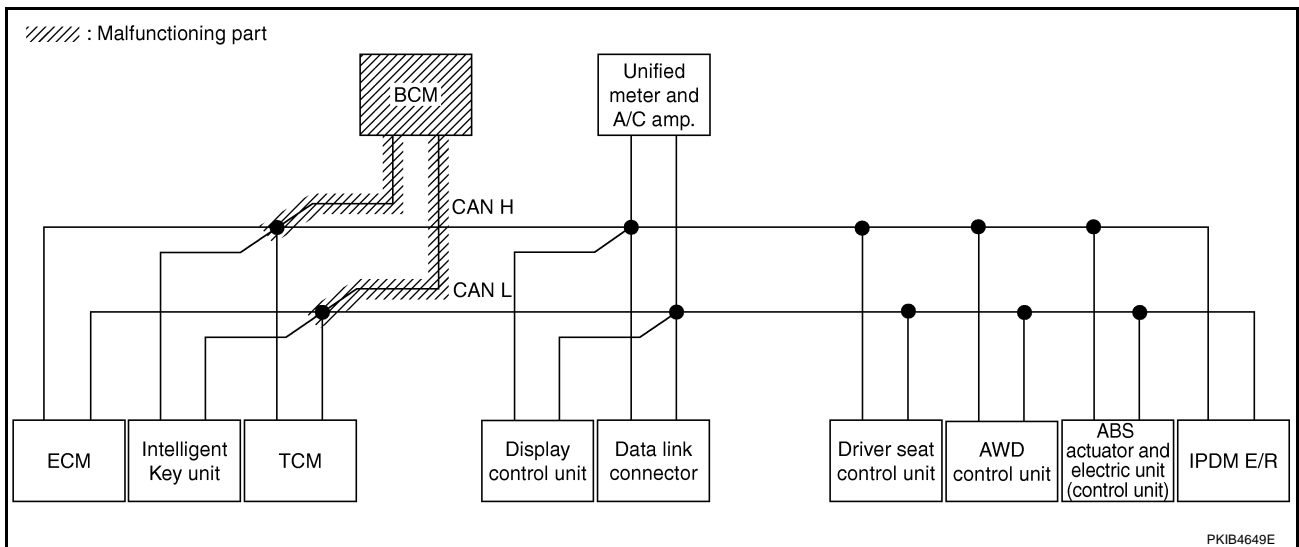
[CAN]

## Case 8

Check BCM circuit. Refer to [LAN-328, "BCM Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4855E



PKIB4649E

# CAN SYSTEM (TYPE 8)

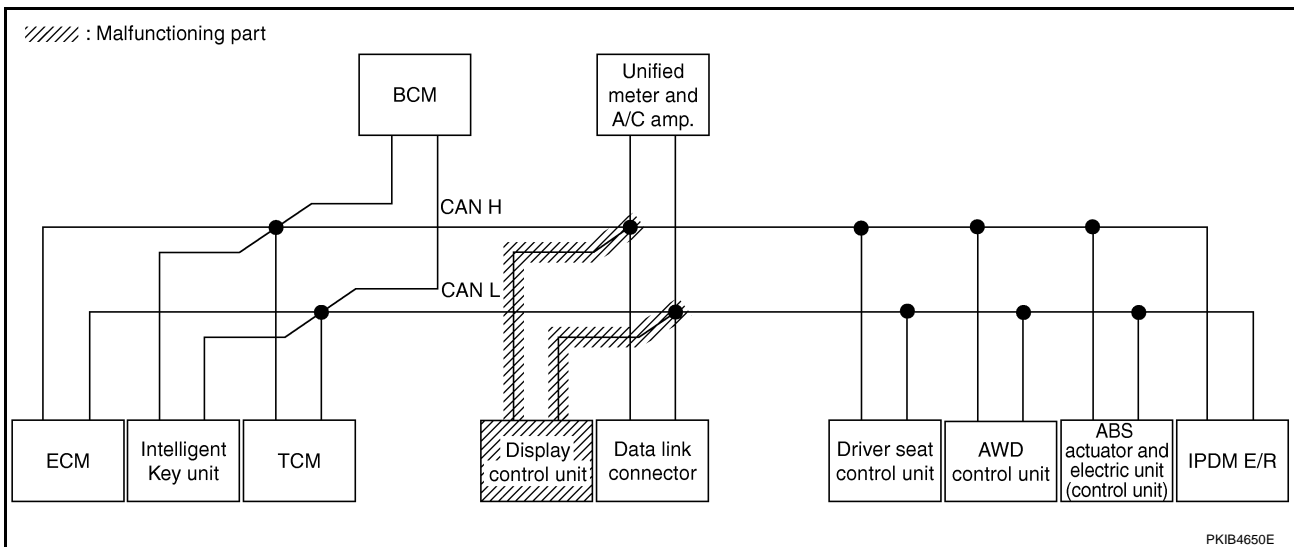
[CAN]

## Case 9

Check display control unit circuit. Refer to [LAN-328, "Display Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4856E



PKIB4650E

# CAN SYSTEM (TYPE 8)

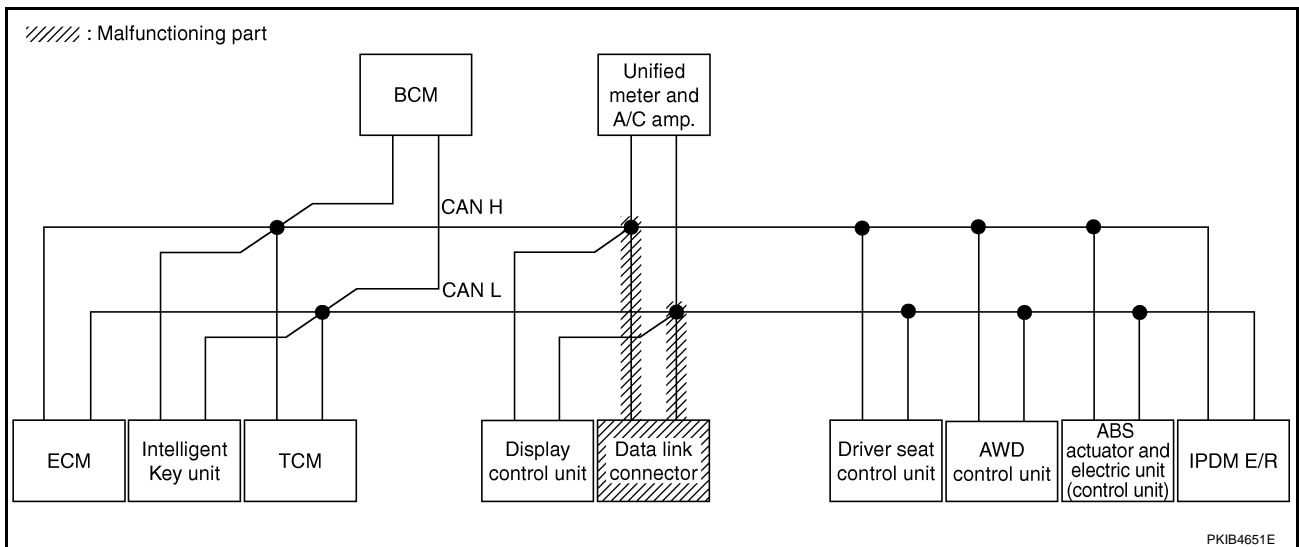
[CAN]

## Case 10

Check data link connector circuit. Refer to [LAN-329, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4857E



PKIB4651E

# CAN SYSTEM (TYPE 8)

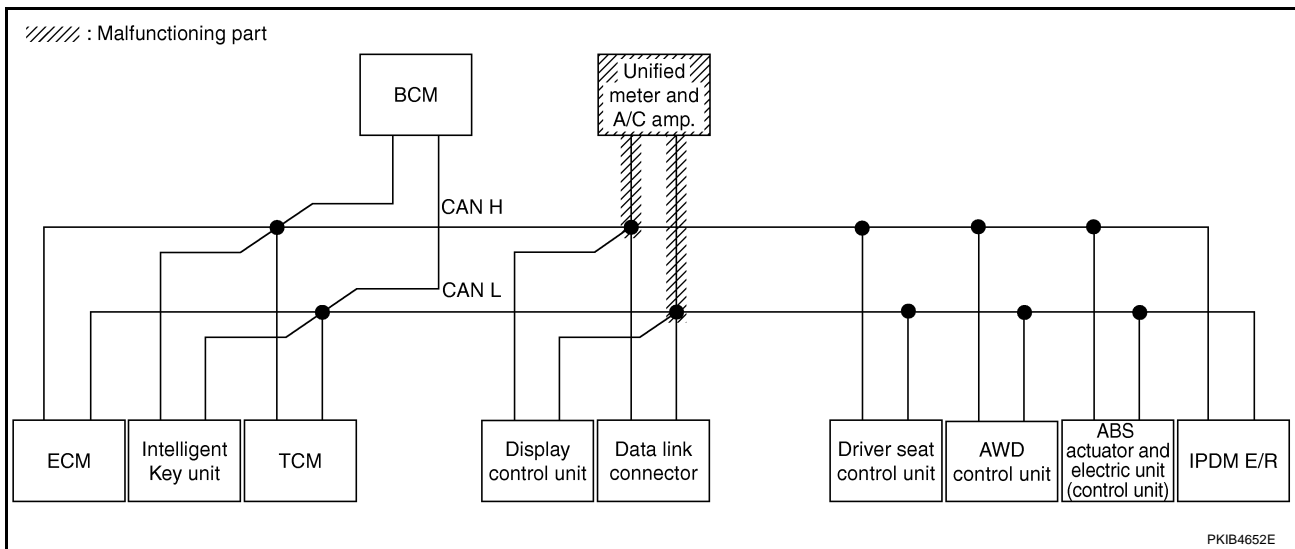
[CAN]

## Case 11

Check unified meter and A/C amp. circuit. Refer to [LAN-329, "Unified Meter and A/C Amp. Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4858E



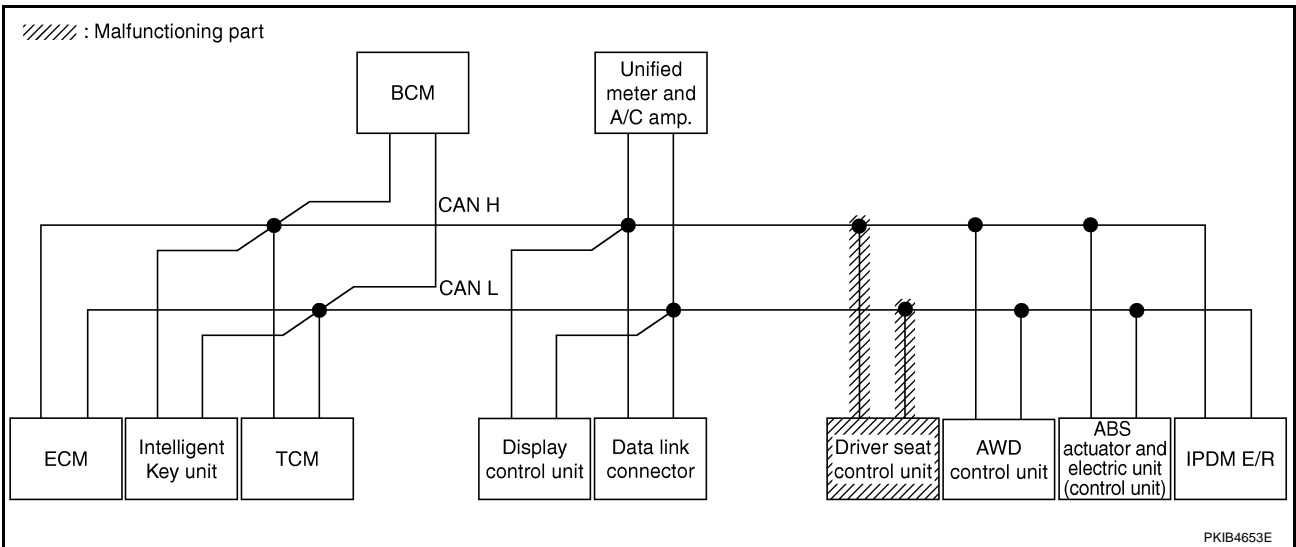
PKIB4652E

## Case 12

Check driver seat control unit circuit. Refer to [LAN-330, "Driver Seat Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4859E



# CAN SYSTEM (TYPE 8)

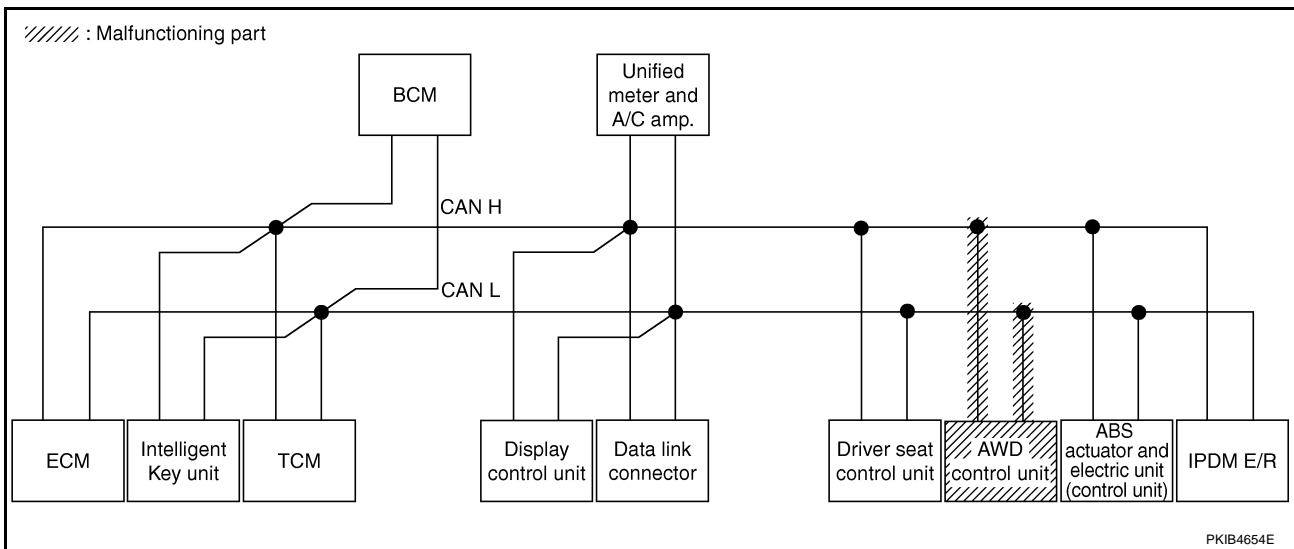
[CAN]

## Case 13

Check AWD control unit circuit. Refer to [LAN-330, "AWD Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	✓	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001) style="text-align: center;">✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	—	✓	UNKWN	—	CAN COMM CIRCUIT (U000) style="text-align: center;">✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U000) style="text-align: center;">✓	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4860E



PKIB4654E



# CAN SYSTEM (TYPE 8)

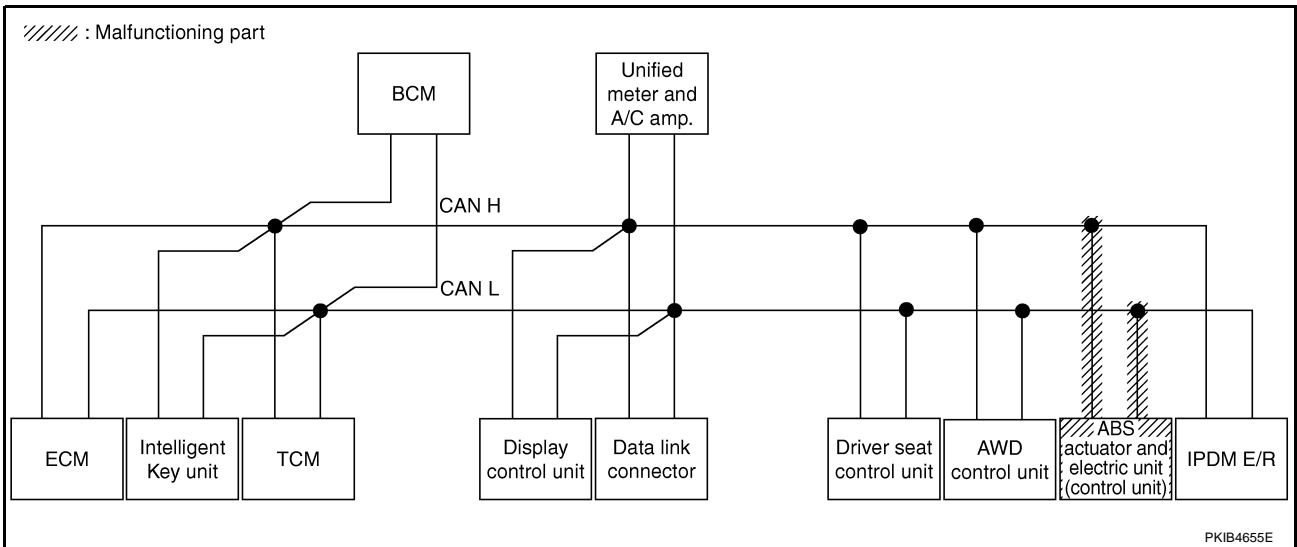
[CAN]

## Case 14

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-331, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	✓	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	✓	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	✓	✓	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4861E



PKIB4655E

# CAN SYSTEM (TYPE 8)

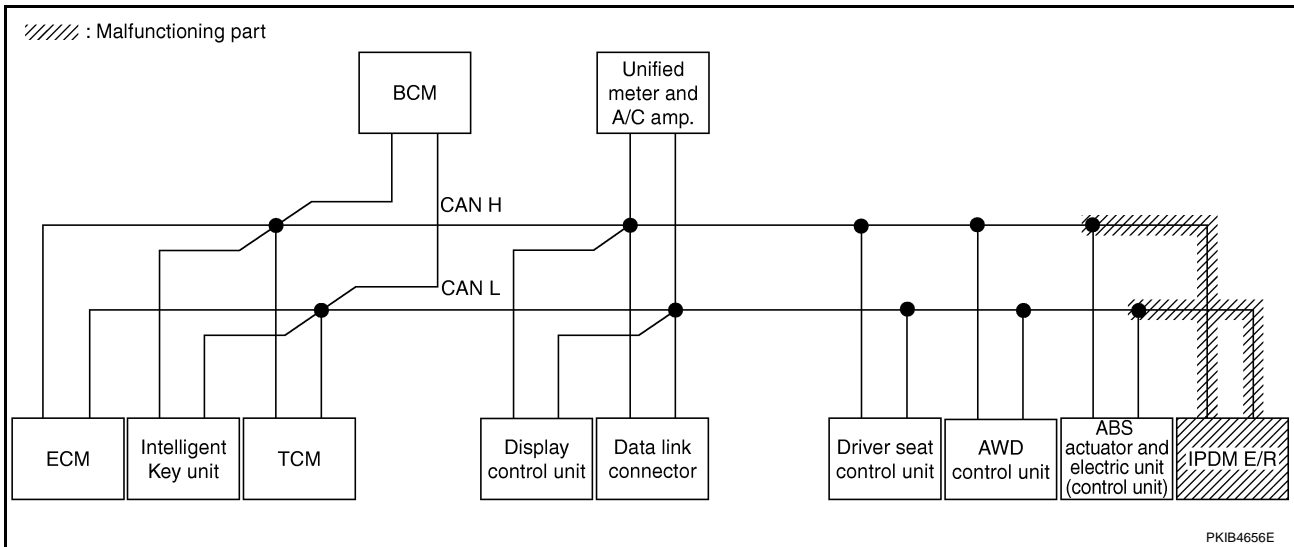
[CAN]

## Case 15

Check IPDM E/R circuit. Refer to [LAN-331, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4862E



PKIB4656E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 16

Check CAN communication circuit. Refer to [LAN-332, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKW <del>N</del>	—	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	UNKW <del>N</del>	—	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	—	
METER A/C AMP	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKW <del>N</del>	—	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKW <del>N</del>	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB483E

## Case 17

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-337, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											IPDM E/R
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS				
ENGINE	—	NG	UNKW <del>N</del>	—	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)	
INTELLIGENT KEY	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	—	CAN COMM CIRCUIT (U1000)	—	
TRANSMISSION	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U1000)	—	
BCM	No indication	NG	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	UNKW <del>N</del>	—	—	UNKW <del>N</del>	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	—	
METER A/C AMP	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	UNKW <del>N</del>	—	CAN COMM CIRCUIT (U1000)	—	
AUTO DRIVE POS.	No indication	NG	UNKW <del>N</del>	—	—	UNKW <del>N</del>	UNKW <del>N</del>	—	UNKW <del>N</del>	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ALL MODE AWD/4WD	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	UNKW <del>N</del>	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	NG	UNKW <del>N</del>	UNKW <del>N</del>	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKW <del>N</del>	UNKW <del>N</del>	—	—	UNKW <del>N</del>	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIC634E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 18

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-337, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR											SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis										
				ECM	I-KEY	TCM	BCM /SEC	DISPLAY	METER /M&A	AWD/4WD /e4WD	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6348E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CJ1

### 1. CHECK HARNESS FOR OPEN CIRCUIT

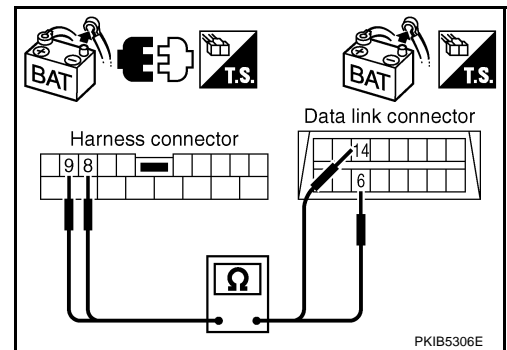
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CJ2

### 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 M9
  - Harness connector B2

OK or NG

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

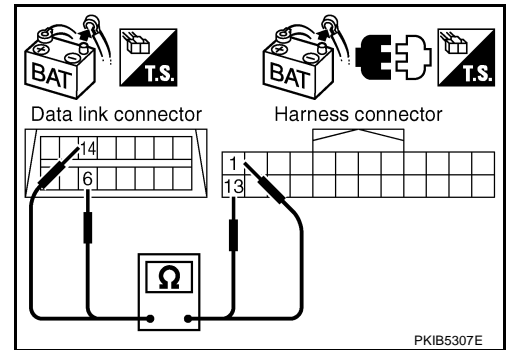
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



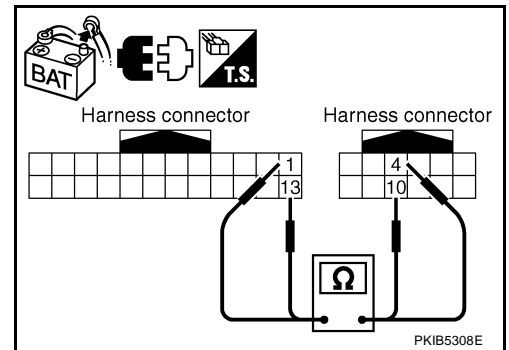
**3. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



**Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit** AKS00CJ3

**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 B4
  - Harness connector E105

OK or NG

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

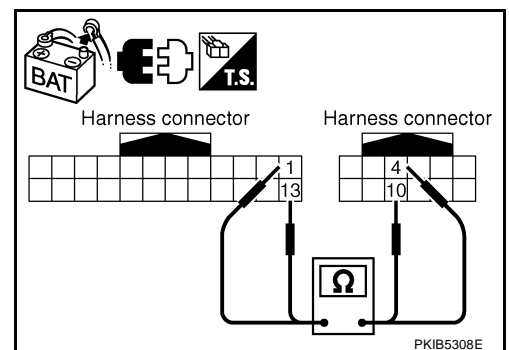
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



### 3. CHECK HARNESS FOR OPEN CIRCUIT

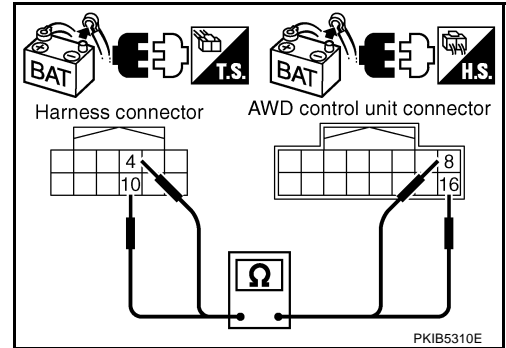
1. Disconnect AWD control unit connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and AWD control unit harness connector E111 terminals 8 (L), 16 (Y).

**4 (L) - 8 (L) : Continuity should exist.**

**10 (Y) - 16 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



### Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit

AKS00CJ4

#### 1. CHECK CONNECTOR

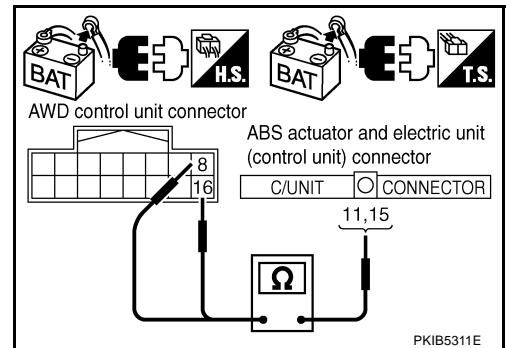
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect following connectors.
  - ECM
  - AWD control unit
  - ABS actuator and electric unit (control unit)
4. Check continuity between AWD control unit harness connector E111 terminals 8 (L), 16 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**8 (L) - 11 (L) : Continuity should exist.**

**16 (Y) - 15 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



### ECM Circuit Inspection

AKS00CJ5

#### 1. CHECK CONNECTOR

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

#### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

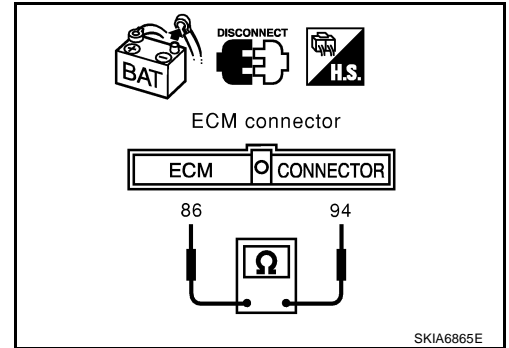
1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

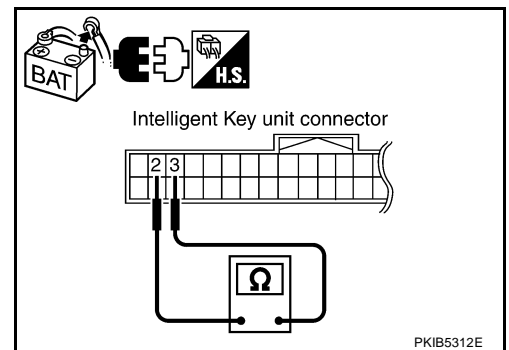
1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y)**

**: Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.



## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

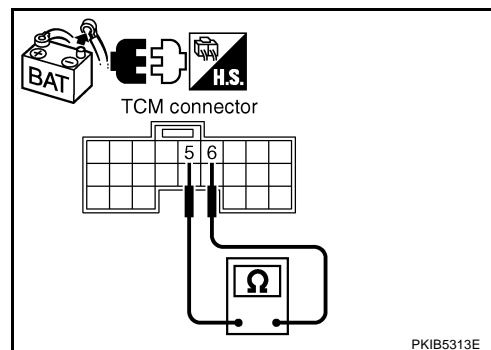
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM and BCM.



AKS00CJ8

## BCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

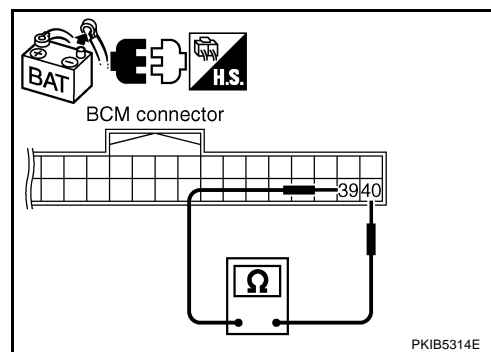
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#) .  
NG >> Repair harness between BCM and harness connector M82.



AKS00CJ9

## Display Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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



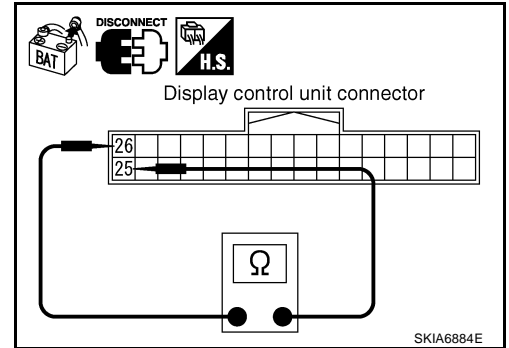
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display control unit connector.
2. Check resistance between display control unit harness connector M43 terminals 25 (L) and 26 (Y).

**25 (L) - 26 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



AKS00CJA

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

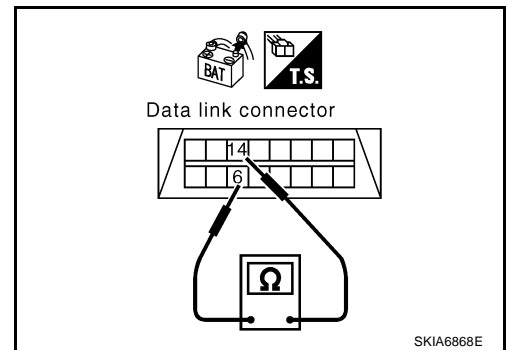
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .  
 NG >> Repair harness between data link connector and unified meter and A/C amp.



AKS00CJB

## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

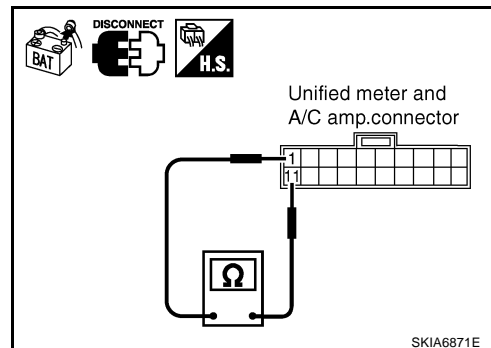
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. and data link connector.



AKS00C/JC

## Driver Seat Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

### OK or NG

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

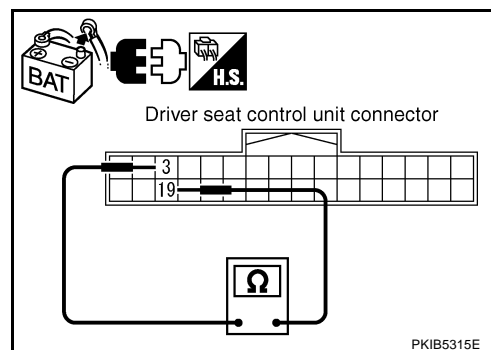
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



AKS00C/JD

## AWD Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of 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.

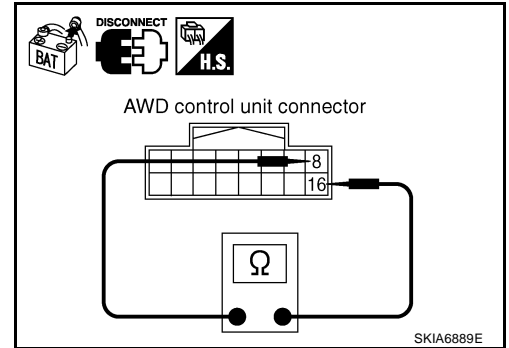
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector E111 terminals 8 (L) and 16 (Y).

**8 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace AWD control unit.  
 NG >> Repair harness between AWD control unit and IPDM E/R.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CJE

### 1. CHECK CONNECTOR

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

### OK or NG

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

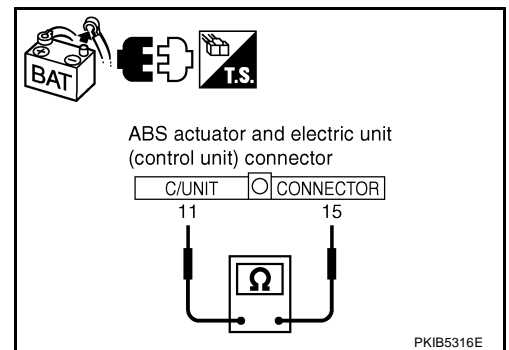
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



## IPDM E/R Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of IPDM E/R 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 IPDM E/R connector.
2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

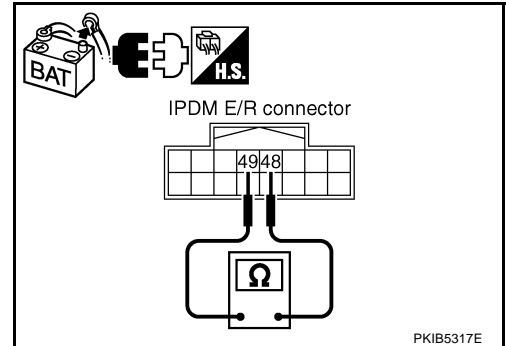
**48 (L) - 49 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

OK >> Replace IPDM E/R.

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



## CAN Communication Circuit Inspection

AKS00C/JG

### 1. CHECK CONNECTOR

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

### OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - BCM connector
  - Display control unit connector
  - Unified meter and A/C amp. connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

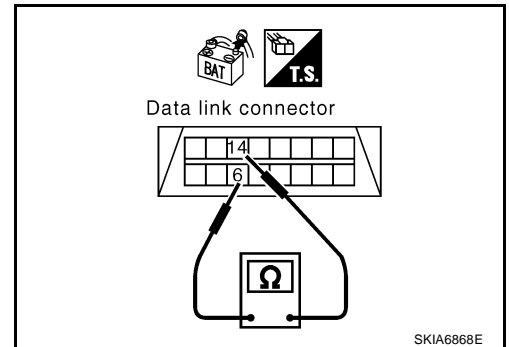
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



## 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

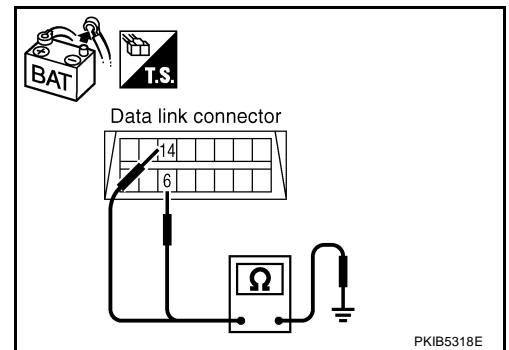
**14 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and harness connector M9



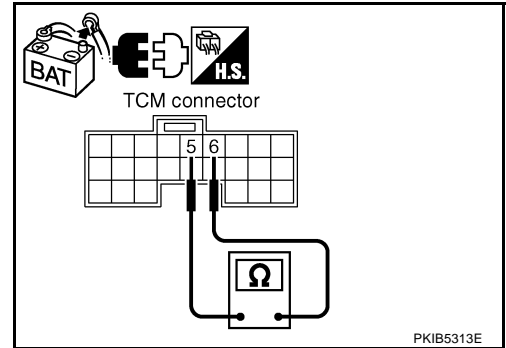
#### 4. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 5.  
 NG >> Repair harness between TCM and harness connector F102.



#### 5. CHECK HARNESS FOR SHORT CIRCUIT

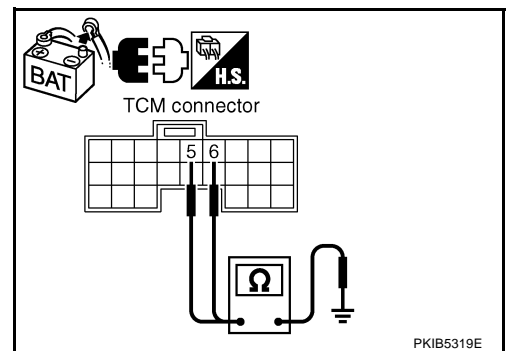
- Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

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

**6 (Y) - Ground : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 6.  
 NG >> Repair harness between TCM and harness connector F102.



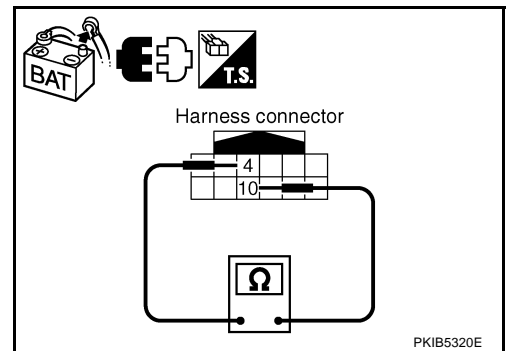
#### 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

**4 (L) - 10 (Y) : Continuity should not exist.**

##### OK or NG

- OK >> GO TO 7.  
 NG >> Check the following harnesses. If any harness is damaged, repair the harness.
- Harness between harness connector B4 and harness connector B2
  - Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

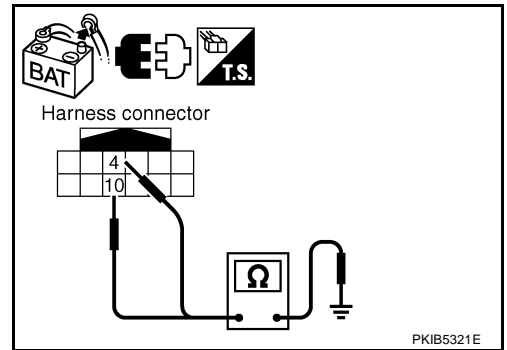
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

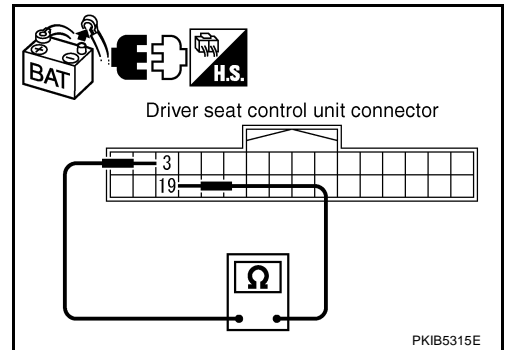
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

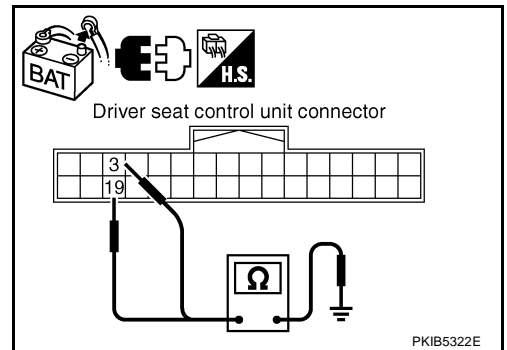
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## 10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect following connectors.
  - AWD control unit connector
  - ABS actuator and electric unit (control unit) connector
  - IPDM E/R connector
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

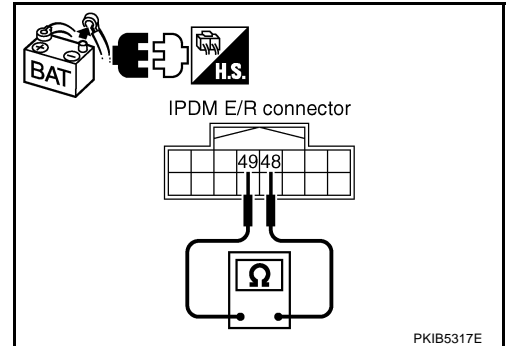
**48 (L) - 49 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

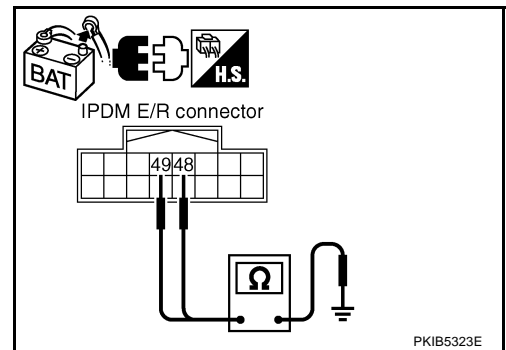
**49 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

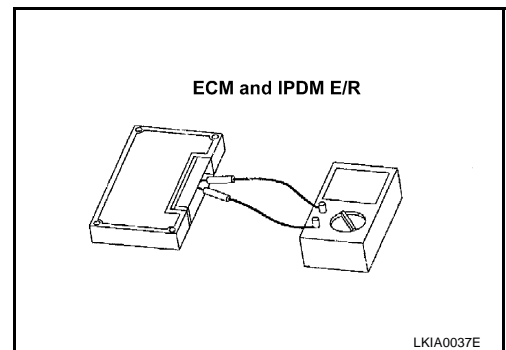
**94 - 86 : Approx. 108 – 132 Ω**
- Check resistance between IPDM E/R terminals 48 and 49.
 

**48 - 49 : Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 13.

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





## 13. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 14.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.

## IPDM E/R Ignition Relay Circuit Inspection

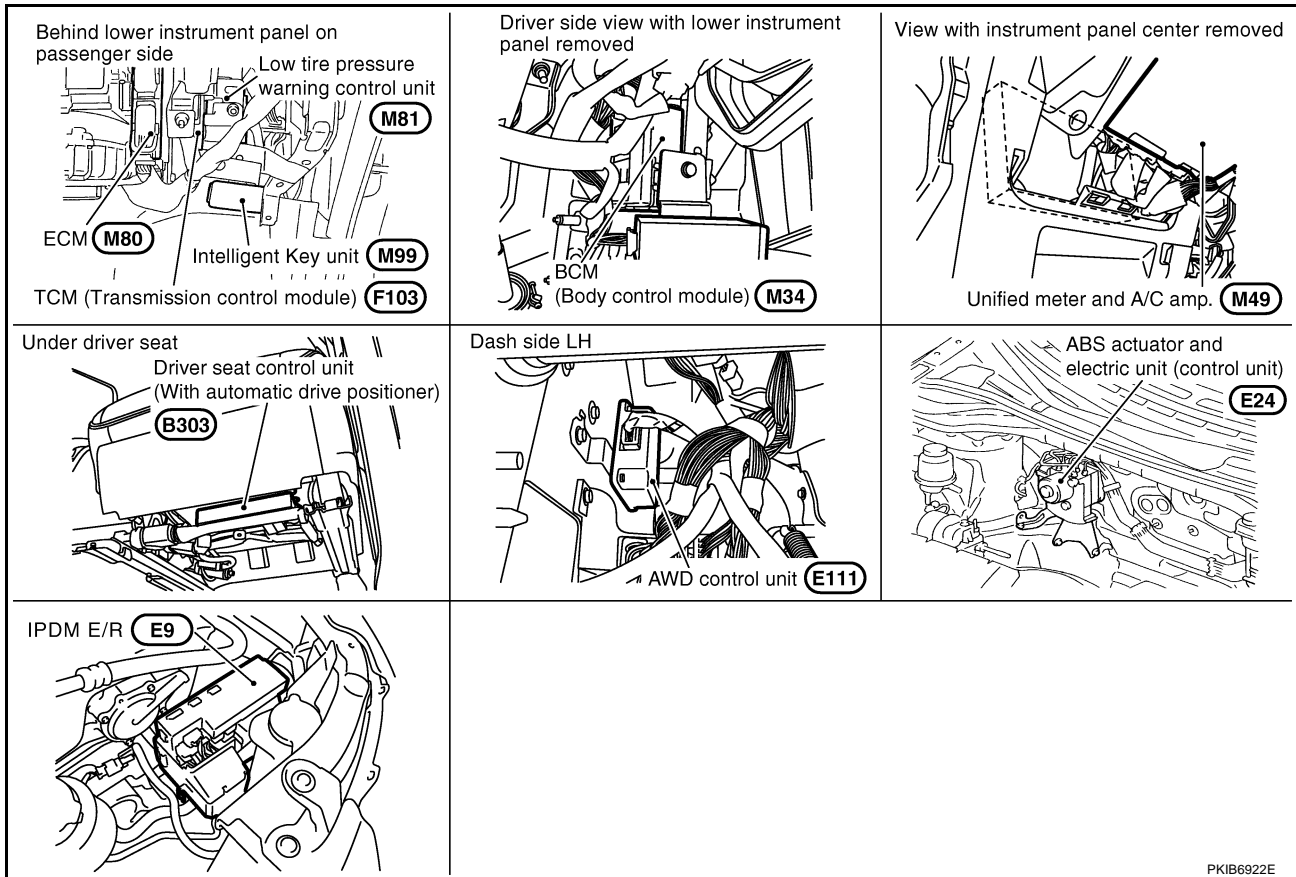
AKS00CJH

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

- IPDM E/R power supply circuit. Refer to [PG-27, "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" .](#)

## CAN SYSTEM (TYPE 9)

### Component Parts and Harness Connector Location

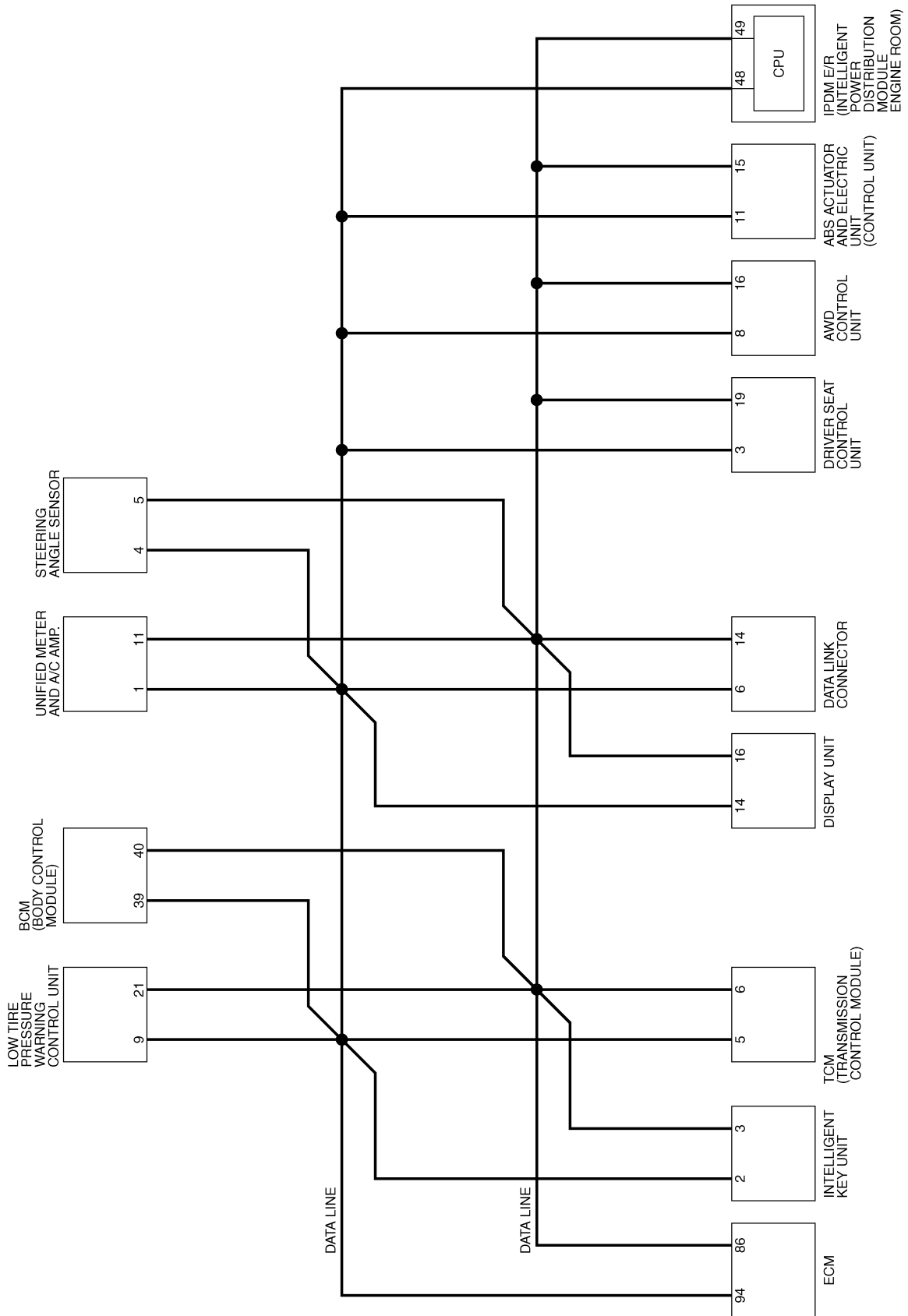


# CAN SYSTEM (TYPE 9)

[CAN]

## Schematic

AKS00AGV



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

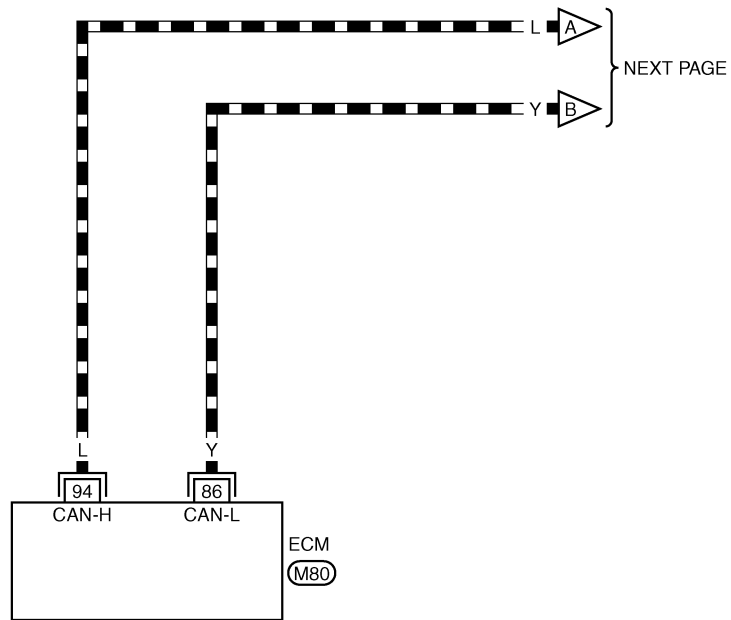
TKWB0867E

### Wiring Diagram - CAN -

AKS00AGW

### LAN-CAN-39

▬ : DATA LINE



REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

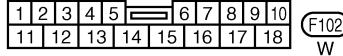
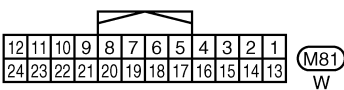
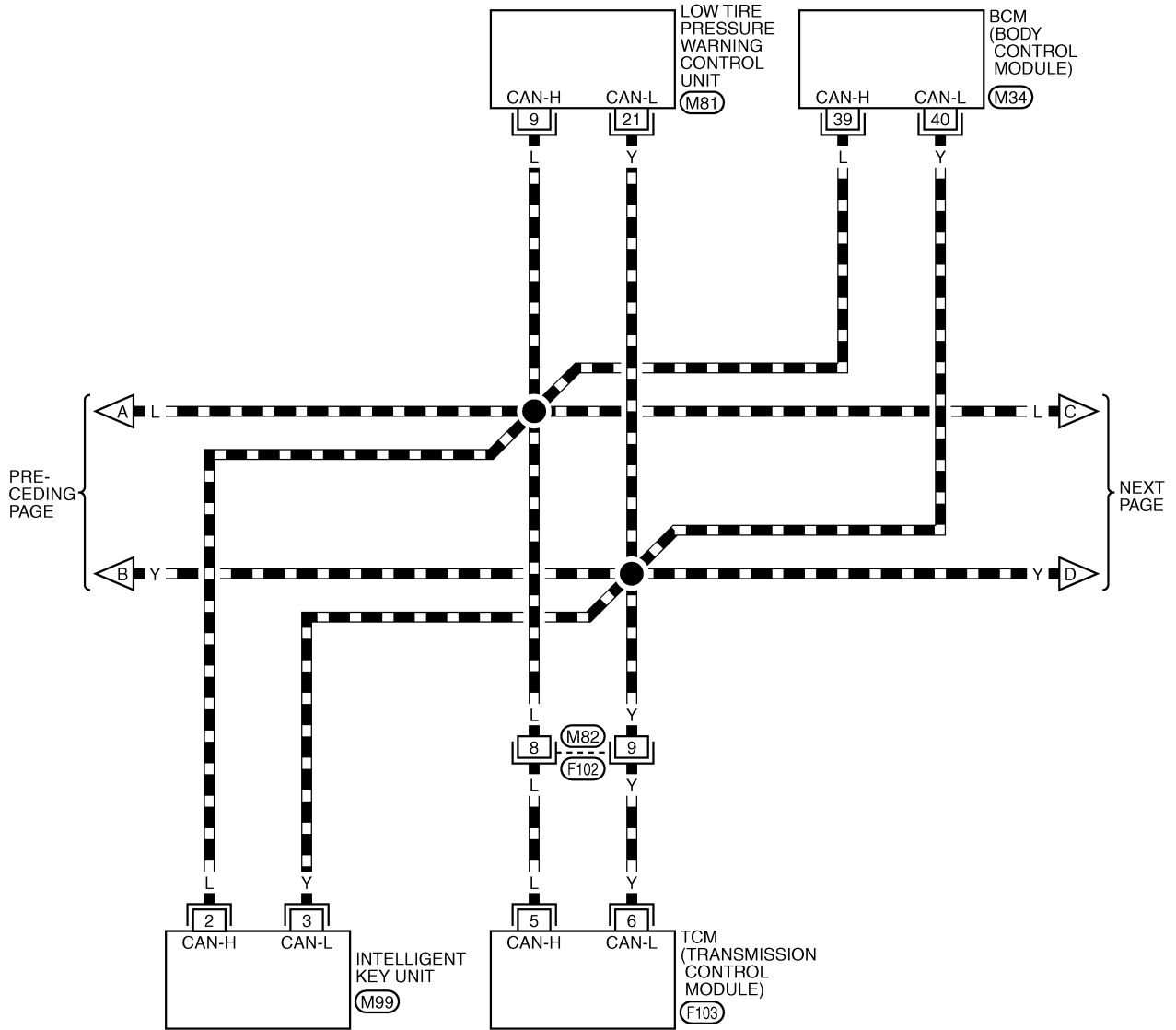
TKWB0868E

# CAN SYSTEM (TYPE 9)

[CAN]

## LAN-CAN-40

▬ : DATA LINE



REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

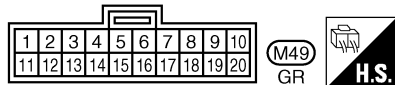
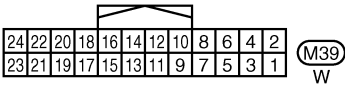
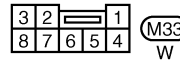
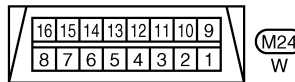
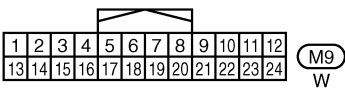
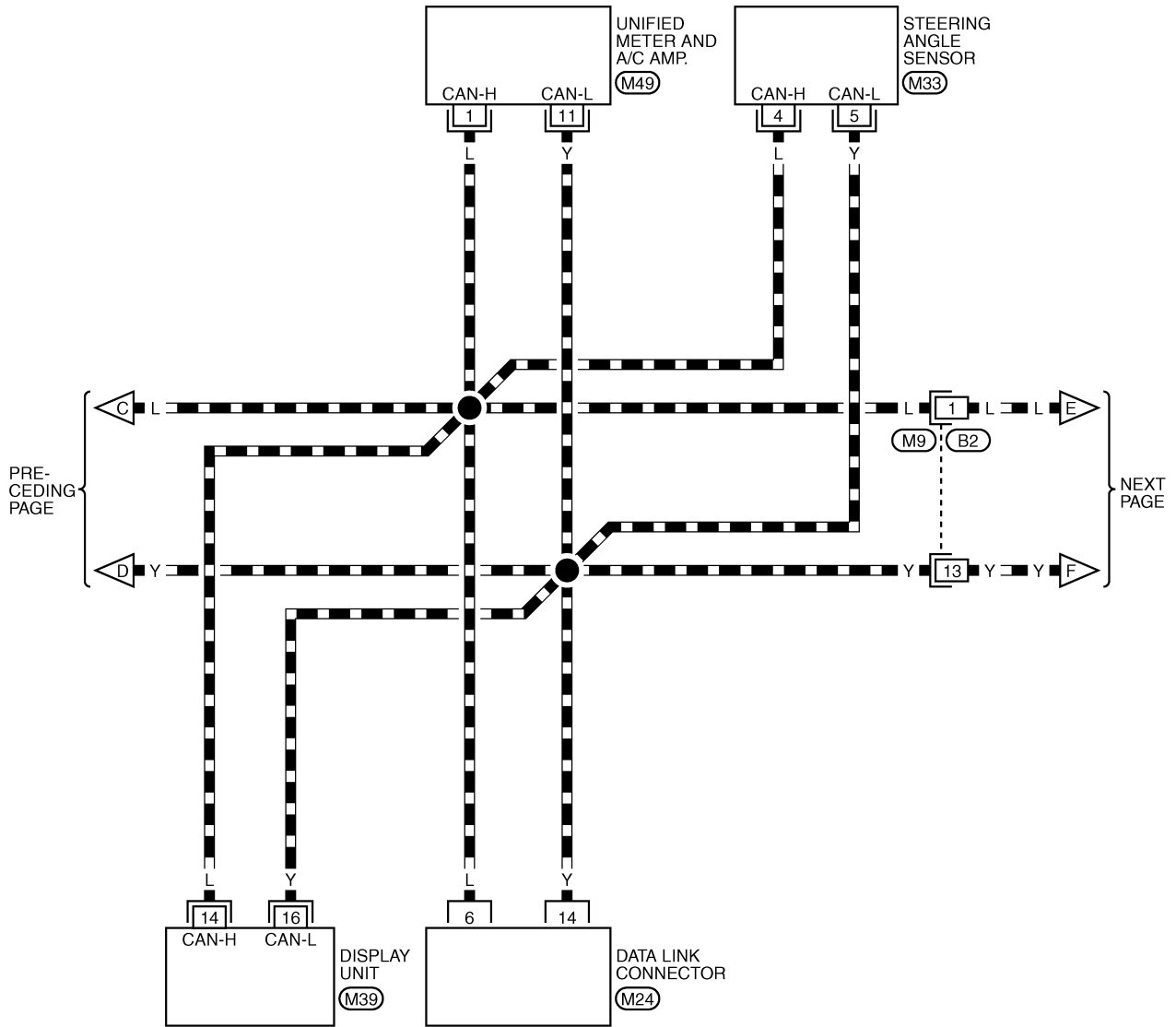
TKWB0869E

# CAN SYSTEM (TYPE 9)

[CAN]

## LAN-CAN-41

▬ : DATA LINE



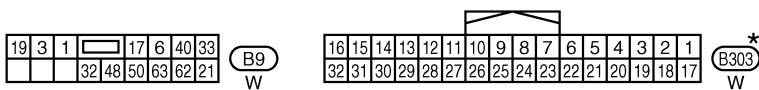
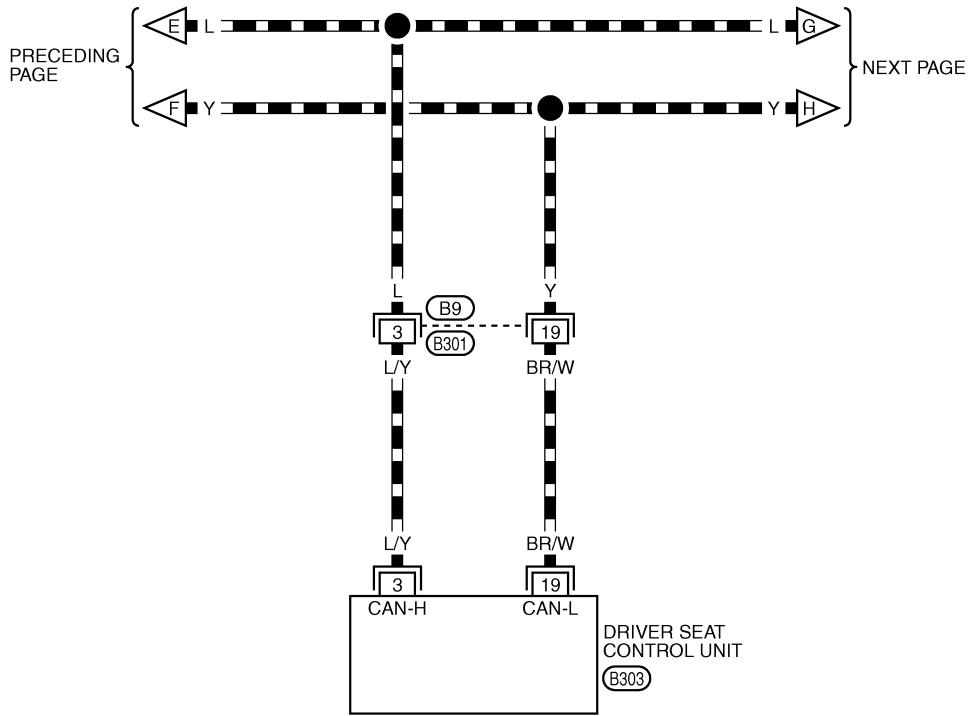
TKWB0870E

# CAN SYSTEM (TYPE 9)

[CAN]

LAN-CAN-42

▬ : DATA LINE



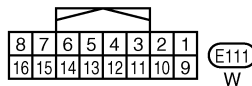
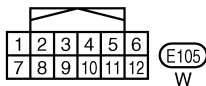
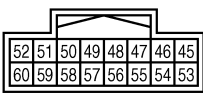
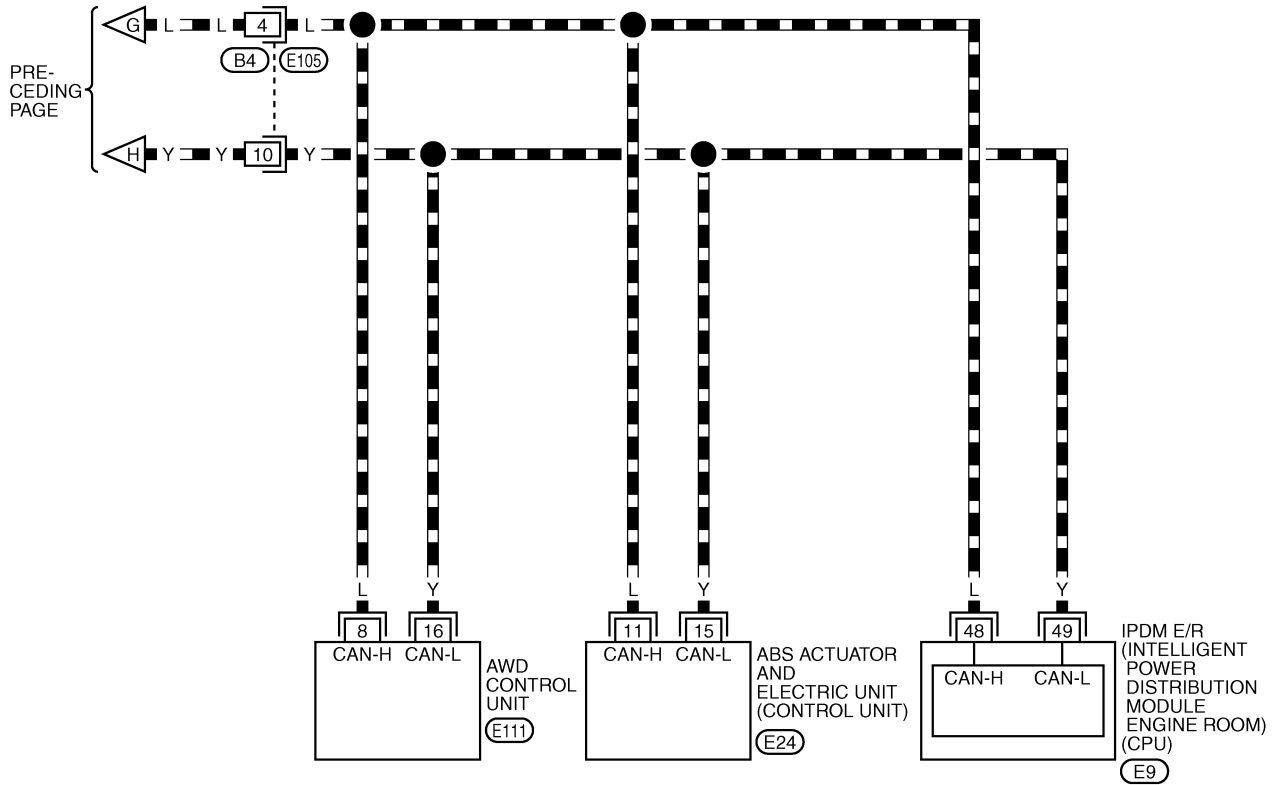
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

LAN

TKWB0871E

## LAN-CAN-43

▬ : DATA LINE



REFER TO THE FOLLOWING.

(E24) -ELECTRICAL UNITS



# CAN SYSTEM (TYPE 9)

[CAN]

AKS00ASH

## Check Sheet

**NOTE:**

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	—	UNKWN	—	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN 5	METER/M&A
CAN 1	Transmit diagnosis	CAN 6	TIRE-P
CAN 2	BCM	CAN 7	IPDM E/R
CAN 3	ECM	CAN 8	—
CAN 4	—	CAN 9	—

Attach copy of  
display unit  
CAN DIAG MNTR check sheet

PKIB4724E

# CAN SYSTEM (TYPE 9)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
AIR PRESSURE  
MONITOR  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

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

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4725E

# CAN SYSTEM (TYPE 9)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AIR PRESSURE  
MONITOR  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

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

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4726E

# CAN SYSTEM (TYPE 9)

[CAN]

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

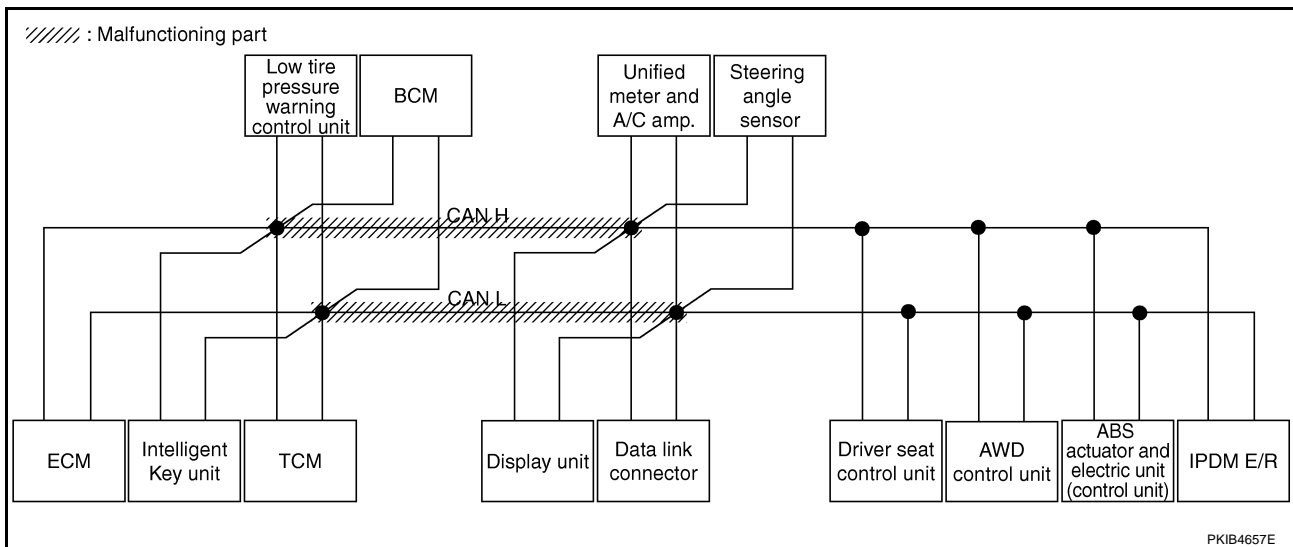
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-366, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	✓	—	✓	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	✓	—	—	✓	✓	✓	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	✓	—	✓	✓	✓	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	—	✓	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U100)	—
ALL MODE AWD/4WD	—	NG	UNKWN	✓	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U100)	—
ABS	—	NG	UNKWN	✓	—	✓	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U100)	—
IPDM E/R	No indication	—	UNKWN	✓	—	—	—	✓	—	—	—	—	—	—	CAN COMM CIRCUIT (U100)	—

PKIB4866E



PKIB4657E

# CAN SYSTEM (TYPE 9)

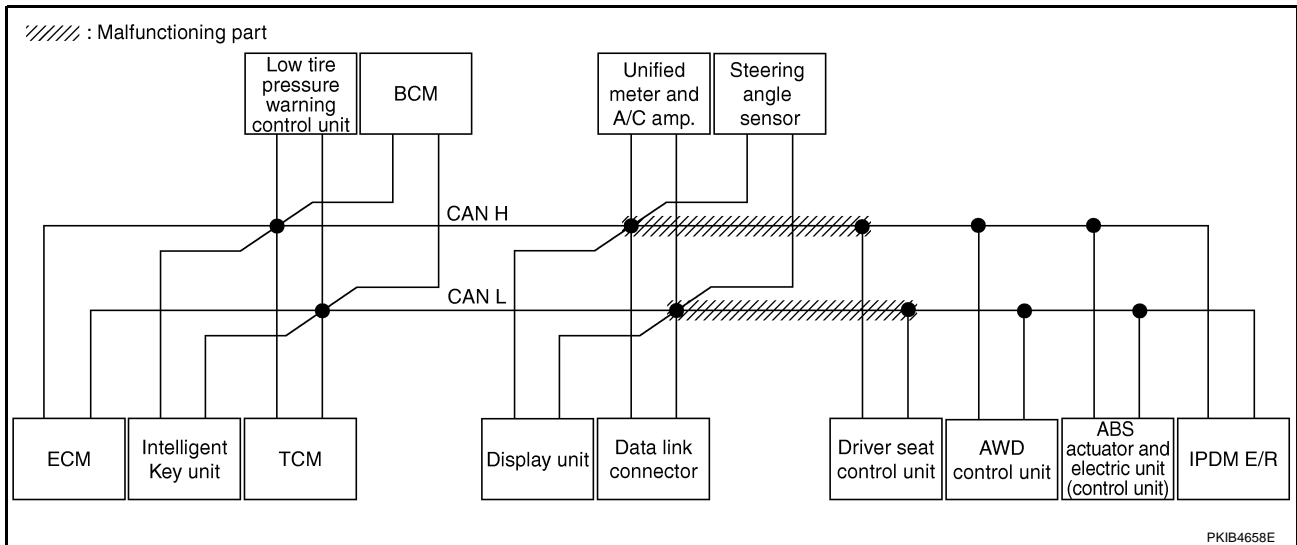
[CAN]

## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-366, "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												CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)		
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS					IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	✓	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	✓	✓	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4867E



# CAN SYSTEM (TYPE 9)

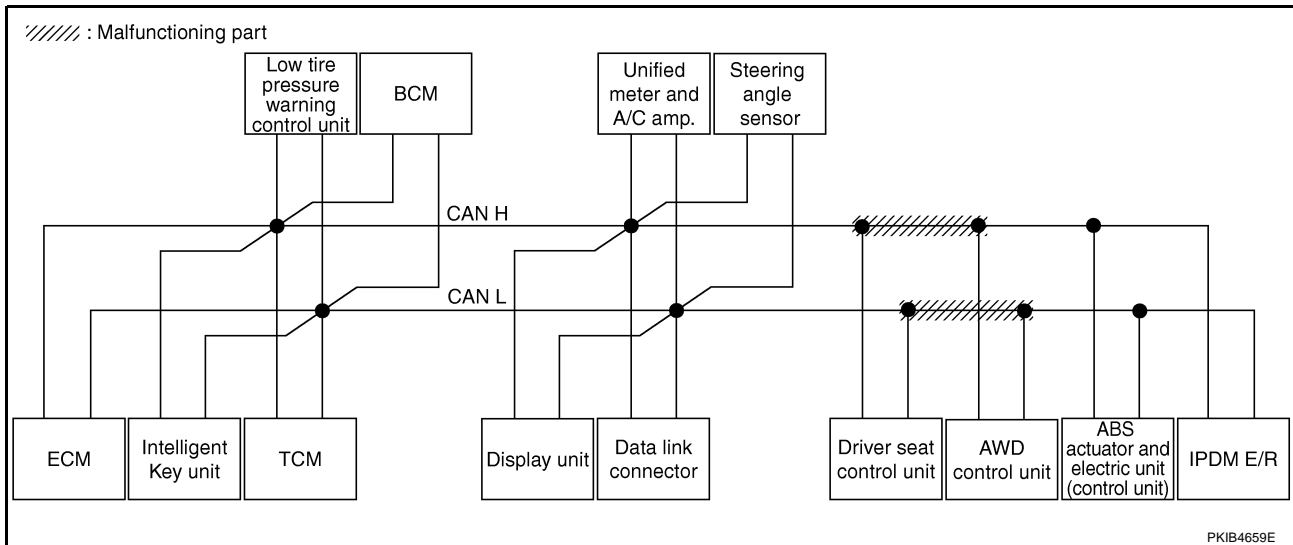
[CAN]

## Case 3

Check harness between driver seat control unit and AWD control unit. Refer to [LAN-367, "Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS					
		Initial diagnosis	Transmit diagnosis	Receive diagnosis															
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U601) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	✓	✓	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIB4868E



PKIB4659E

# CAN SYSTEM (TYPE 9)

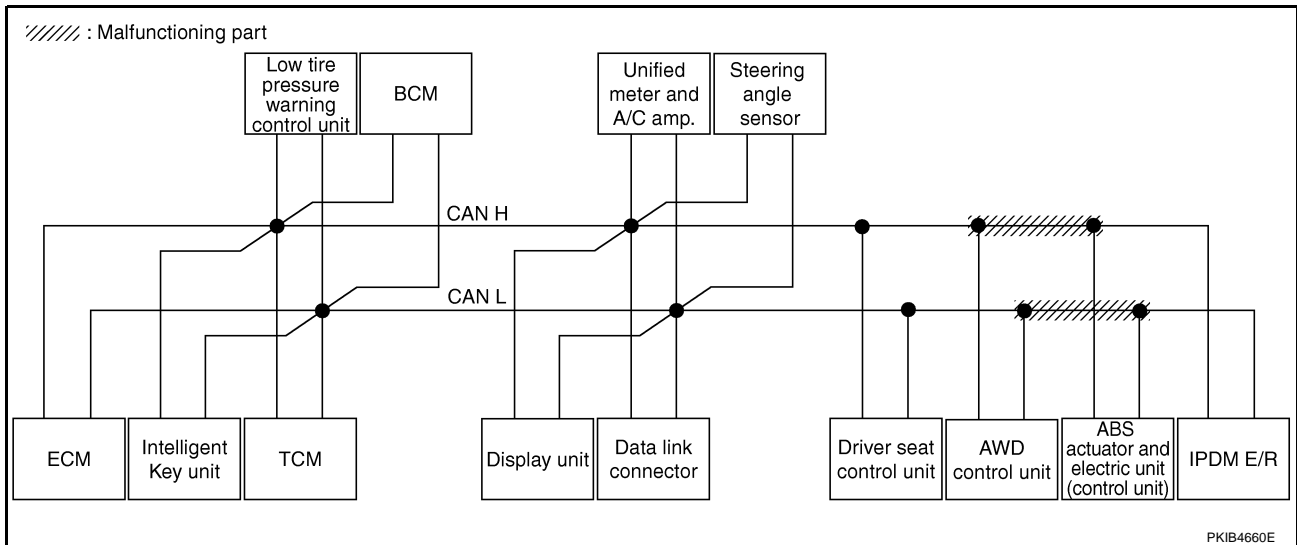
[CAN]

## Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to [LAN-368](#).  
"Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4869E



PKIB4660E

# CAN SYSTEM (TYPE 9)

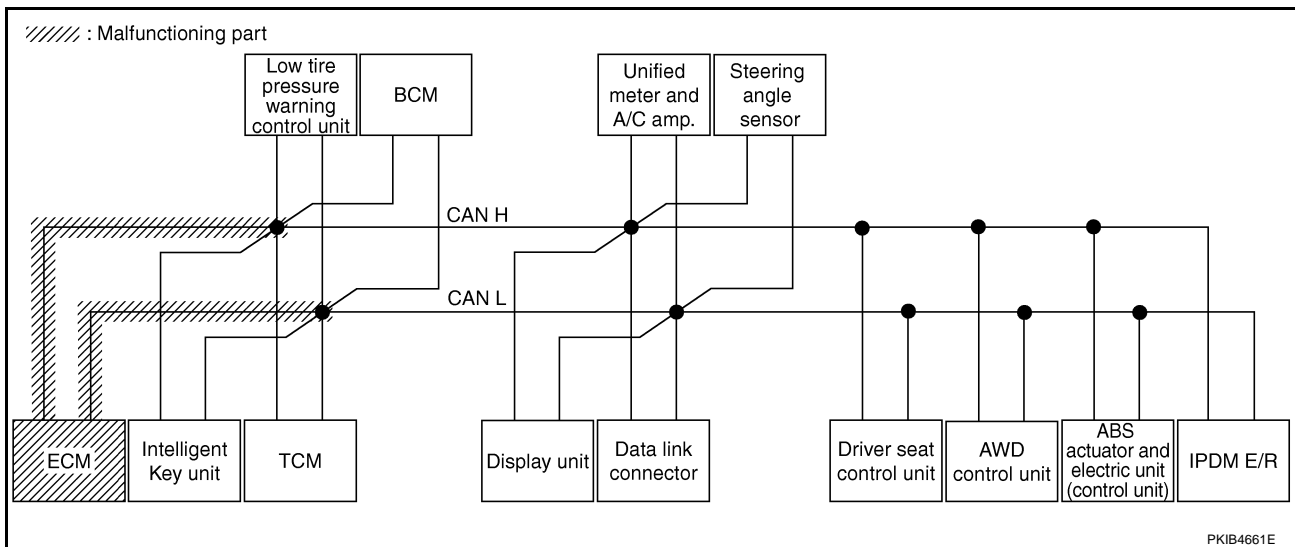
[CAN]

## Case 5

Check ECM circuit. Refer to [LAN-368, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS						
		Initial diagnosis	Transmit diagnosis	Receive diagnosis																
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R				
ENGINE	—	NG	UNKWN	✓	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	✓	✓	✓	CAN COMM CIRCUIT (U000)	✓	CAN COMM CIRCUIT (U001)	✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	✓	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U000)	✓	—	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	✓	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U000)	✓	—	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—	—	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U000)	✓	—	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U000)	✓	—	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	✓	—	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U000)	✓	—	—

PKIB4870E



PKIB4661E



# CAN SYSTEM (TYPE 9)

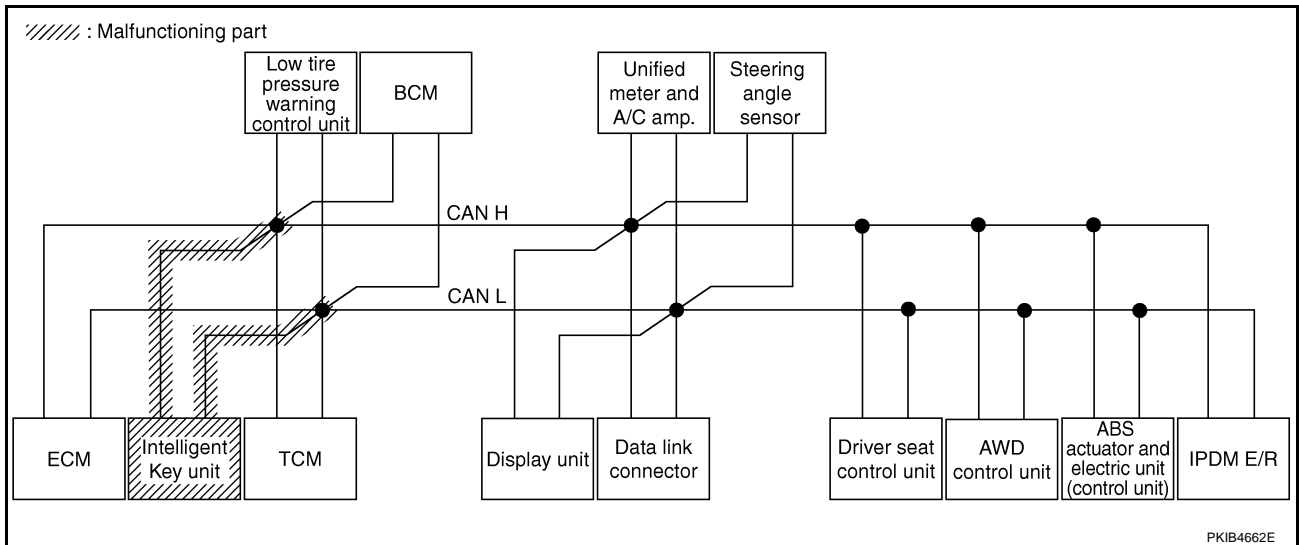
[CAN]

## Case 6

Check Intelligent Key unit circuit. Refer to [LAN-369, "Intelligent Key Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4871E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 9)

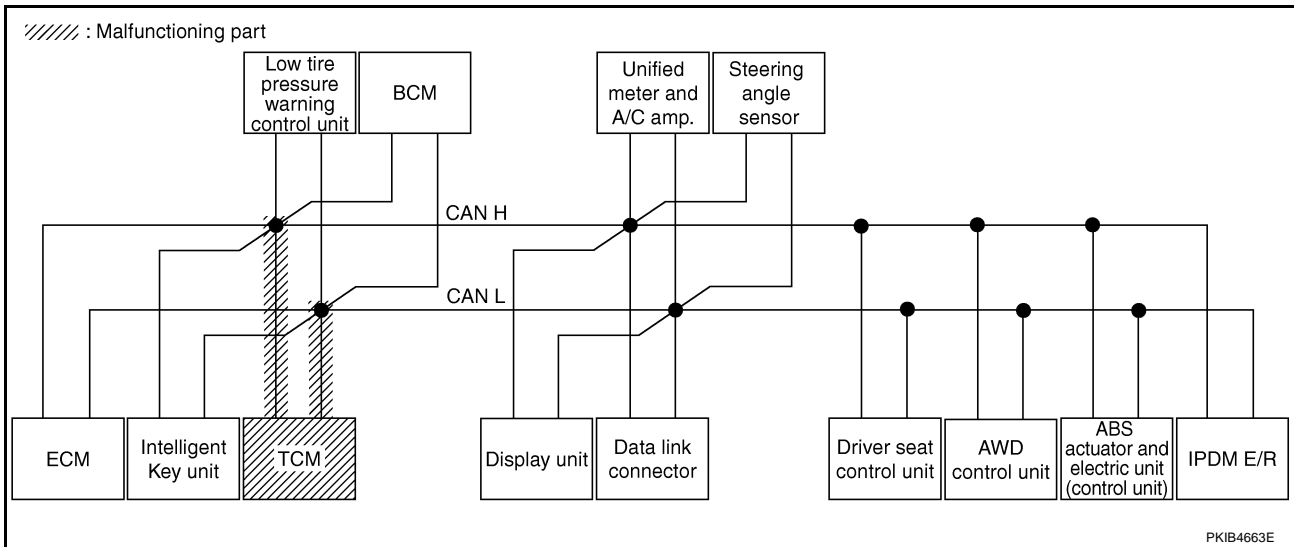
[CAN]

## Case 7

Check TCM circuit. Refer to [LAN-369, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—
TRANSMISSION	✓ No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000) —	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U100) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U100) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) —	—
ABS	—	NG	UNKWN	UNKWN	—	✓	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—

PKIB4872E



PKIB4663E

# CAN SYSTEM (TYPE 9)

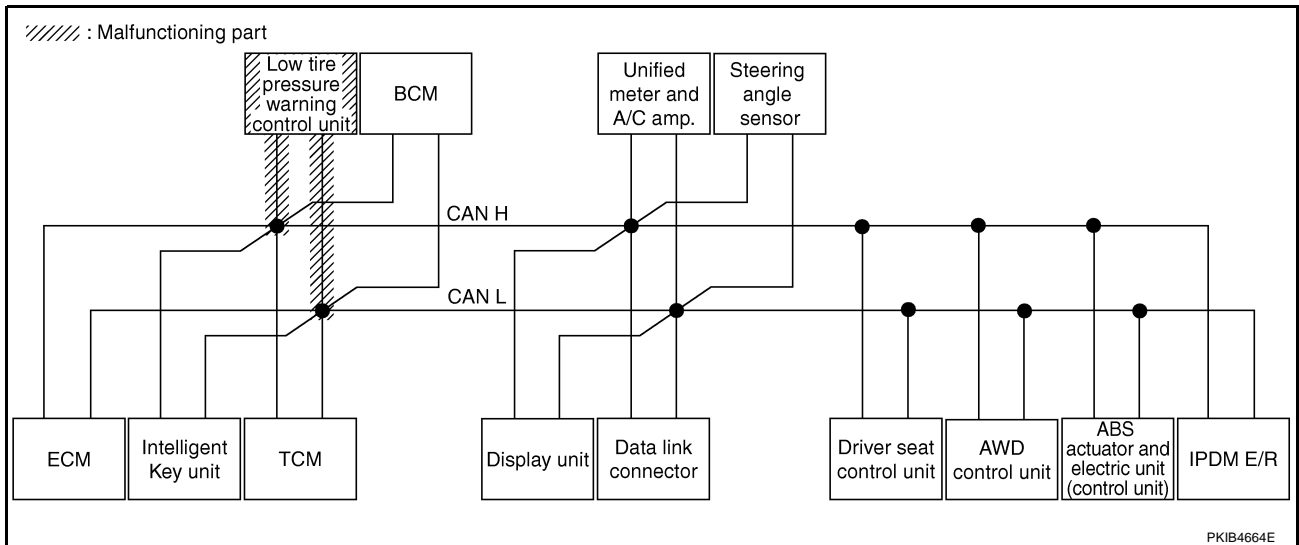
[CAN]

## Case 8

Check low tire pressure warning control unit circuit. Refer to [LAN-370, "Low Tire Pressure Warning Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	—	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4873E



# CAN SYSTEM (TYPE 9)

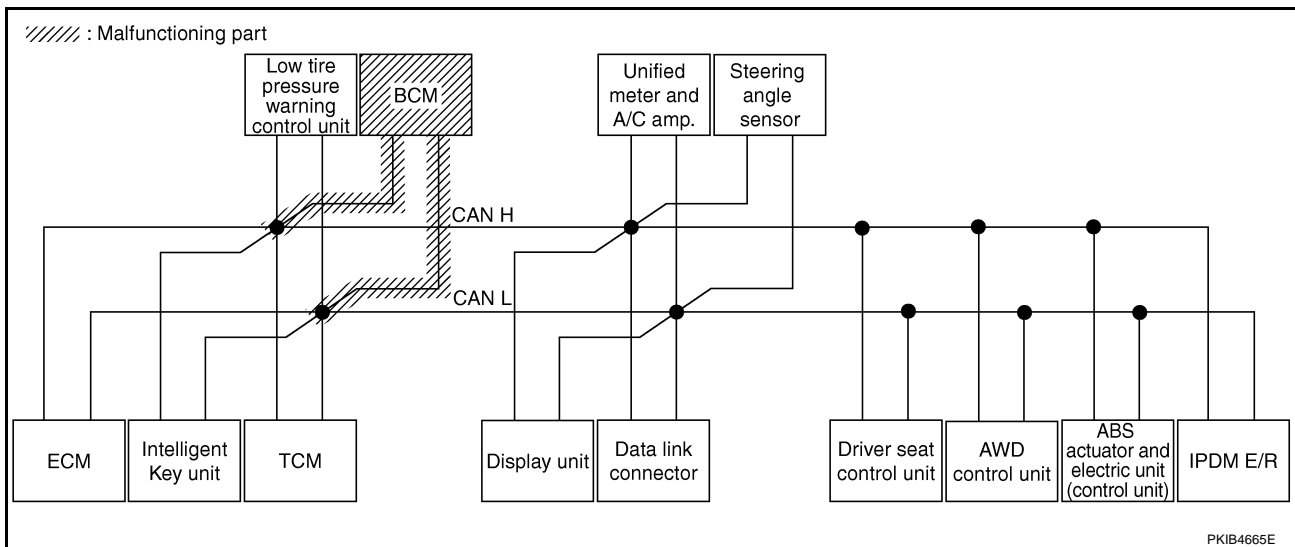
[CAN]

## Case 9

Check BCM circuit. Refer to [LAN-370, "BCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U000)	—	

PKIB4874E



PKIB4665E

# CAN SYSTEM (TYPE 9)

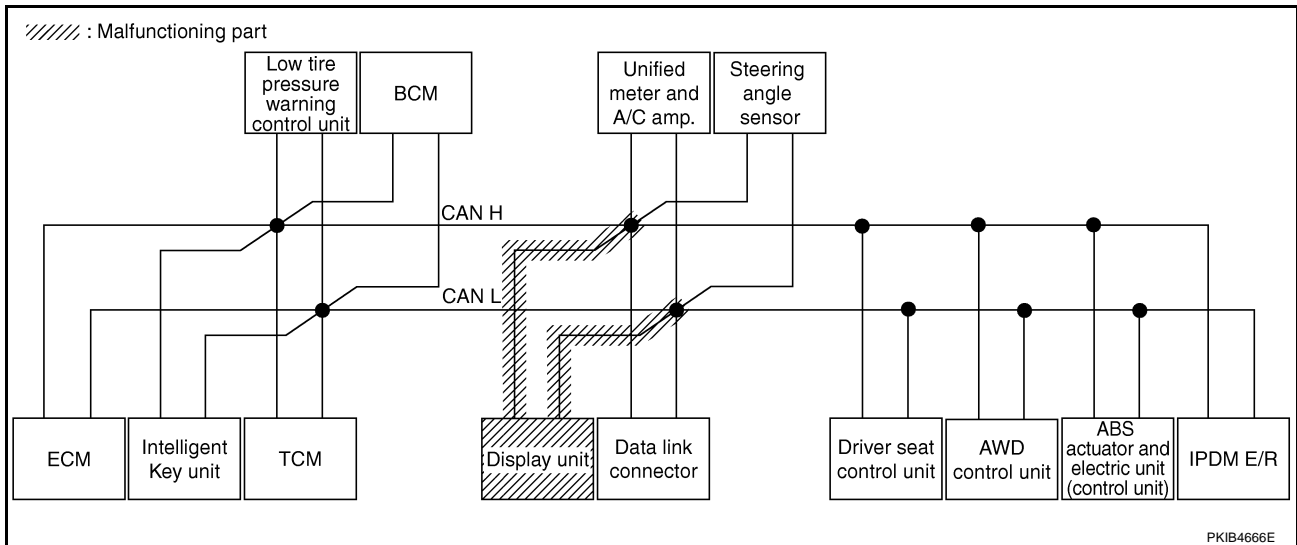
[CAN]

## Case 10

Check display unit circuit. Refer to [LAN-371, "Display Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	✓	✓	—	—	✓	✓	—	✓	—	—	—	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	

PKIB4875E



PKIB4666E

# CAN SYSTEM (TYPE 9)

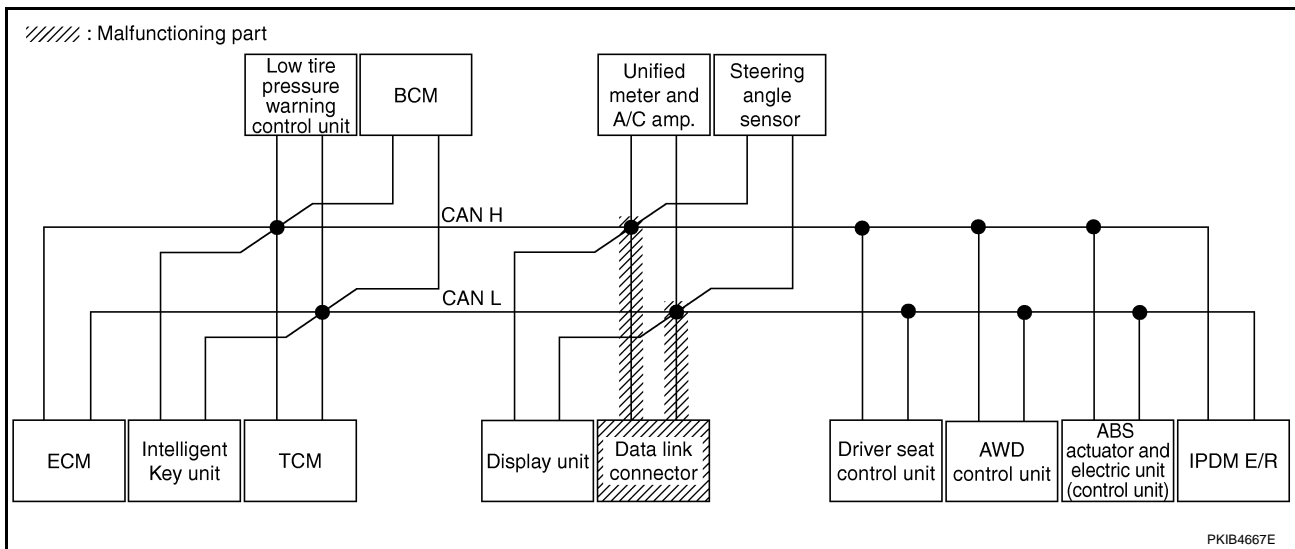
[CAN]

## Case 11

Check data link connector circuit. Refer to [LAN-371, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4876E



PKIB4667E

# CAN SYSTEM (TYPE 9)

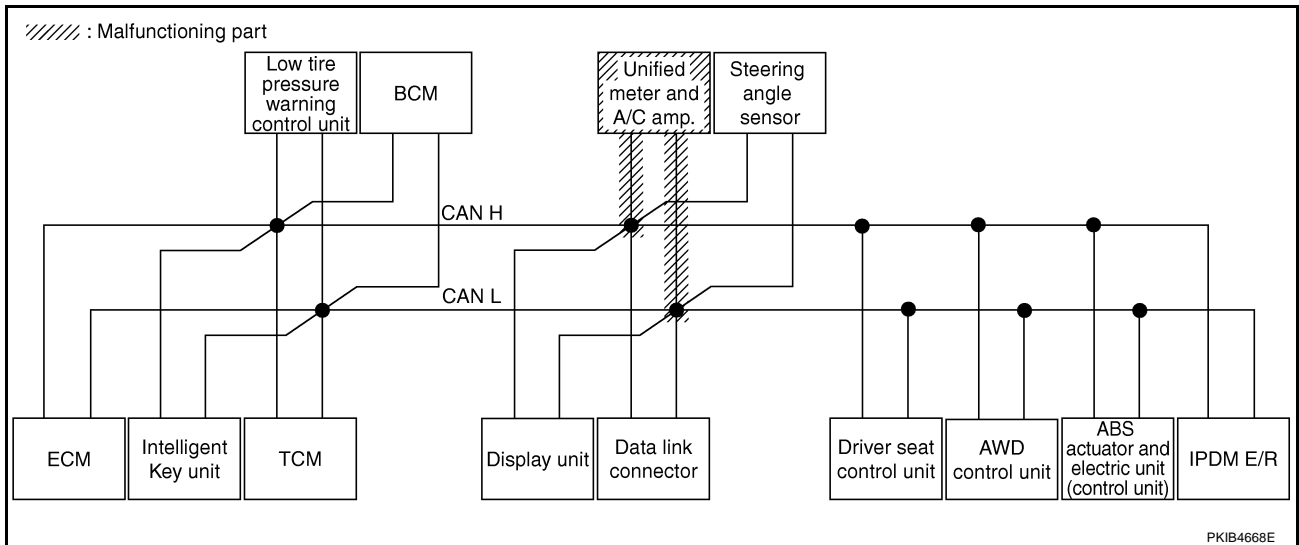
[CAN]

## Case 12

Check unified meter and A/C amp. circuit. Refer to [LAN-372, "Unified Meter and A/C Amp. Circuit Inspection"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4877E



PKIB4668E

# CAN SYSTEM (TYPE 9)

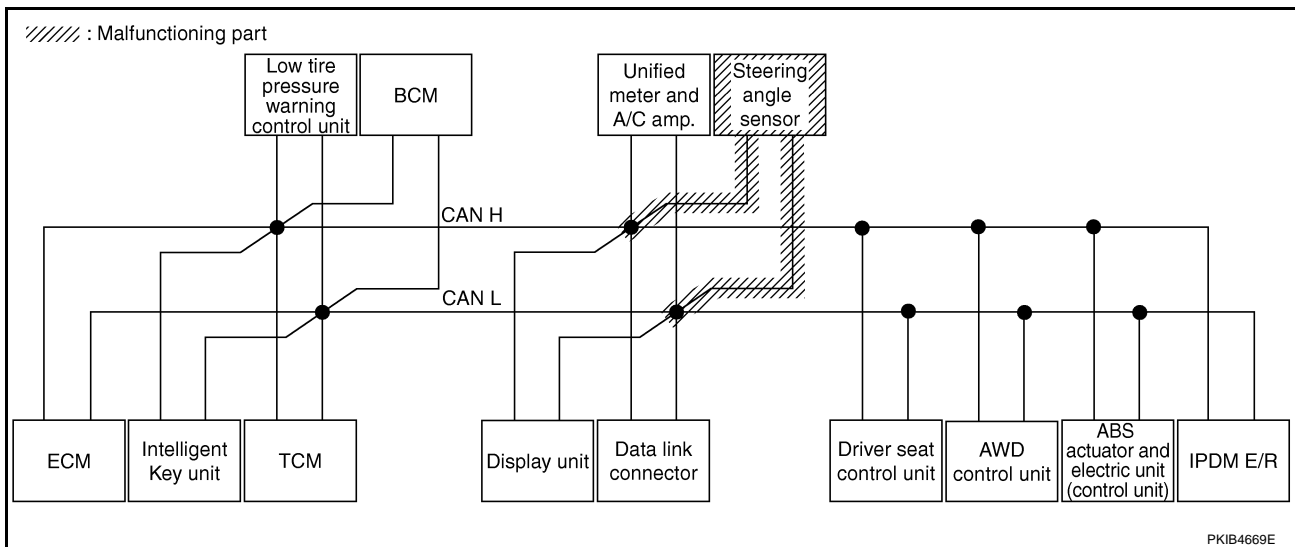
[CAN]

## Case 13

Check steering angle sensor circuit. Refer to [LAN-372, "Steering Angle Sensor Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	✓	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4878E



PKIB4669E



# CAN SYSTEM (TYPE 9)

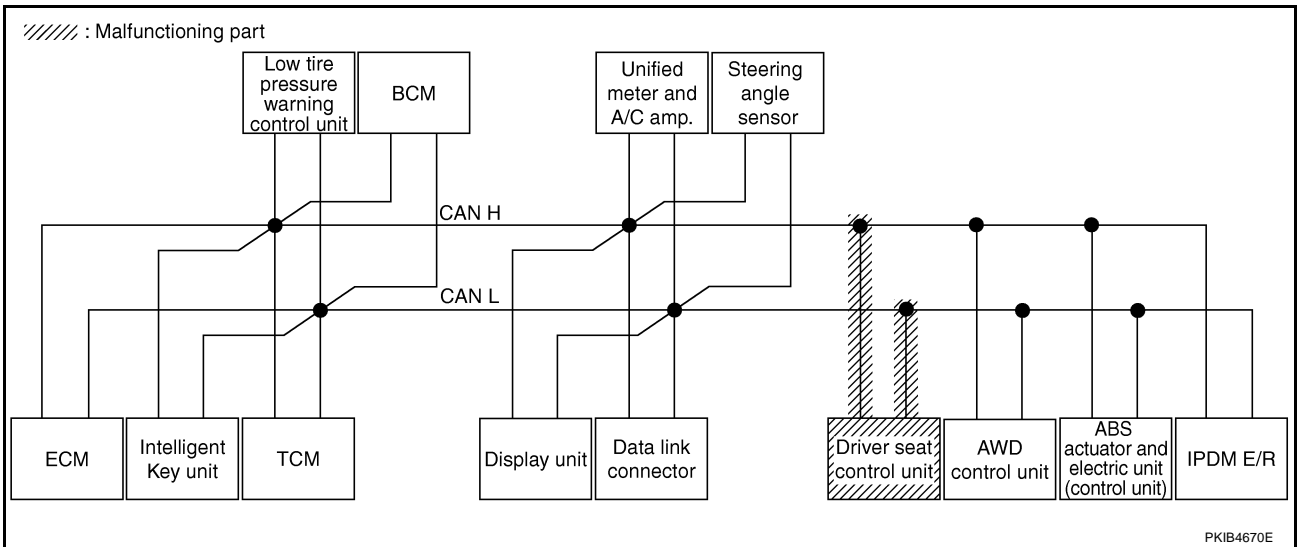
[CAN]

## Case 14

Check driver seat control unit circuit. Refer to [LAN-373, "Driver Seat Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4879E



PKIB4670E

# CAN SYSTEM (TYPE 9)

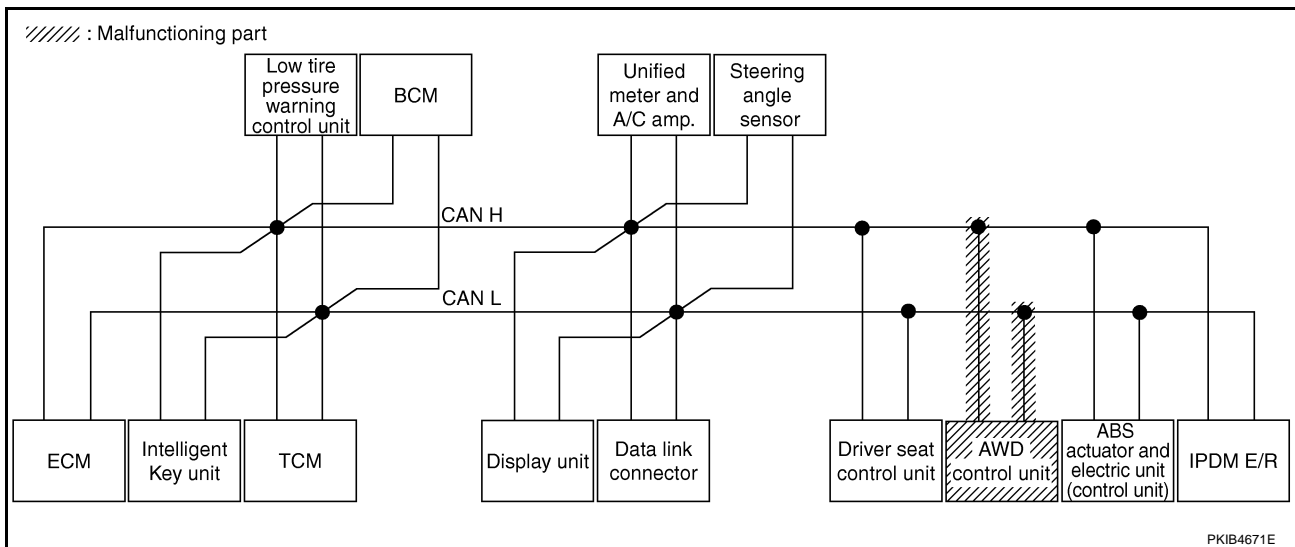
[CAN]

## Case 15

Check AWD control unit circuit. Refer to [LAN-373. "AWD Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1011) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN ✓	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN ✓	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB480E



PKIB4671E

# CAN SYSTEM (TYPE 9)

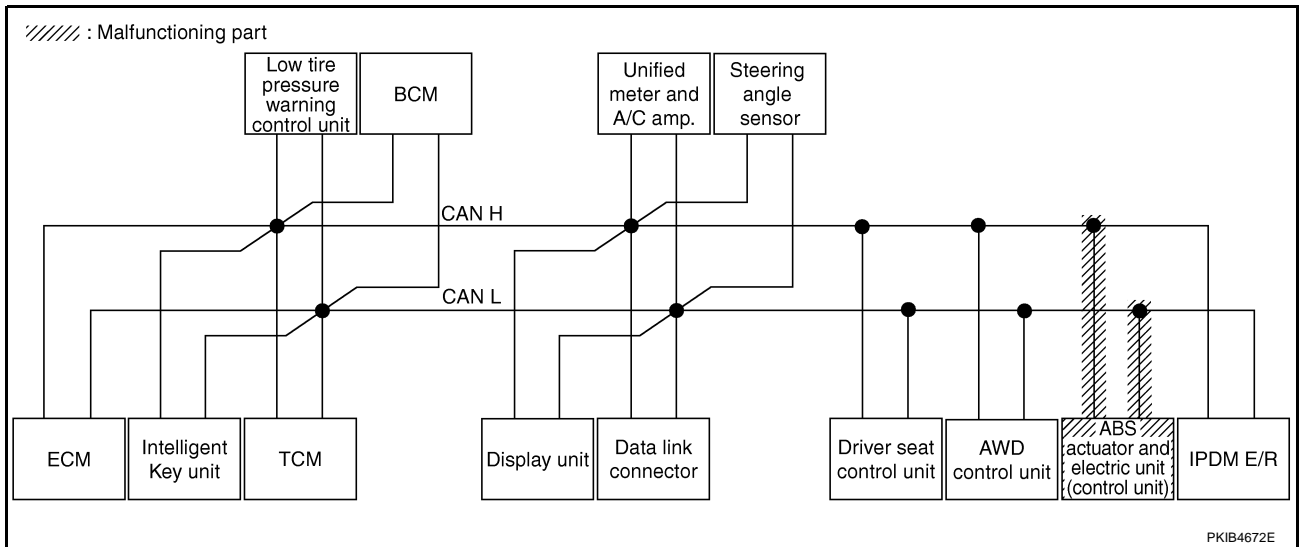
[CAN]

## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-374, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	✓	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	✓	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	✓	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	✓	✓	—	✓	—	—	—	—	—	✓	✓	—	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4881E



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

# CAN SYSTEM (TYPE 9)

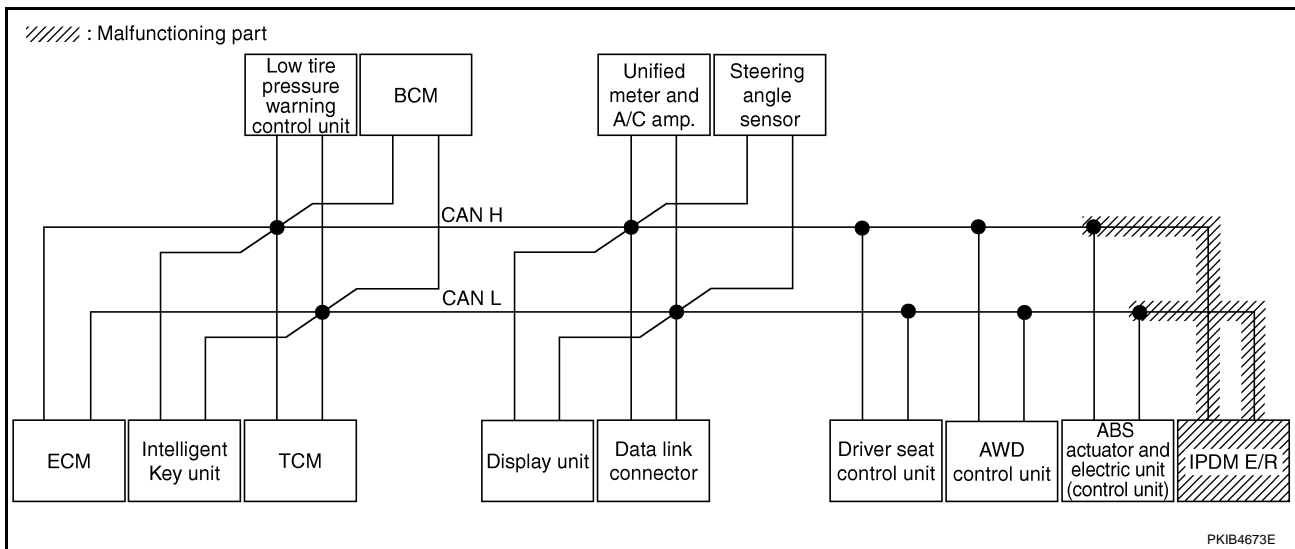
[CAN]

## Case 17

Check IPDM E/R circuit. Refer to [LAN-374, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis													
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R	
ENGINE	✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4882E



PKIB4673E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 18

Check CAN communication circuit. Refer to [LAN-375, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	✓	—	—	✓	—	✓	—	✓	—	✓	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	✓	✓	—	—	✓	✓	—	✓	—	—	—	✓	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	
ABS	—	✓	✓	✓	—	✓	—	—	—	—	✓	✓	—	CAN COMM CIRCUIT (U1000)	—	
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4883E

## Case 19

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-381, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	✓	✓	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	UNKWN	—	—	✓	✓	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6349E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## Case 20

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-381, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	UNKWN	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6350E

## Inspection Between TCM and Data Link Connector Circuit

AKS00C1D

### 1. CHECK HARNESS FOR OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

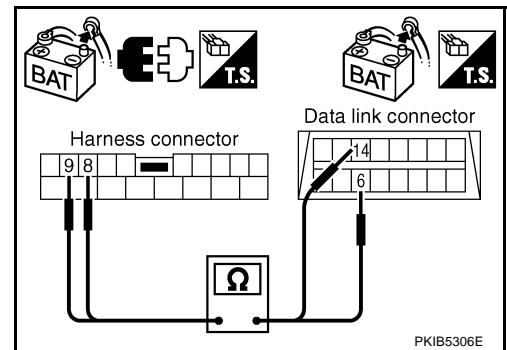
**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

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

NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00C1E

### 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 M9
  - Harness connector B2

OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

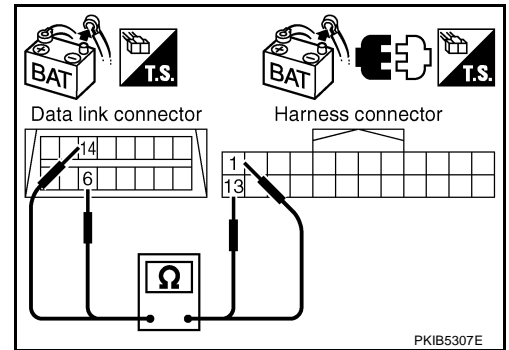
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



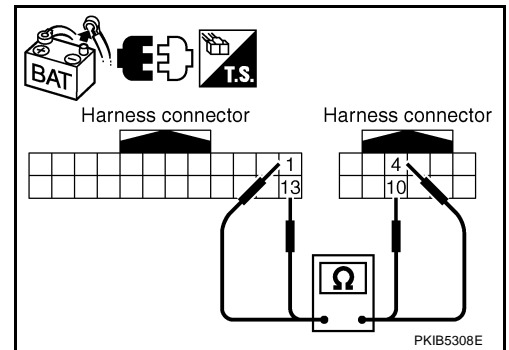
**3. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



**Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit** AKS00C1F

**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 B4
  - Harness connector E105

OK or NG

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

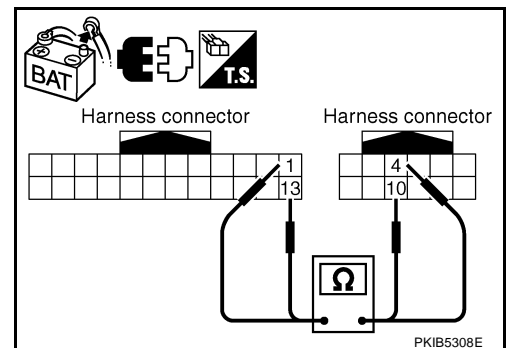
**2. CHECK HARNESS FOR OPEN CIRCUIT**

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



### 3. CHECK HARNESS FOR OPEN CIRCUIT

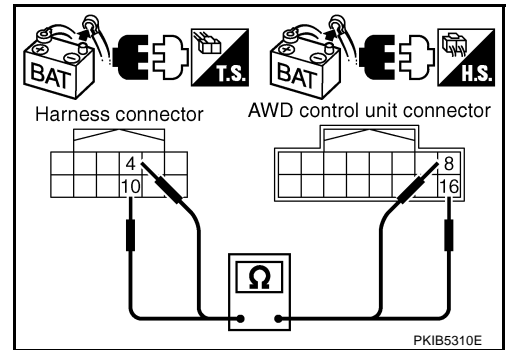
1. Disconnect AWD control unit connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and AWD control unit harness connector E111 terminals 8 (L), 16 (Y).

**4 (L) - 8 (L) : Continuity should exist.**

**10 (Y) - 16 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



### Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit

AKS00CIG

#### 1. CHECK CONNECTOR

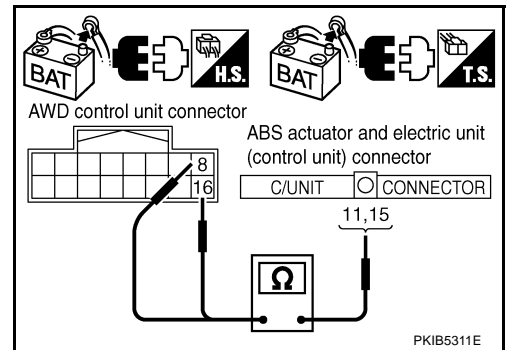
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect following connectors.
  - ECM
  - AWD control unit
  - ABS actuator and electric unit (control unit)
4. Check continuity between AWD control unit harness connector E111 terminals 8 (L), 16 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**8 (L) - 11 (L) : Continuity should exist.**

**16 (Y) - 15 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



AKS00CIH

### ECM Circuit Inspection

#### 1. CHECK CONNECTOR

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

OK or NG

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



## 2. CHECK HARNESS FOR OPEN CIRCUIT

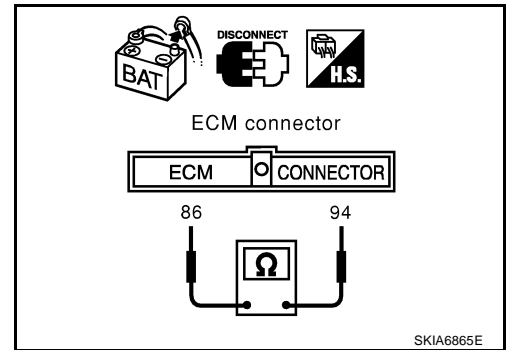
1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM and BCM.



## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

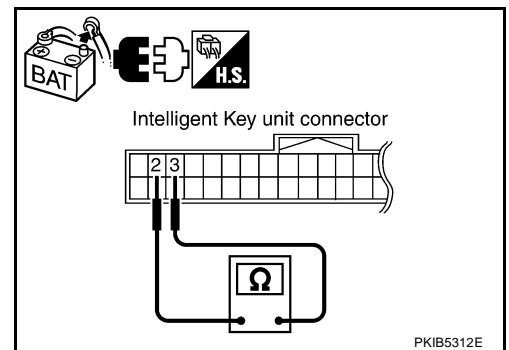
1. Disconnect Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

**2 (L) - 3 (Y)**

**: Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace Intelligent Key unit.  
 NG >> Repair harness between Intelligent Key unit and BCM.



## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

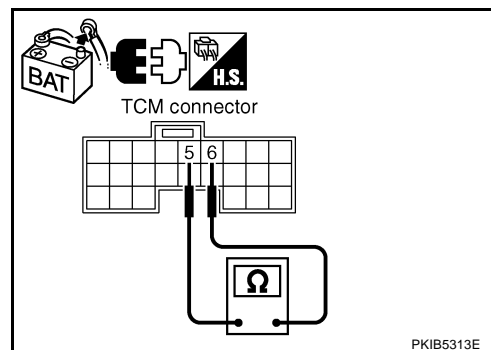
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM and BCM.



## Low Tire Pressure Warning Control Unit Circuit Inspection

AKS00C1K

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of low tire pressure warning 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.

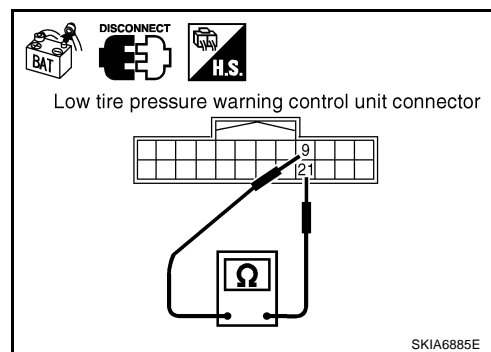
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect low tire pressure warning control unit connector.
2. Check resistance between low tire pressure warning control unit harness connector M81 terminals 9 (L) and 21 (Y).

**9 (L) - 21 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace low tire pressure warning control unit.  
NG >> Repair harness between low tire pressure warning control unit and BCM.



## BCM Circuit Inspection

AKS00C1L

### 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.

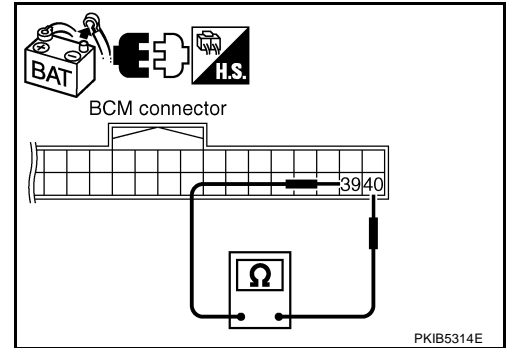
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#).
- NG >> Repair harness between BCM and harness connector M82.



AKS00C1M

## Display Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

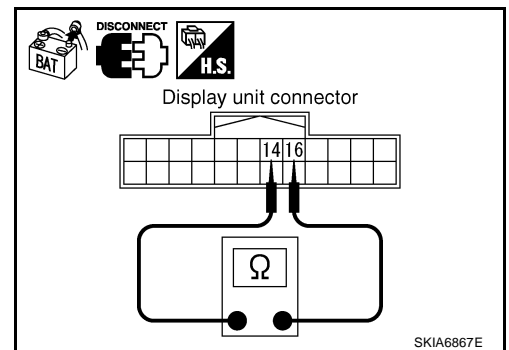
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display unit connector.
2. Check resistance between display unit harness connector M39 terminals 14 (L) and 16 (Y).

**14 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace display unit.
- NG >> Repair harness between display unit and data link connector.



AKS00C1N

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

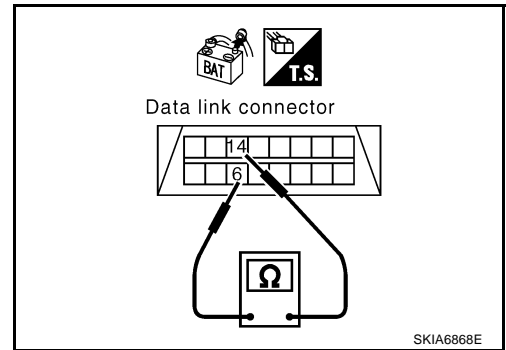
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness between data link connector and unified meter and A/C amp.



AKS00C10

## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

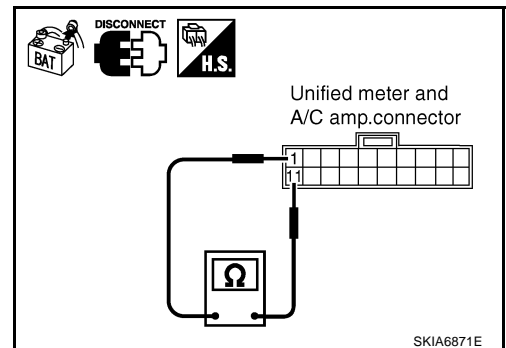
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.
- NG >> Repair harness between unified meter and A/C amp. and data link connector.



AKS00C1P

## Steering Angle Sensor Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

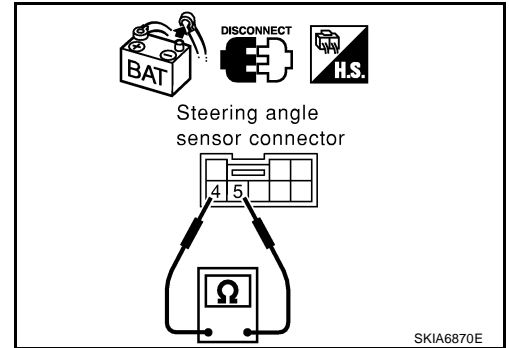
1. Disconnect steering angle sensor connector.
2. Check resistance between steering angle sensor harness connector M33 terminals 4 (L) and 5 (Y).

**4 (L) - 5 (Y)**

**: Approx. 54 - 66Ω**

### 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

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

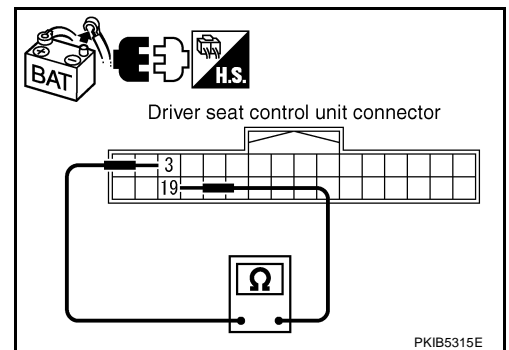
1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W)**

**: Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



## AWD Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of 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.

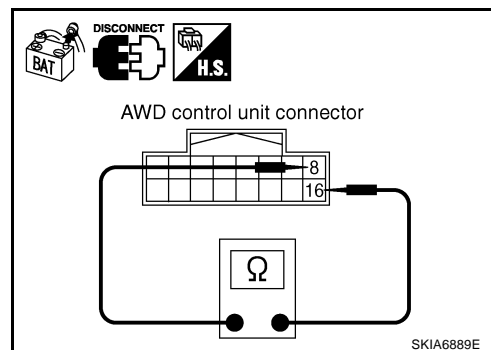
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector E111 terminals 8 (L) and 16 (Y).

**8 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace AWD control unit.  
 NG >> Repair harness between AWD control unit and IPDM E/R.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00CIS

### 1. CHECK CONNECTOR

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

### OK or NG

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

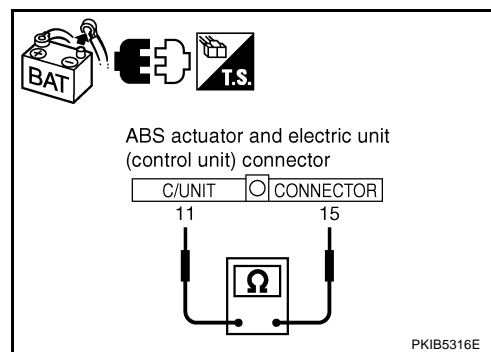
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



## IPDM E/R Circuit Inspection

AKS00CIT

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of IPDM E/R 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

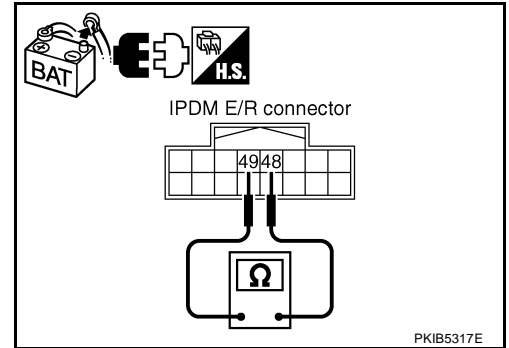
1. Disconnect IPDM E/R connector.
2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

**48 (L) - 49 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

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



AKS00CIU

## CAN Communication Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - Low tire pressure warning control unit connector
  - BCM connector
  - Display unit connector
  - Unified meter and A/C amp. connector
  - Steering angle sensor connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

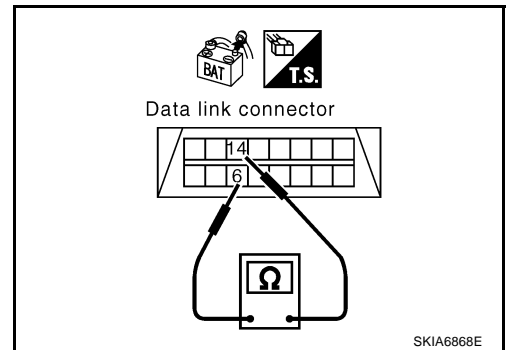
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9





### 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

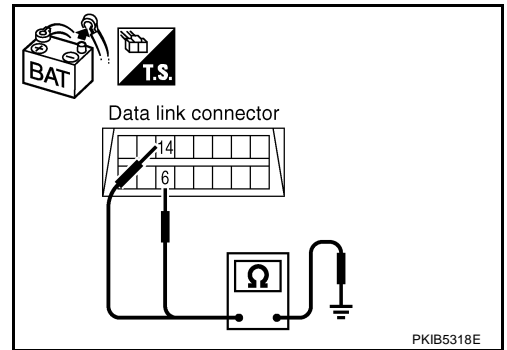
**14 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 4. CHECK HARNESS FOR SHORT CIRCUIT

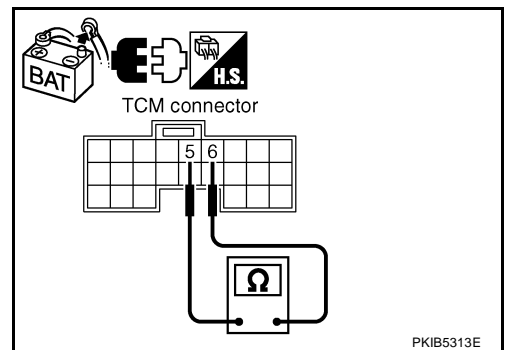
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

#### OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



### 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

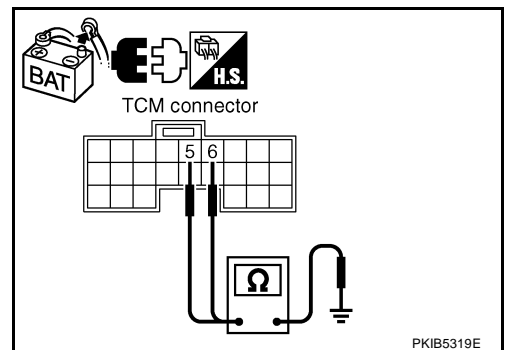
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



## 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

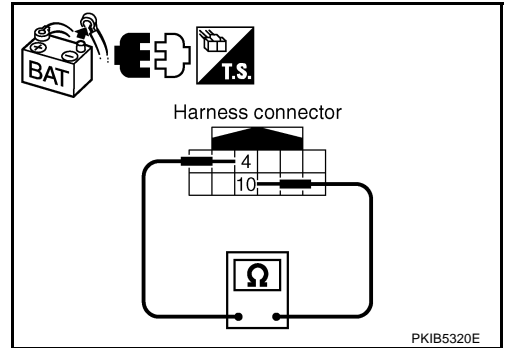
**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 7.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

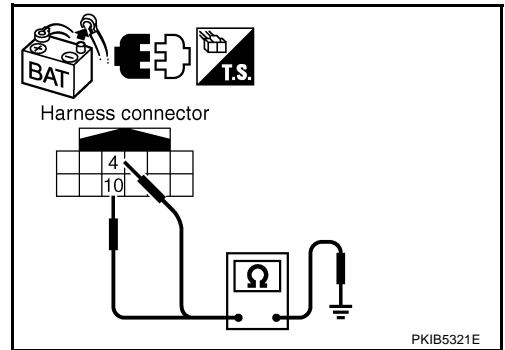
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

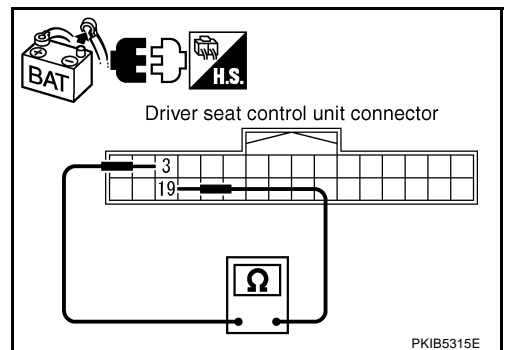
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

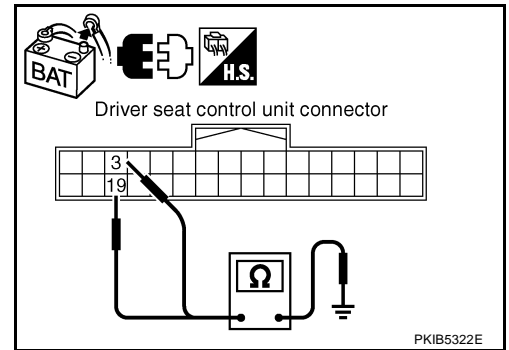
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect following connectors.
  - AWD control unit connector
  - ABS actuator and electric unit (control unit) connector
  - IPDM E/R connector
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

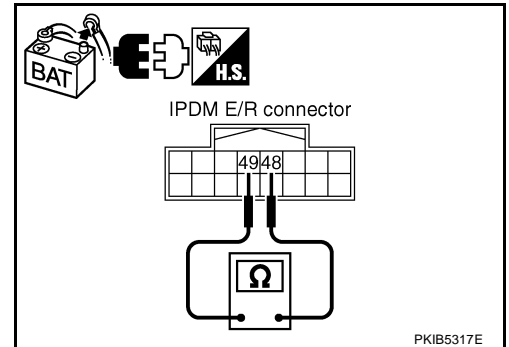
**48 (L) - 49 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

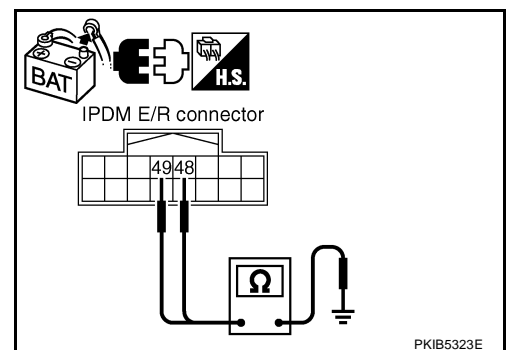
**49 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 12.

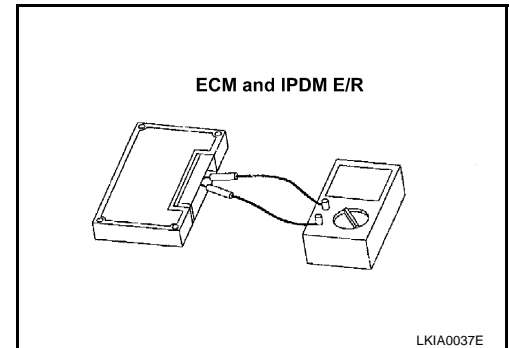
NG >> Check the following harnesses. If any harness is damaged, repair the harness.

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

1. Remove ECM and IPDM E/R from vehicle.
2. Check resistance between ECM terminals 94 and 86.  
**94 - 86 : Approx. 108 – 132 Ω**
3. Check resistance between IPDM E/R terminals 48 and 49.  
**48 - 49 : Approx. 108 – 132 Ω**



### OK or NG

- OK >> GO TO 13.  
NG >> Replace ECM and/or IPDM E/R.

## 13. CHECK SYMPTOM

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

### OK or NG

- OK >> GO TO 14.  
NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

## IPDM E/R Ignition Relay Circuit Inspection

AKS00CIV

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

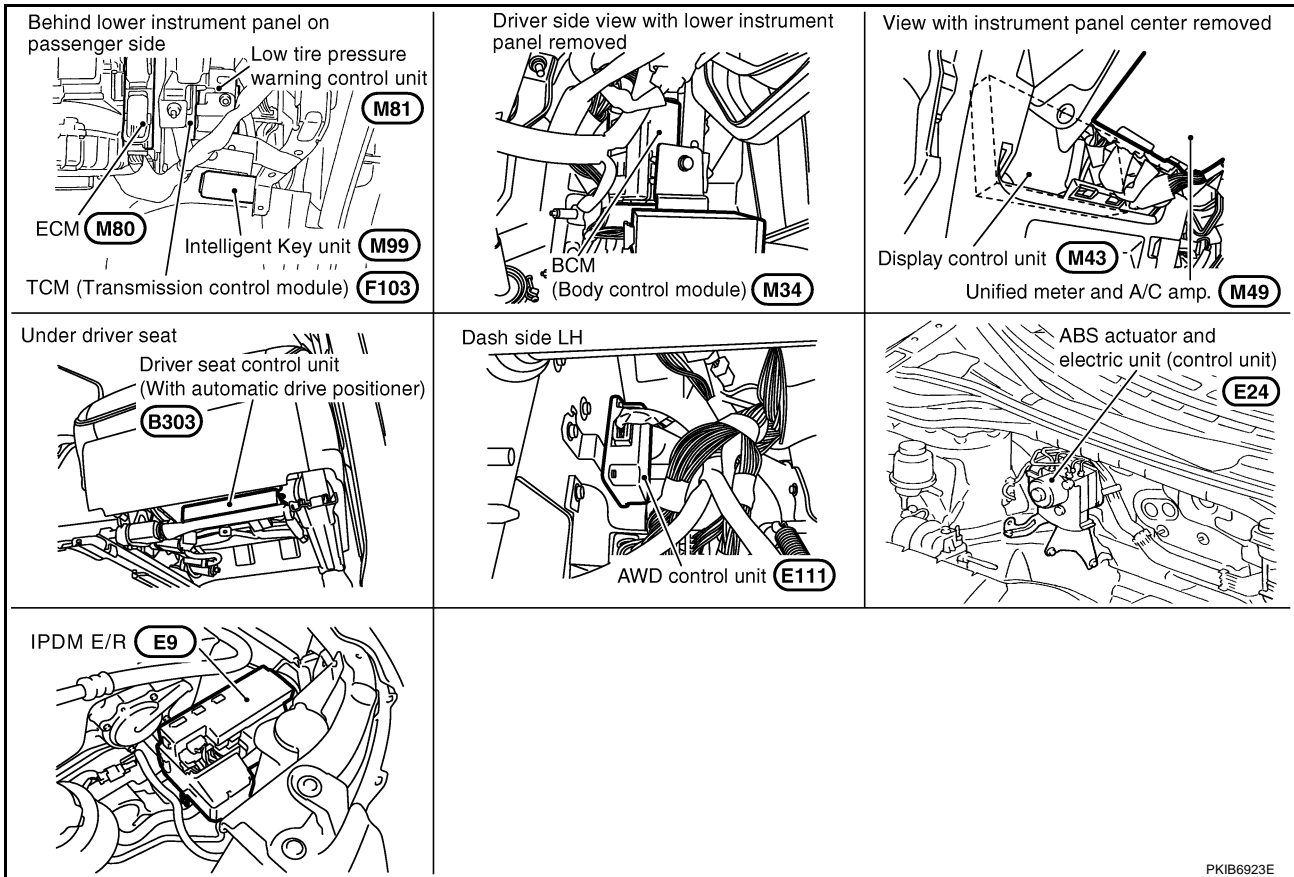
- IPDM E/R power supply circuit. Refer to [PG-27, "IPDM E/R Power/Ground Circuit Inspection"](#) .
- Ignition power supply circuit. Refer to [PG-10, "IGNITION POWER SUPPLY - IGNITION SW. IN "ON" AND/OR "START" "](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

## CAN SYSTEM (TYPE 10)

### Component Parts and Harness Connector Location

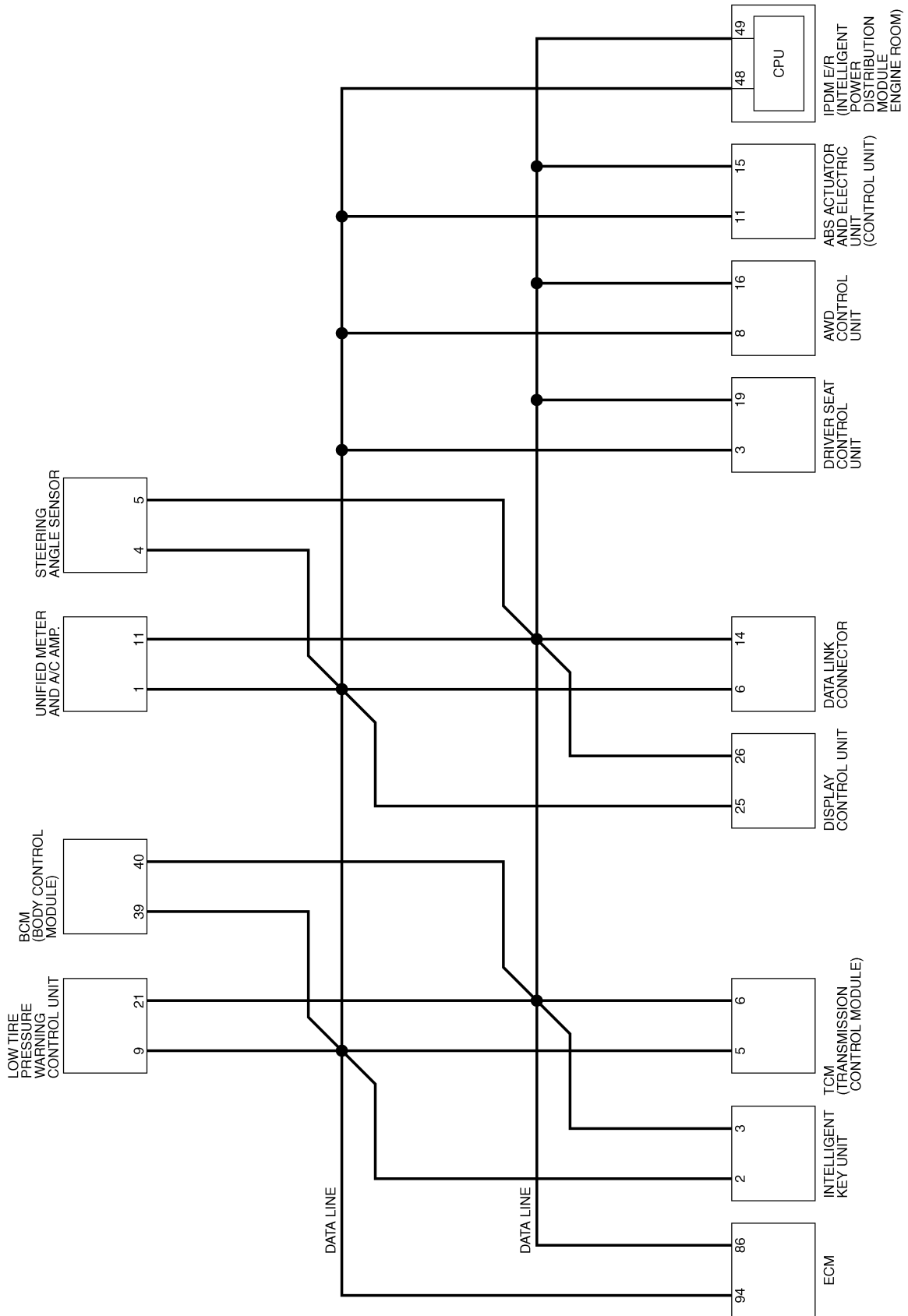


# CAN SYSTEM (TYPE 10)

[CAN]

## Schematic

AKS00AHE



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

LAN

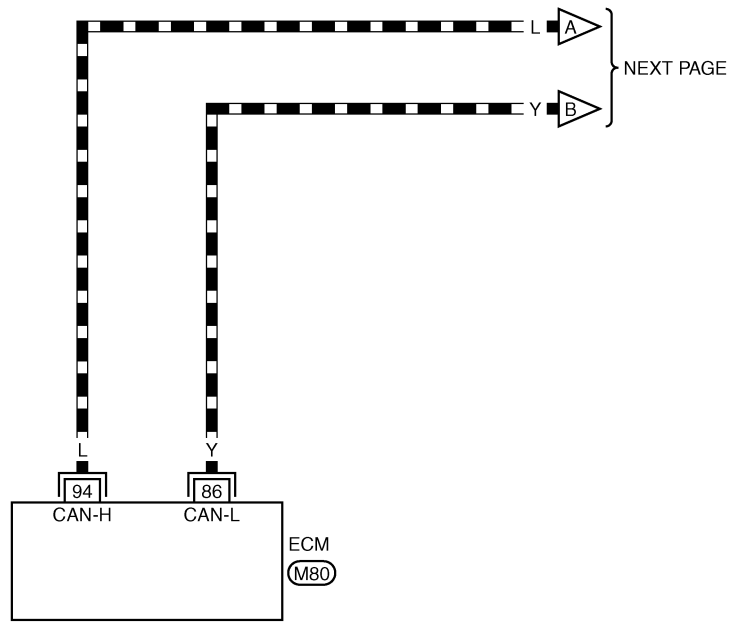
TKWB0873E

Wiring Diagram - CAN -

AKS00AHF

LAN-CAN-44

▬ : DATA LINE



REFER TO THE FOLLOWING.  
(M80) -ELECTRICAL UNITS

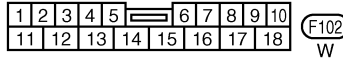
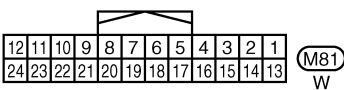
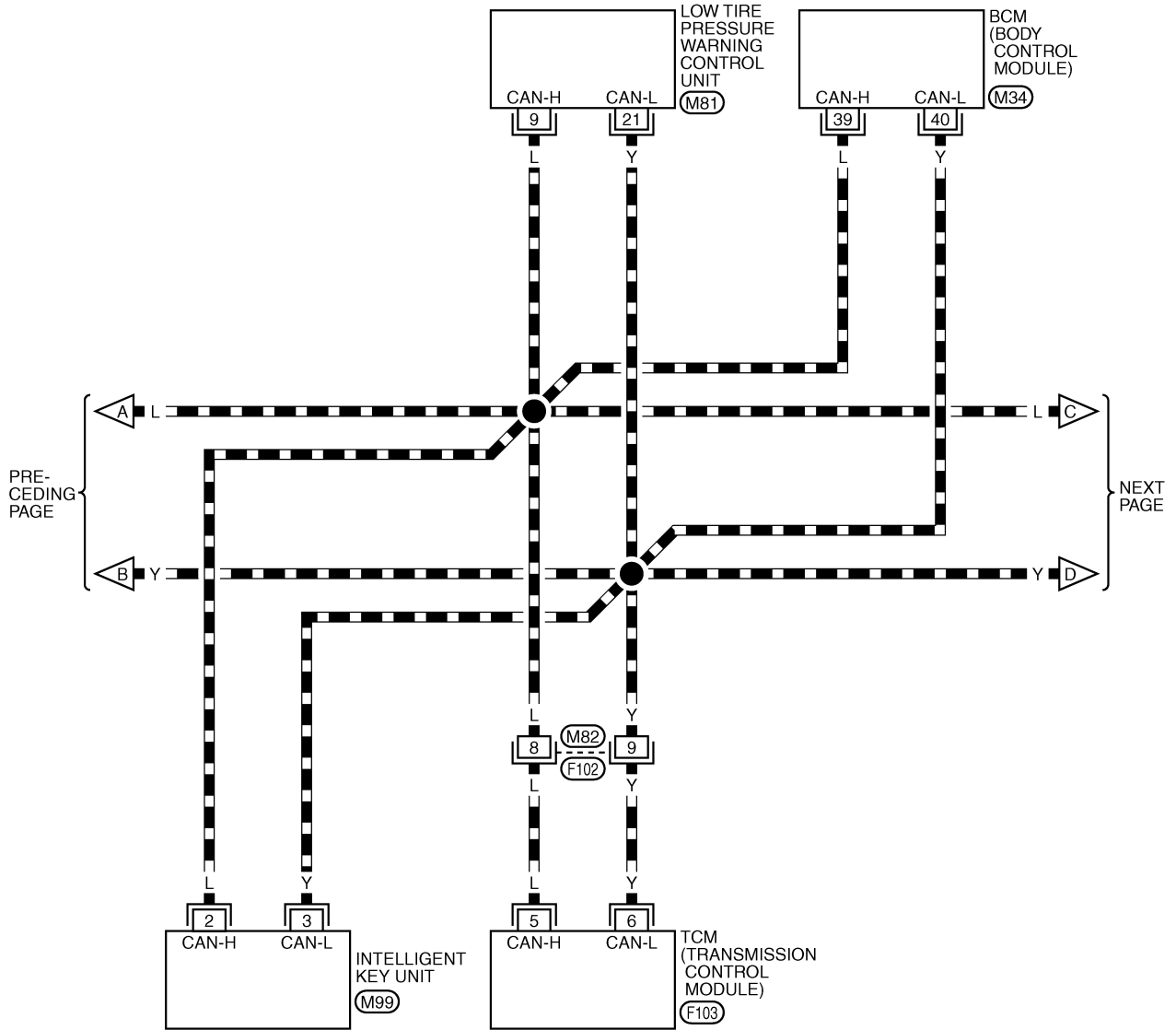


# CAN SYSTEM (TYPE 10)

[CAN]

## LAN-CAN-45

▬ : DATA LINE



REFER TO THE FOLLOWING.

(M34), (M99), (F103)  
-ELECTRICAL UNITS

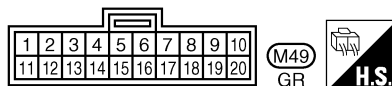
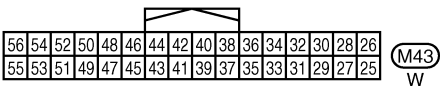
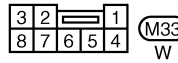
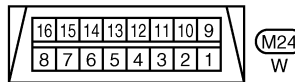
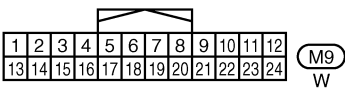
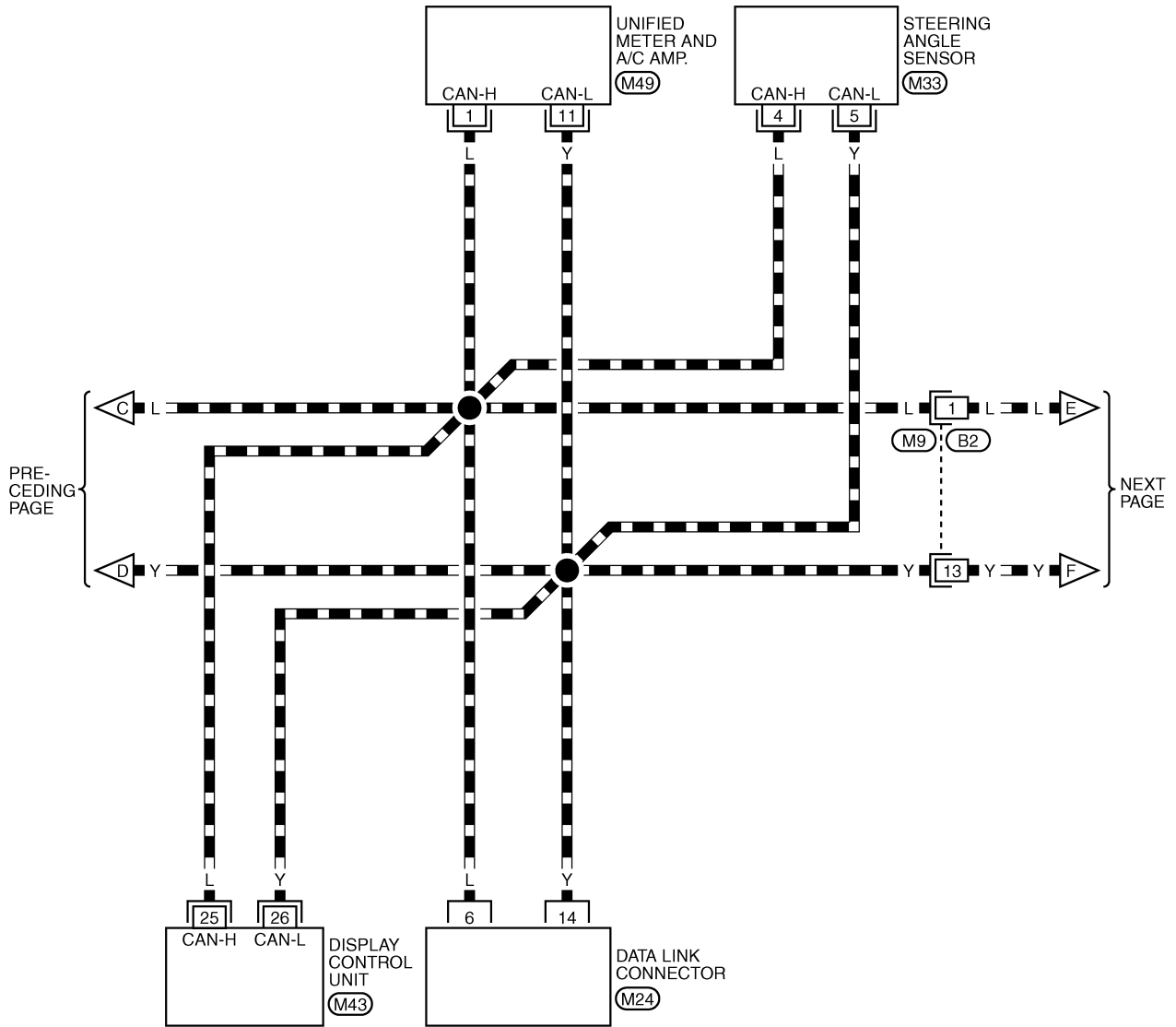
TKWB0875E

# CAN SYSTEM (TYPE 10)

[CAN]

## LAN-CAN-46

▬ : DATA LINE



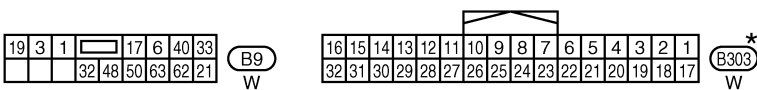
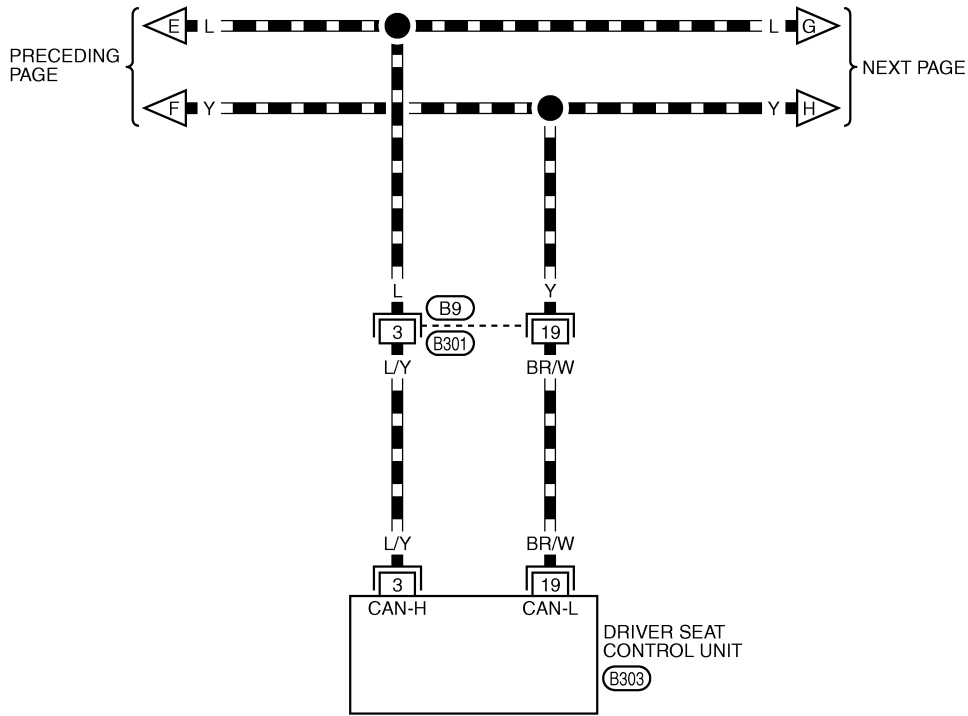
TKWB0876E

# CAN SYSTEM (TYPE 10)

[CAN]

LAN-CAN-47

▬ : DATA LINE



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

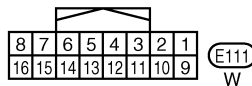
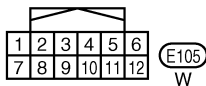
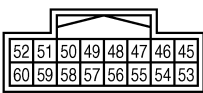
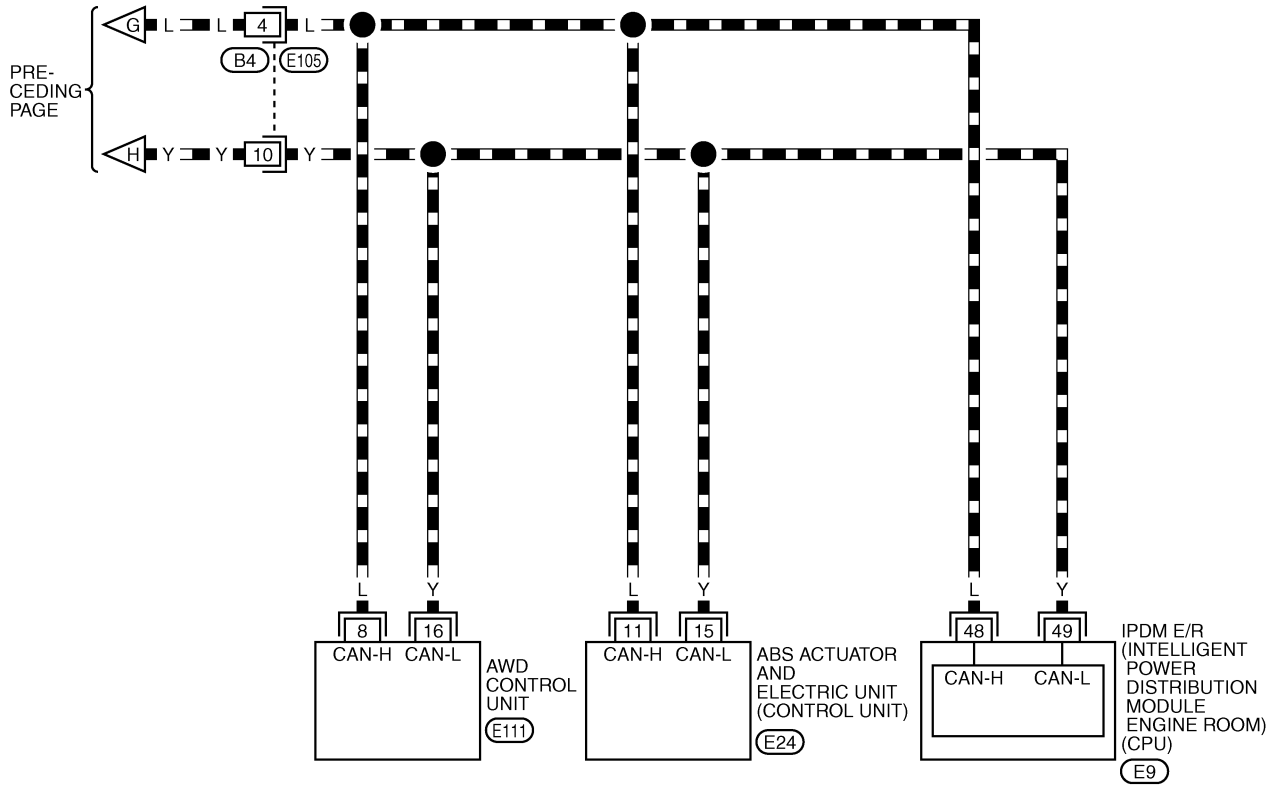
TKWB0877E

# CAN SYSTEM (TYPE 10)

[CAN]

## LAN-CAN-48

▬ : DATA LINE



REFER TO THE FOLLOWING.

E24 -ELECTRICAL UNITS

TKWB0878E

# CAN SYSTEM (TYPE 10)

[CAN]

AKS00AHG

## Check Sheet

**NOTE:**

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

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Display control unit Translation Sheet: Rewrite the following names, and put a check mark on the above check sheet table.			
Confirmation/Adjustment Display	Check sheet table Display	Confirmation/Adjustment Display	Check sheet table Display
CAN COMM	Initial diagnosis	CAN CIRC 5	METER/M&A
CAN CIRC 1	Transmit diagnosis	CAN CIRC 6	TIRE-P
CAN CIRC 2	BCM	CAN CIRC 7	IPDM E/R
CAN CIRC 3	ECM	CAN CIRC 8	—
CAN CIRC 4	—	CAN CIRC 9	—

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

PKIB4727E

# CAN SYSTEM (TYPE 10)

[CAN]

Attach copy of  
ENGINE  
SELF-DIAG RESULTS

Attach copy of  
INTELLIGENT KEY  
SELF-DIAG RESULTS

Attach copy of  
TRANSMISSION  
SELF-DIAG RESULTS

Attach copy of  
AIR PRESSURE  
MONITOR  
SELF-DIAG RESULTS

Attach copy of  
BCM  
SELF-DIAG RESULTS

Attach copy of  
METER A/C AMP  
SELF-DIAG RESULTS

Attach copy of  
AUTO DRIVE POS.  
SELF-DIAG RESULTS

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

Attach copy of  
ABS  
SELF-DIAG RESULTS

Attach copy of  
IPDM E/R  
SELF-DIAG RESULTS

PKIB4725E

# CAN SYSTEM (TYPE 10)

[CAN]

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LAN  
L  
M

Attach copy of  
ENGINE  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
INTELLIGENT KEY  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
TRANSMISSION  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AIR PRESSURE  
MONITOR  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
BCM  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
METER A/C AMP  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
AUTO DRIVE POS.  
CAN DIAG SUPPORT  
MNTR

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

Attach copy of  
ABS  
CAN DIAG SUPPORT  
MNTR

Attach copy of  
IPDM E/R  
CAN DIAG SUPPORT  
MNTR

PKIB4726E

## CHECK SHEET RESULTS (EXAMPLE)

### NOTE:

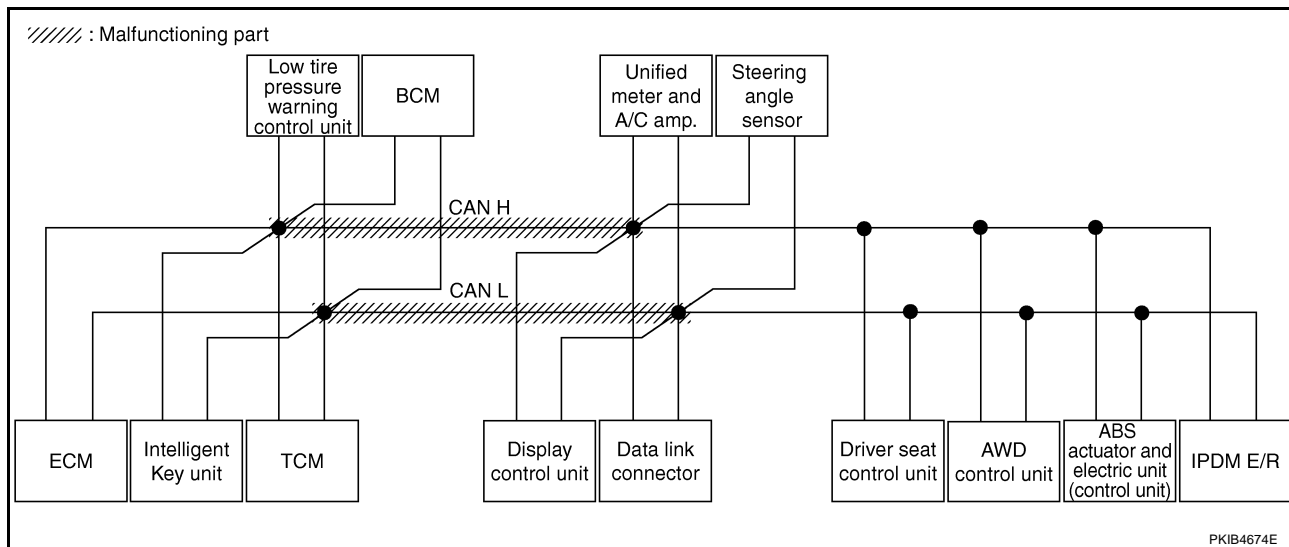
If a check mark is put on "NG" on "INITIAL DIAG (Initial diagnosis)", replace the control unit.

### Case 1

Check harness between TCM and data link connector. Refer to [LAN-410, "Inspection Between TCM and Data Link Connector Circuit"](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4886E





# CAN SYSTEM (TYPE 10)

[CAN]

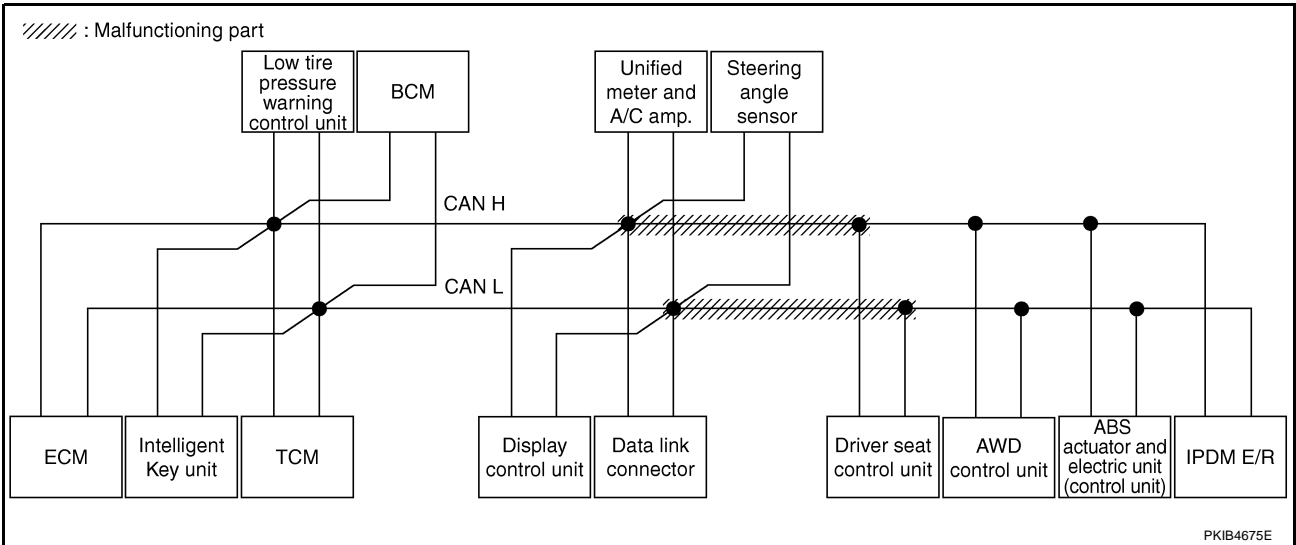
## Case 2

Check harness between data link connector and driver seat control unit. Refer to [LAN-410, "Inspection Between Data Link Connector and Driver Seat Control Unit Circuit"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4887E



LAN

# CAN SYSTEM (TYPE 10)

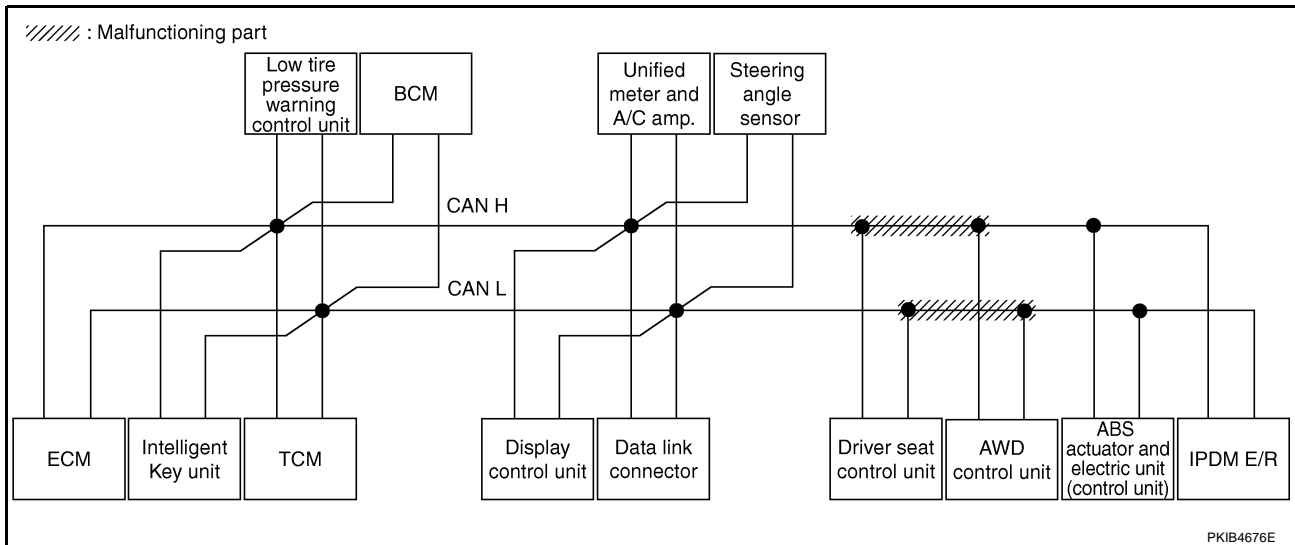
[CAN]

## Case 3

Check harness between driver seat control unit and AWD control unit. Refer to [LAN-411, "Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U601)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4888E



PKIB4676E

# CAN SYSTEM (TYPE 10)

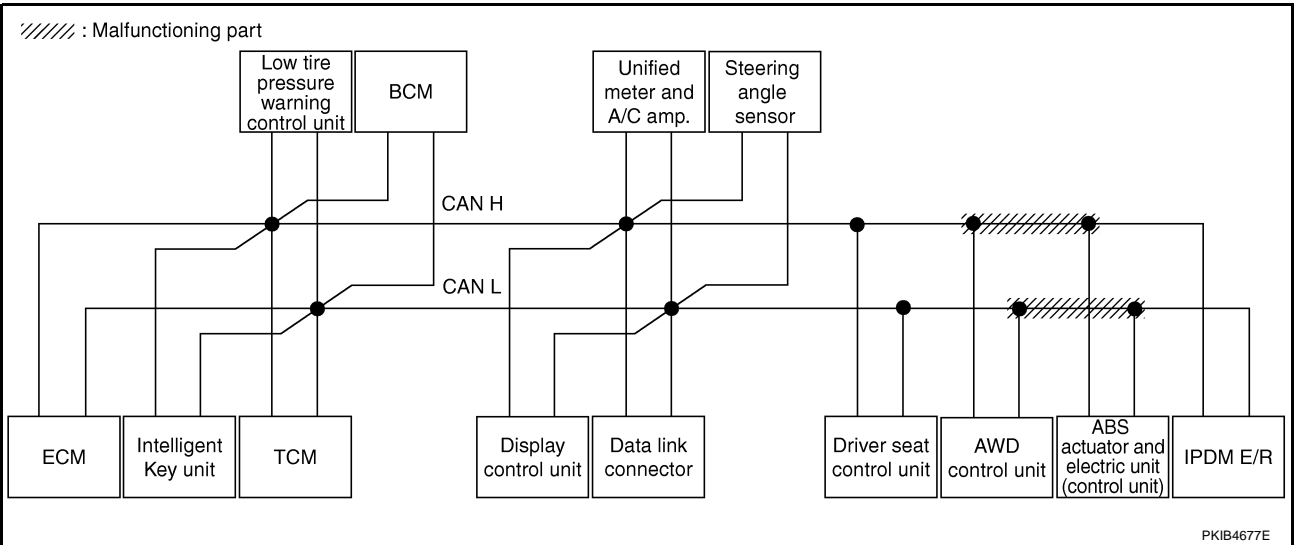
[CAN]

## Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to [LAN-412](#), "Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4889E



PKIB4677E

# CAN SYSTEM (TYPE 10)

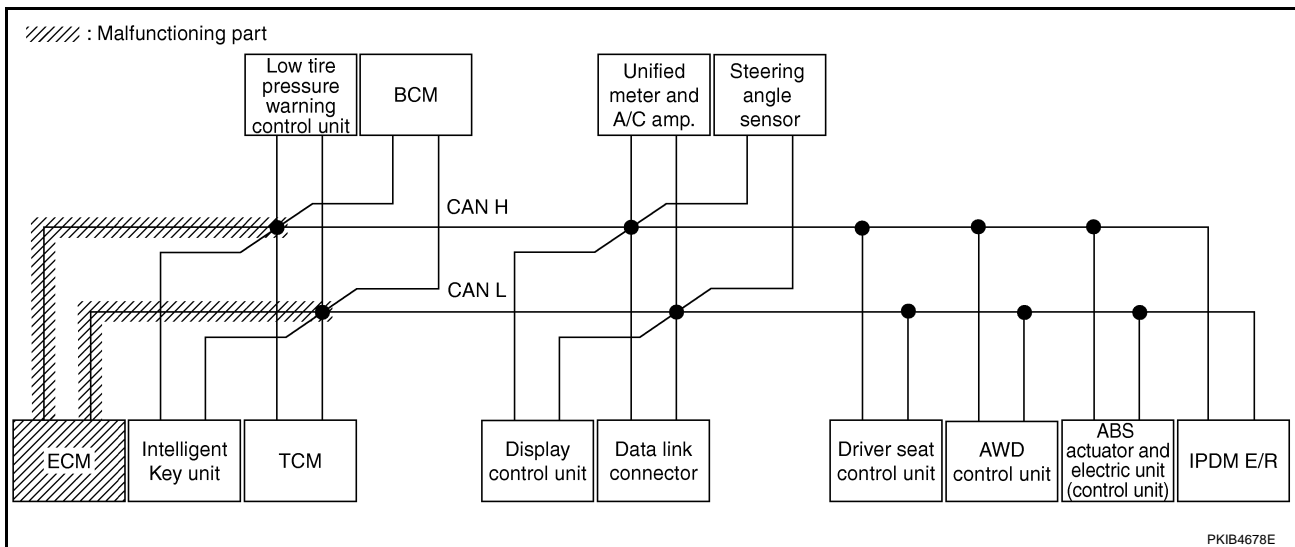
[CAN]

## Case 5

Check ECM circuit. Refer to [LAN-412, "ECM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	✓	—	—	✓	—	✓	—	✓	—	✓	✓	✓	CAN COMM CIRCUIT (U1000)	✓	CAN COMM CIRCUIT (U1011)	✓
INTELLIGENT KEY	No indication	—	UNKWN	✓	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	✓	—	—
TRANSMISSION	No indication	NG	UNKWN	✓	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	✓	—	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
BCM	No indication	NG	UNKWN	✓	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—	—	—
Display control unit	—	NG	UNKWN	✓	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	✓	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	✓	—	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—	—	—
ALL MODE AWD/4WD	—	NG	UNKWN	✓	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	✓	—	—
ABS	—	NG	UNKWN	✓	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	✓	—	—
IPDM E/R	No indication	—	UNKWN	✓	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	✓	—	—

PKIB4890E



PKIB4678E

# CAN SYSTEM (TYPE 10)

[CAN]

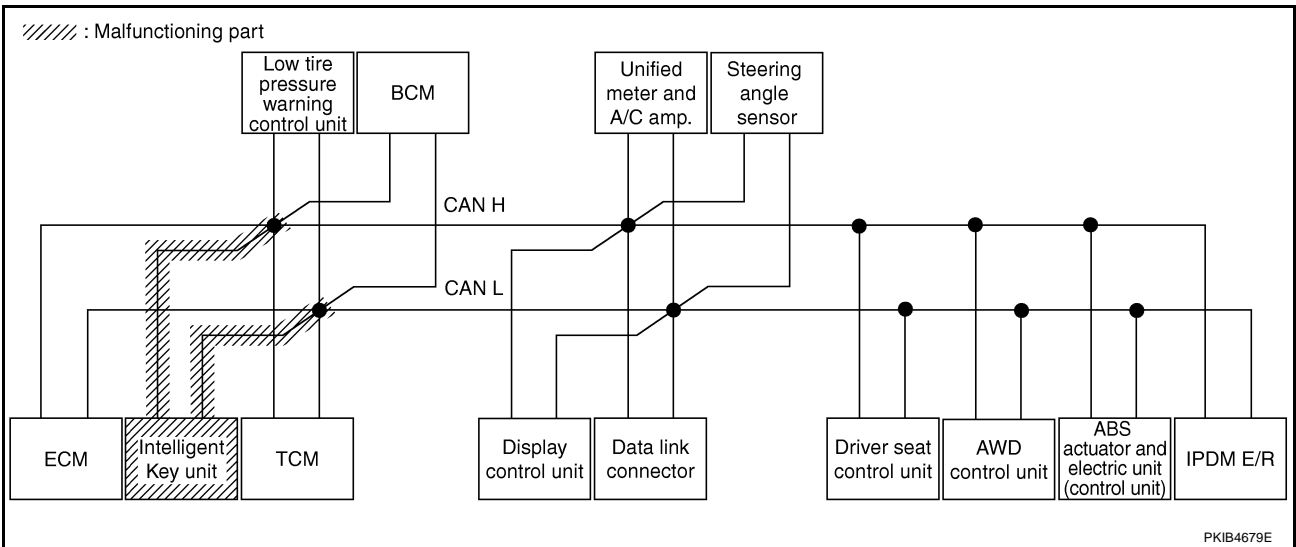
## Case 6

Check Intelligent Key unit circuit. Refer to [LAN-413, "Intelligent Key Unit Circuit Inspection"](#).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4891E



PKIB4679E

LAN

# CAN SYSTEM (TYPE 10)

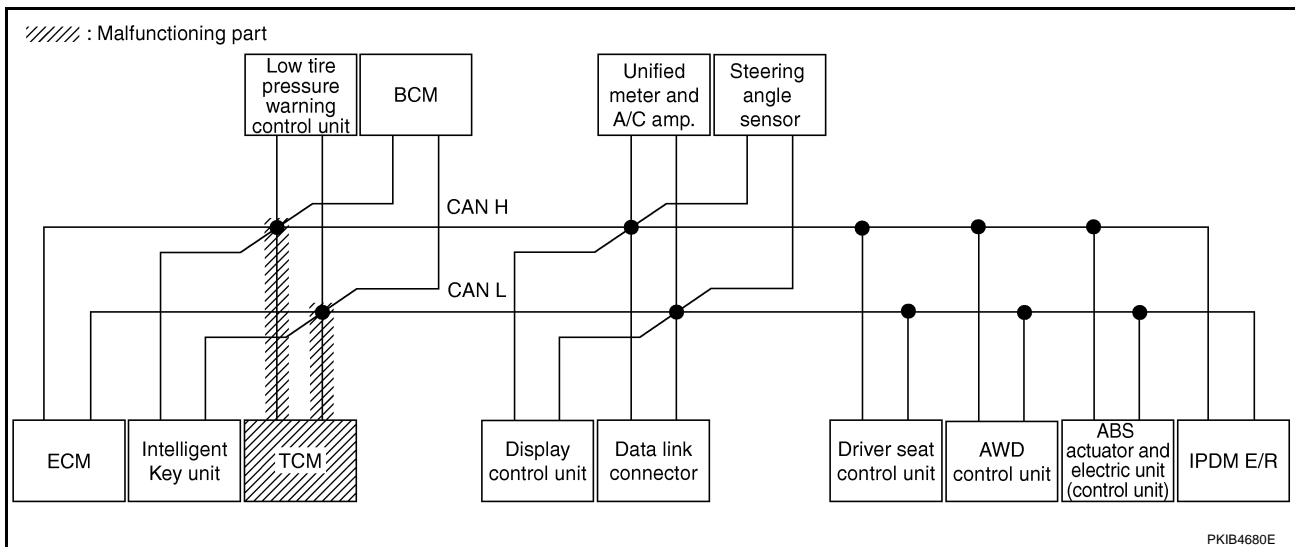
[CAN]

## Case 7

Check TCM circuit. Refer to [LAN-413, "TCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U100) ✓	CAN COMM CIRCUIT (U101) ✓
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000) —	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) —	—
ABS	—	NG	UNKWN	UNKWN	—	✓	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) —	—

PKIB4892E



PKIB4680E

# CAN SYSTEM (TYPE 10)

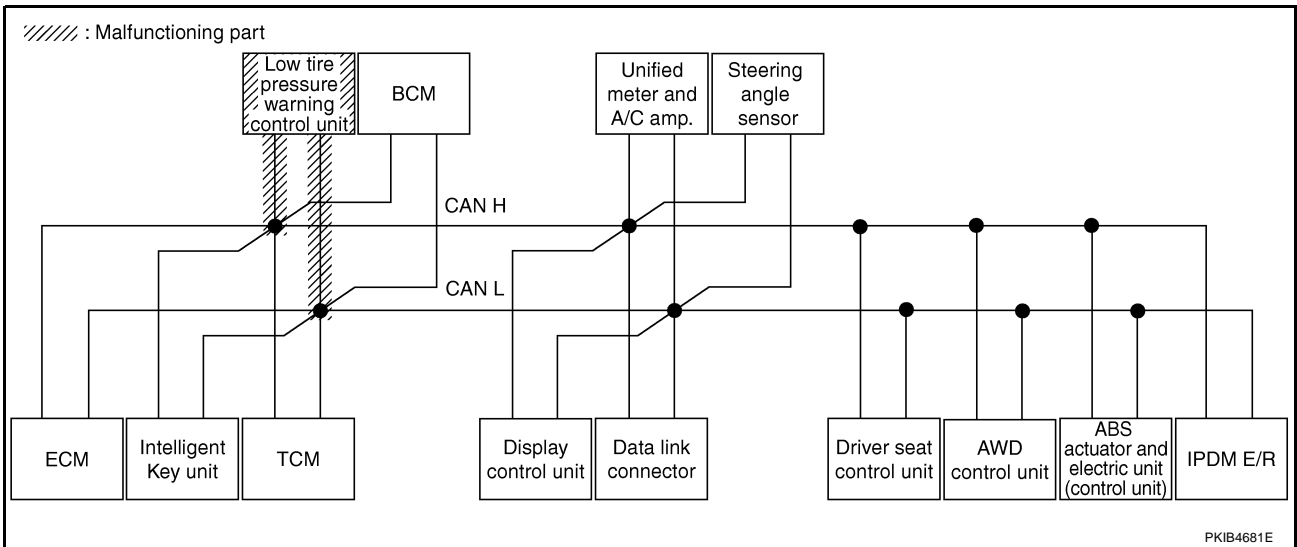
[CAN]

## Case 8

Check low tire pressure warning control unit circuit. Refer to [LAN-414, "Low Tire Pressure Warning Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN	—	UNKWN	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4893E



LAN

# CAN SYSTEM (TYPE 10)

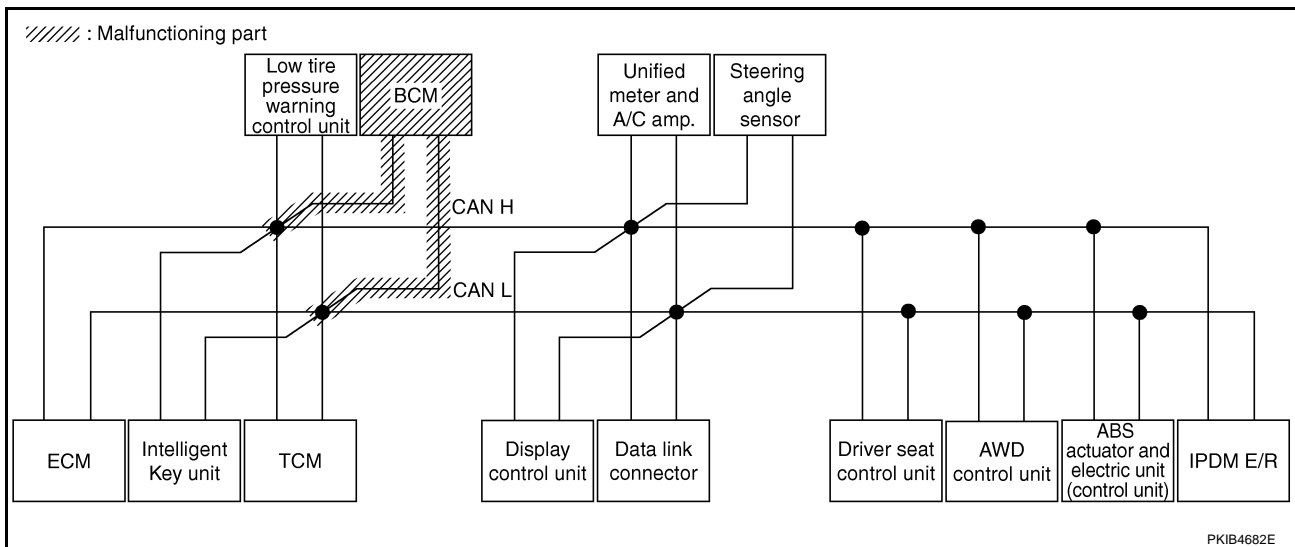
[CAN]

## Case 9

Check BCM circuit. Refer to [LAN-414, "BCM Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4894E



PKIB4682E



# CAN SYSTEM (TYPE 10)

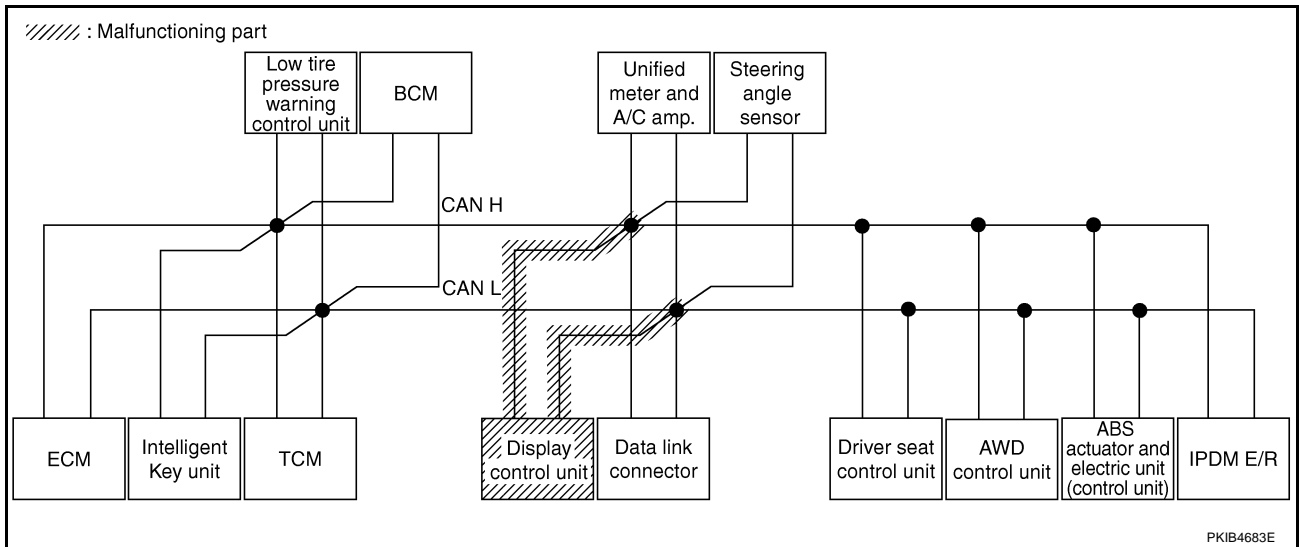
[CAN]

## Case 10

Check display control unit circuit. Refer to [LAN-415, "Display Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	✓	✓	—	—	✓	✓	—	✓	—	—	—	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4895E



PKIB4683E

# CAN SYSTEM (TYPE 10)

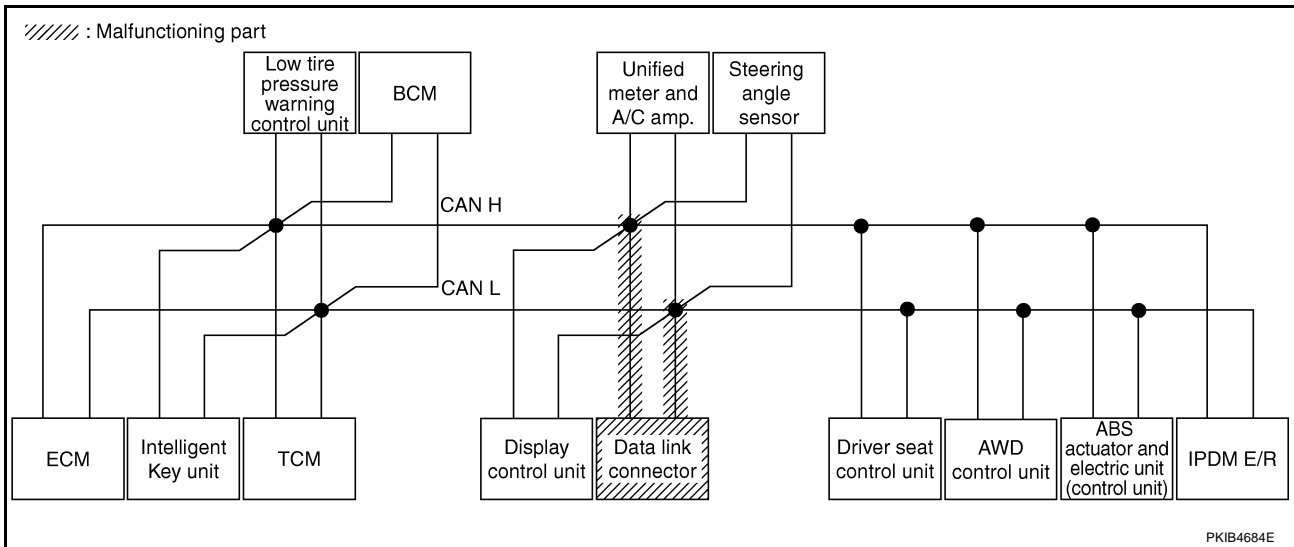
[CAN]

## Case 11

Check data link connector circuit. Refer to [LAN-415, "Data Link Connector Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4896E



PKIB4684E

# CAN SYSTEM (TYPE 10)

[CAN]

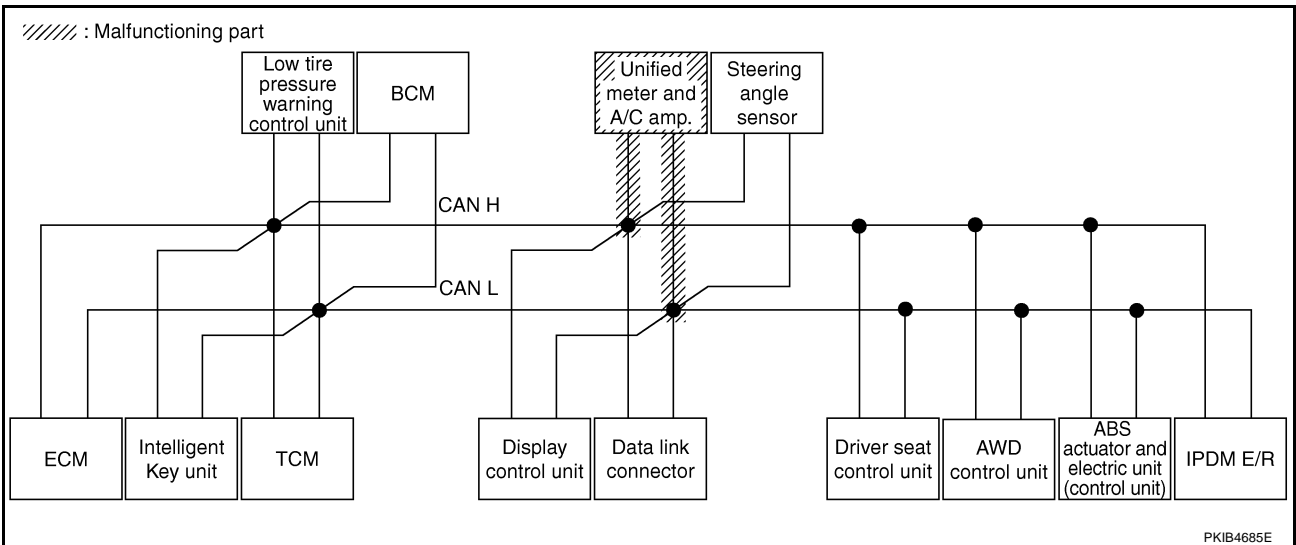
## Case 12

Check unified meter and A/C amp. circuit. Refer to [LAN-416, "Unified Meter and A/C Amp. Circuit Inspection"](#).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4897E



PKIB4685E

LAN

# CAN SYSTEM (TYPE 10)

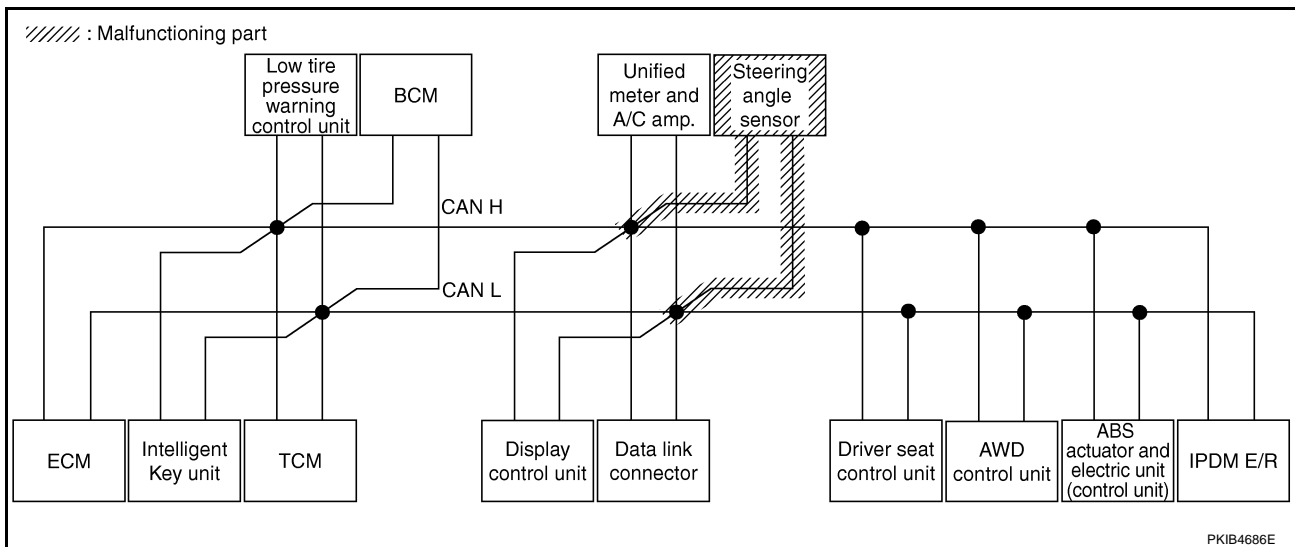
[CAN]

## Case 13

Check steering angle sensor circuit. Refer to [LAN-416, "Steering Angle Sensor Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4898E



PKIB4686E

# CAN SYSTEM (TYPE 10)

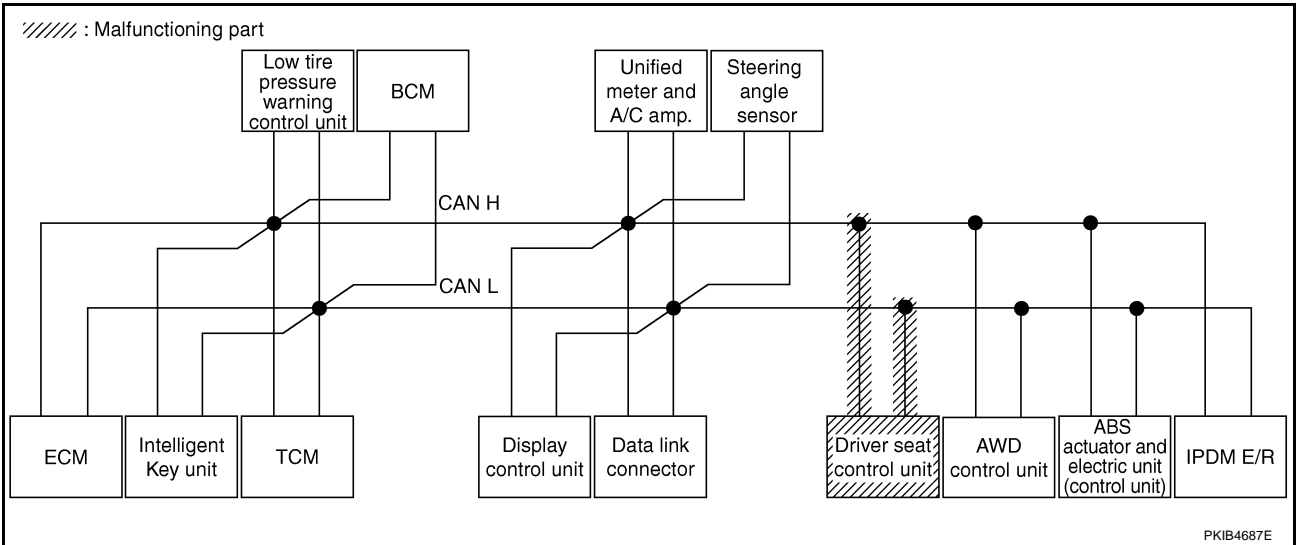
[CAN]

## Case 14

Check driver seat control unit circuit. Refer to [LAN-417, "Driver Seat Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS		
		Initial diagnosis	Transmit diagnosis	Receive diagnosis												
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4899E



PKIB4687E

# CAN SYSTEM (TYPE 10)

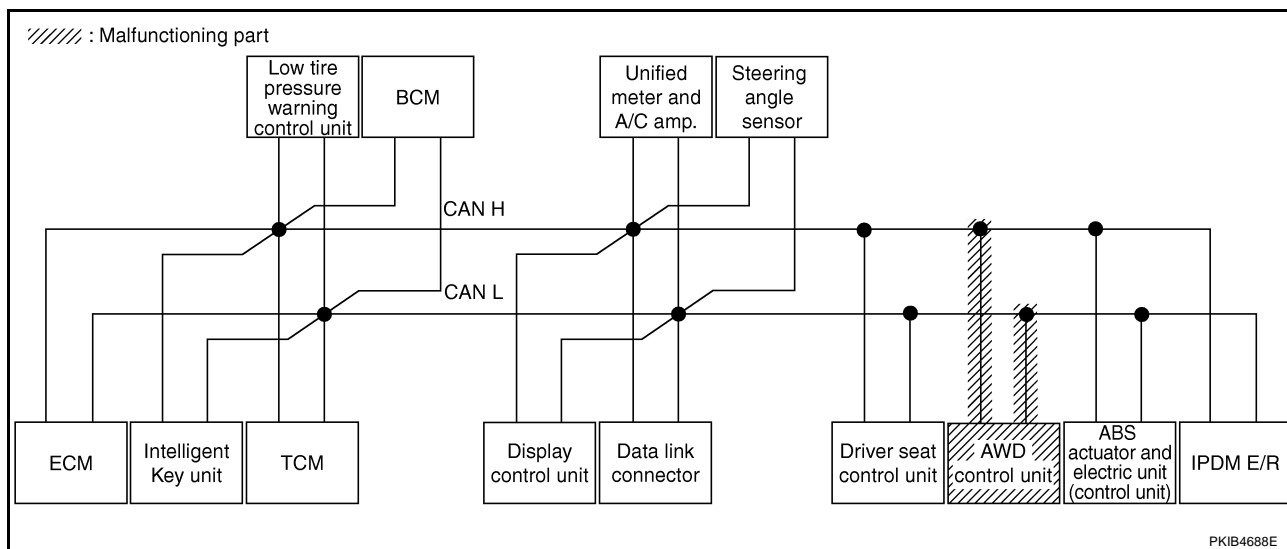
[CAN]

## Case 15

Check AWD control unit circuit. Refer to [LAN-417. "AWD Control Unit Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS					
		Initial diagnosis	Transmit diagnosis	Receive diagnosis															
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R			
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4900E



PKIB4688E

# CAN SYSTEM (TYPE 10)

[CAN]

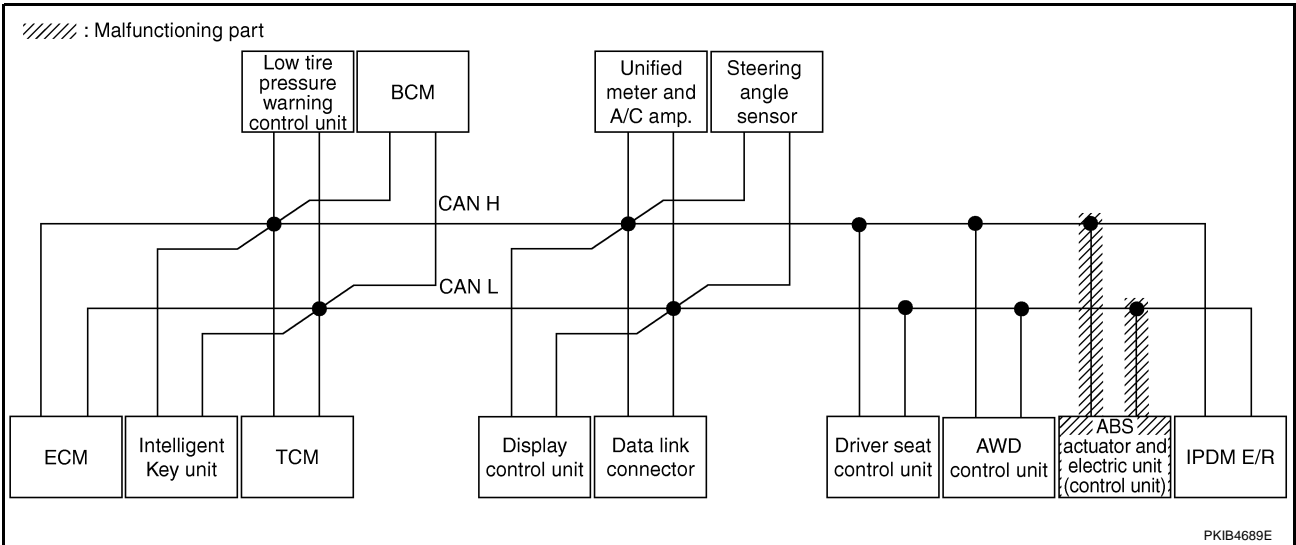
## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-418, "ABS Actuator and Electric Unit \(Control Unit\) Circuit Inspection"](#) .

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
L  
M

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis													
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	✓	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4901E



LAN

# CAN SYSTEM (TYPE 10)

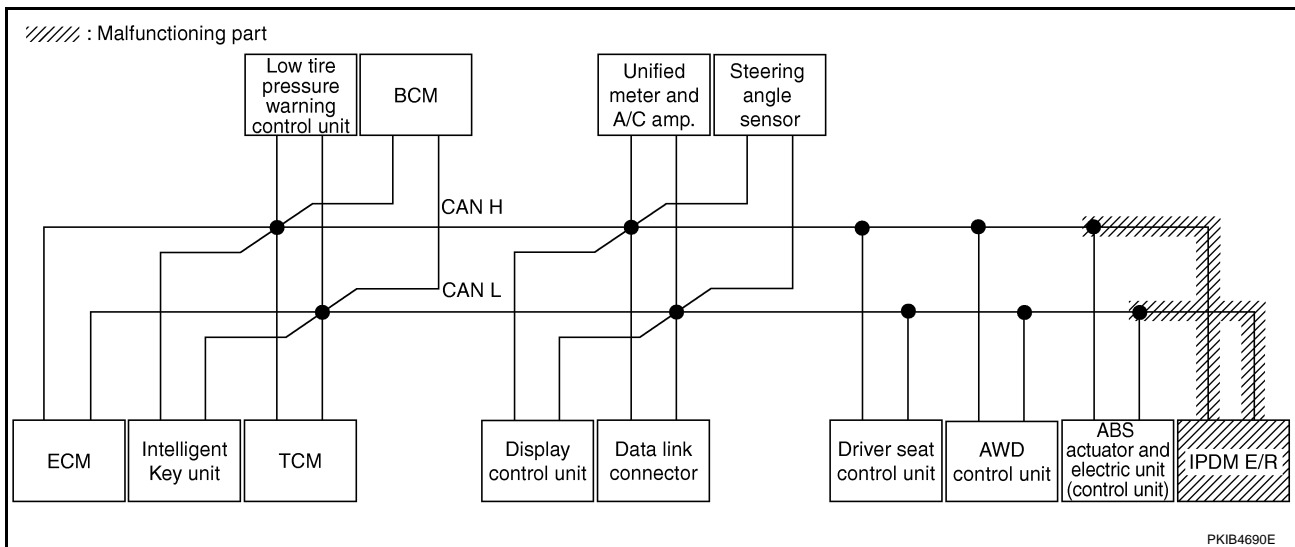
[CAN]

## Case 17

Check IPDM E/R circuit. Refer to [LAN-418, "IPDM E/R Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS			
		Initial diagnosis	Transmit diagnosis	Receive diagnosis													
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R	
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	UNKWN	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U101)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	UNKWN	✓	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	UNKWN	✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4902E



PKIB4690E



# CAN SYSTEM (TYPE 10)

[CAN]

## Case 18

Check CAN communication circuit. Refer to [LAN-419, "CAN Communication Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	✓	—	—	✓	—	✓	—	✓	—	✓	✓	✓	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication ✓	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	✓	✓	—	—	✓	✓	—	✓	—	—	—	—	✓	—	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	✓	—	—	—	—	—	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	✓	✓	✓	—	✓	—	—	—	—	✓	✓	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIB4903E

## Case 19

Check IPDM E/R ignition relay circuit continuously sticks "OFF". Refer to [LAN-425, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS				
		Initial diagnosis	Transmit diagnosis	Receive diagnosis														
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS			IPDM E/R		
ENGINE	—	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	✓	✓	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	—	—	—	—	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	✓	UNKWN	UNKWN	UNKWN	—	—	✓	✓	—	—	—	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	✓	—	UNKWN	—	UNKWN	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	UNKWN	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	—	UNKWN	—	—	—	—	UNKWN	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6351E

## Case 20

Check IPDM E/R ignition relay circuit continuously sticks "ON". Refer to [LAN-425, "IPDM E/R Ignition Relay Circuit Inspection"](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR												SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis											
				ECM	I-KEY	TCM	TIRE-P	BCM /SEC	DISPLAY	METER /M&A	STRG	AWD/4WD /e4WD	VDC/TCS /ABS		
ENGINE	—	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
INTELLIGENT KEY	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
AIR PRESSURE MONITOR	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display control unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	—
AUTO DRIVE POS.	No indication	NG	UNKWN	—	—	UNKWN	—	UNKWN	—	UNKWN	—	—	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	—	UNKWN	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	—	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC6352E

## Inspection Between TCM and Data Link Connector Circuit

AKS00CHV

### 1. CHECK HARNESS FOR OPEN CIRCUIT

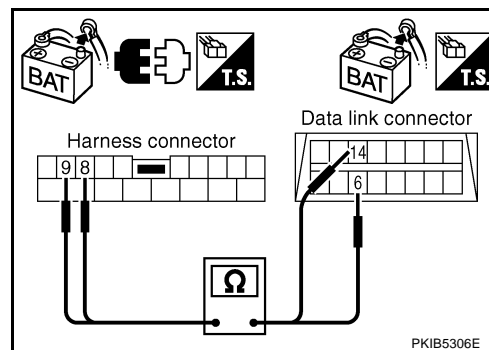
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect ECM connector and harness connector M82.
4. Check continuity between harness connector M82 terminals 8 (L), 9 (Y) and data link connector M24 terminals 6 (L), 14 (Y).

**8 (L) - 6 (L) : Continuity should exist.**

**9 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#) .
- NG >> Repair harness.



## Inspection Between Data Link Connector and Driver Seat Control Unit Circuit

AKS00CHW

### 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 M9
  - Harness connector B2

OK or NG

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

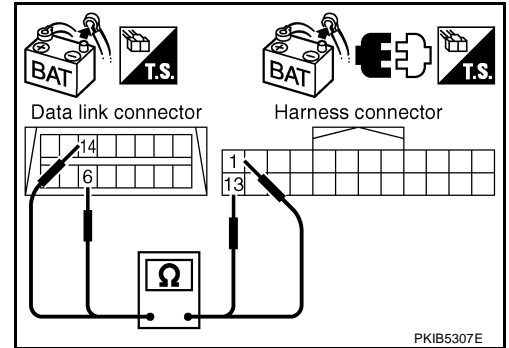
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector M9.
2. Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and harness connector M9 terminals 1 (L), 13 (Y).

**6 (L) - 1 (L) : Continuity should exist.**  
**14 (Y) - 13 (Y) : Continuity should exist.**

OK or NG

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



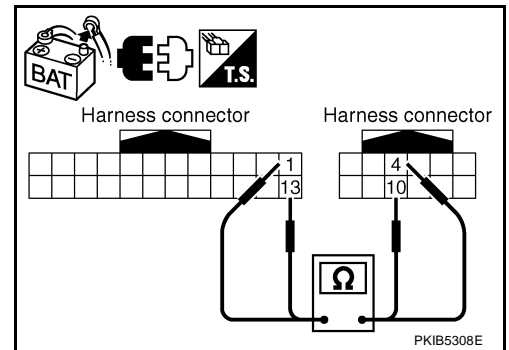
## 3. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



## Inspection Between Driver Seat Control Unit and AWD Control Unit Circuit AKS00CHX

### 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 B4
  - Harness connector E105

OK or NG

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

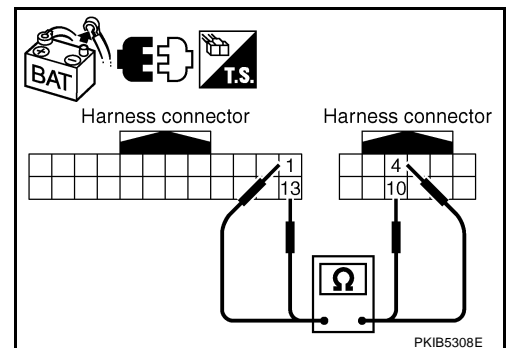
### 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect harness connector B4.
2. Check continuity between harness connector B2 terminals 1 (L), 13 (Y) and harness connector B4 terminals 4 (L), 10 (Y).

**1 (L) - 4 (L) : Continuity should exist.**  
**13 (Y) - 10 (Y) : Continuity should exist.**

OK or NG

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



### 3. CHECK HARNESS FOR OPEN CIRCUIT

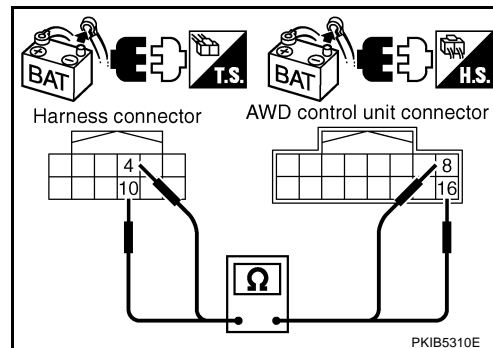
1. Disconnect AWD control unit connector.
2. Check continuity between harness connector E105 terminals 4 (L), 10 (Y) and AWD control unit harness connector E111 terminals 8 (L), 16 (Y).

**4 (L) - 8 (L) : Continuity should exist.**

**10 (Y) - 16 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



### Inspection Between AWD Control Unit and ABS Actuator and Electric Unit (Control Unit) Circuit

AKS00C1C

#### 1. CHECK CONNECTOR

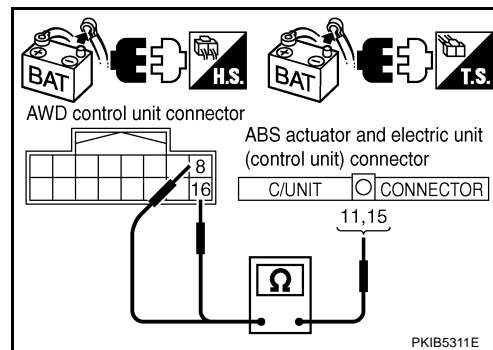
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect following connectors.
  - ECM
  - AWD control unit
  - ABS actuator and electric unit (control unit)
4. Check continuity between AWD control unit harness connector E111 terminals 8 (L), 16 (Y) and ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L), 15 (Y).

**8 (L) - 11 (L) : Continuity should exist.**

**16 (Y) - 15 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all the connectors and diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness.



### ECM Circuit Inspection

AKS00CHY

#### 1. CHECK CONNECTOR

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

#### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ECM connector.
2. Check resistance between ECM harness connector M80 terminals 94 (L) and 86 (Y).

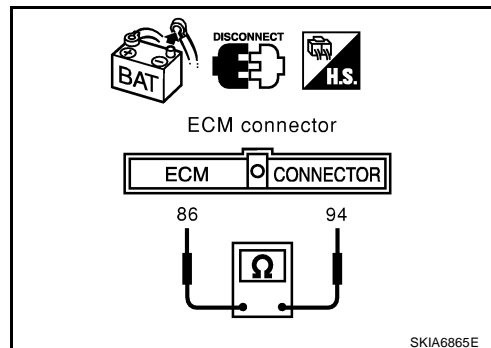
**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM and BCM.



AKS00CHZ

## Intelligent Key Unit Circuit Inspection

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of Intelligent Key unit for damage, bend and loose connection (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 Intelligent Key unit connector.
2. Check resistance between Intelligent Key unit harness connector M99 terminals 2 (L) and 3 (Y).

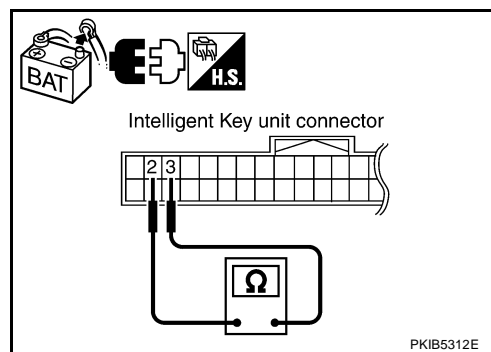
**2 (L) - 3 (Y)**

**: Approx. 54 - 66Ω**

### OK or NG

OK >> Replace Intelligent Key unit.

NG >> Repair harness between Intelligent Key unit and BCM.



AKS00C10

## TCM Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

OK >> GO TO 2.

NG >> Repair terminal or connector.

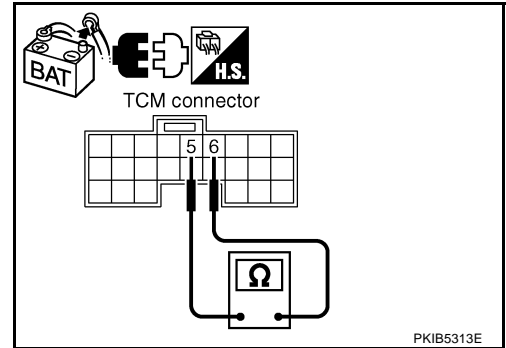
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect TCM connector.
2. Check resistance between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM and BCM.



## Low Tire Pressure Warning Control Unit Circuit Inspection

AKS00C11

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of low tire pressure warning 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.

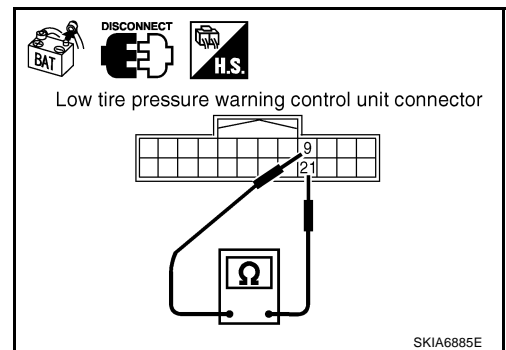
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect low tire pressure warning control unit connector.
2. Check resistance between low tire pressure warning control unit harness connector M81 terminals 9 (L) and 21 (Y).

**9 (L) - 21 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace low tire pressure warning control unit.  
NG >> Repair harness between low tire pressure warning control unit and BCM.



## BCM Circuit Inspection

AKS00C12

### 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.

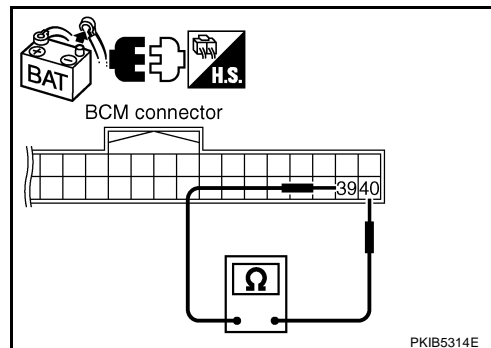
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check resistance between BCM harness connector M34 terminals 39 (L) and 40 (Y).

**39 (L) - 40 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace BCM. Refer to [BCS-16, "Removal and Installation of BCM"](#).
- NG >> Repair harness between BCM and harness connector M82.



AKS00C13

## Display Control Unit Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

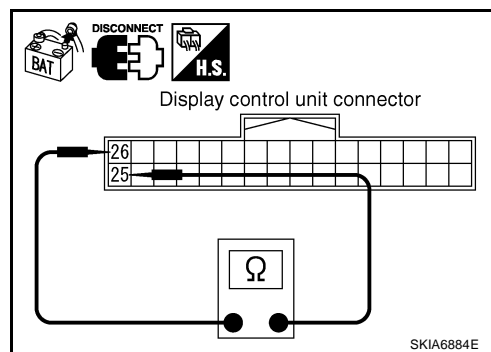
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect display control unit connector.
2. Check resistance between display control unit harness connector M43 terminals 25 (L) and 26 (Y).

**25 (L) - 26 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



AKS00C14

## Data Link Connector Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

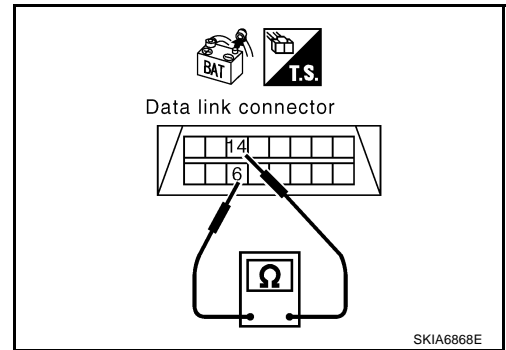
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M24 terminals 6 (L) and 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Diagnose again. Refer to [LAN-7, "TROUBLE DIAGNOSES WORK FLOW"](#).
- NG >> Repair harness between data link connector and unified meter and A/C amp.



AKS00C15

## Unified Meter and A/C Amp. Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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

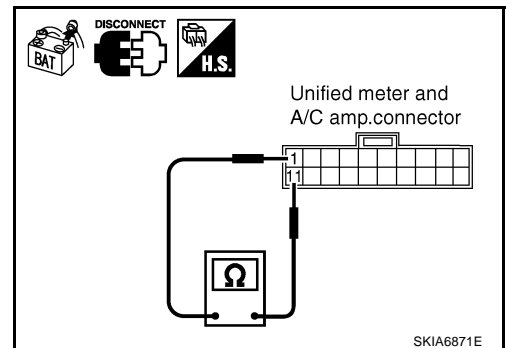
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect unified meter and A/C amp. connector.
2. Check resistance between unified meter and A/C amp. harness connector M49 terminals 1 (L) and 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.
- NG >> Repair harness between unified meter and A/C amp. and data link connector.



AKS00C16

## Steering Angle Sensor Circuit Inspection

### 1. CHECK CONNECTOR

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

OK or NG

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



## 2. CHECK HARNESS FOR OPEN CIRCUIT

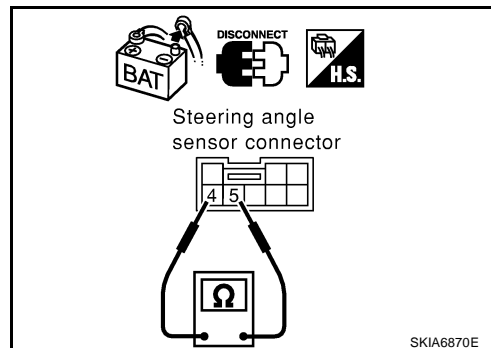
1. Disconnect steering angle sensor connector.
2. Check resistance between steering angle sensor harness connector M33 terminals 4 (L) and 5 (Y).

**4 (L) - 5 (Y)**

**: Approx. 54 - 66Ω**

### 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

AKS00C17

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check following terminals and connectors for damage, bend and loose connection (control unit side and harness side).
  - Driver seat control unit connector
  - Harness connector B301
  - Harness connector B9

### OK or NG

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

## 2. CHECK HARNESS FOR OPEN CIRCUIT

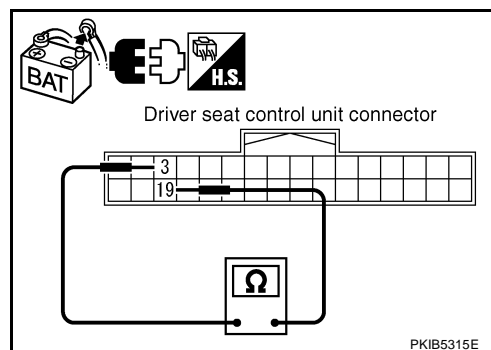
1. Disconnect driver seat control unit connector.
2. Check resistance between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W)**

**: Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit and harness connector B4.



## AWD Control Unit Circuit Inspection

AKS00AHP

### 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.

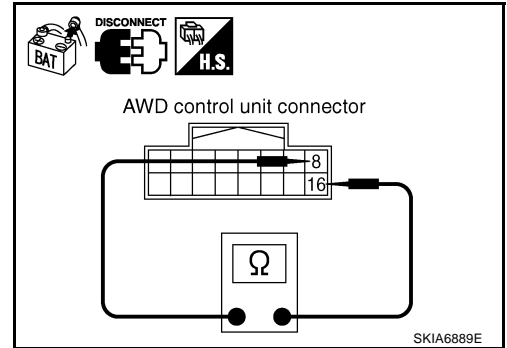
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect AWD control unit connector.
2. Check resistance between AWD control unit harness connector E111 terminals 8 (L) and 16 (Y).

**8 (L) - 16 (Y) : Approx. 54 - 66Ω**

### OK or NG

- OK >> Replace AWD control unit.  
 NG >> Repair harness between AWD control unit and IPDM E/R.



## ABS Actuator and Electric Unit (Control Unit) Circuit Inspection

AKS00C18

### 1. CHECK CONNECTOR

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

### OK or NG

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

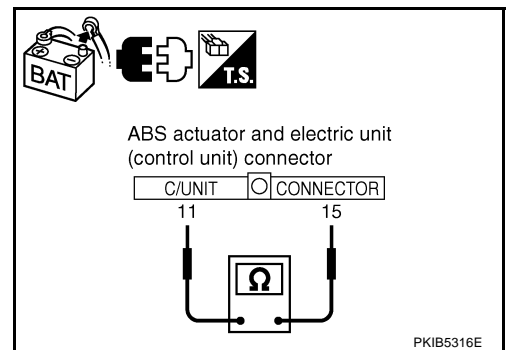
## 2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect ABS actuator and electric unit (control unit) connector.
2. Check resistance between ABS actuator and electric unit (control unit) harness connector E24 terminals 11 (L) and 15 (Y).

**11 (L) - 15 (Y) : Approx. 54 - 66Ω**

### OK or NG

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



## IPDM E/R Circuit Inspection

AKS00C19

### 1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of IPDM E/R 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

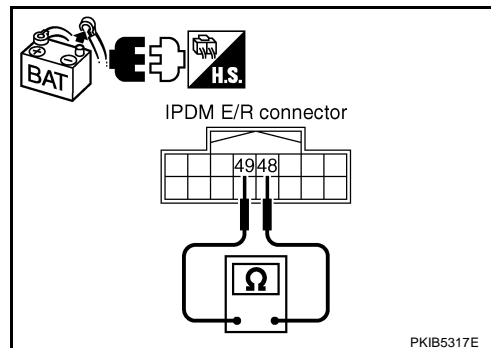
1. Disconnect IPDM E/R connector.
2. Check resistance between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

**48 (L) - 49 (Y)**

**: Approx. 108 - 132Ω**

### OK or NG

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



## CAN Communication Circuit Inspection

### 1. CHECK CONNECTOR

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

### OK or NG

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

## 2. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect following connectors.
  - ECM connector
  - Intelligent Key unit connector
  - Harness connector M82
  - Low tire pressure warning control unit connector
  - BCM connector
  - Display control unit connector
  - Unified meter and A/C amp. connector
  - Steering angle sensor connector
  - Harness connector M9
2. Check continuity between data link connector M24 terminals 6 (L) and 14 (Y).

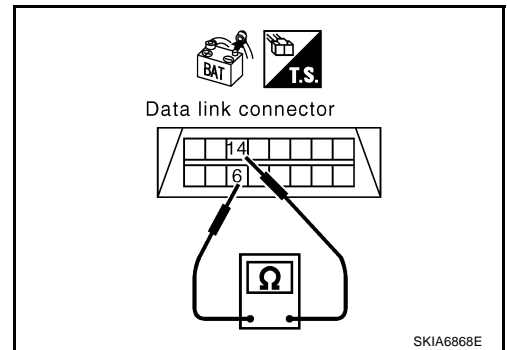
**6 (L) - 14 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 3.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector M24 terminals 6 (L), 14 (Y) and ground.

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

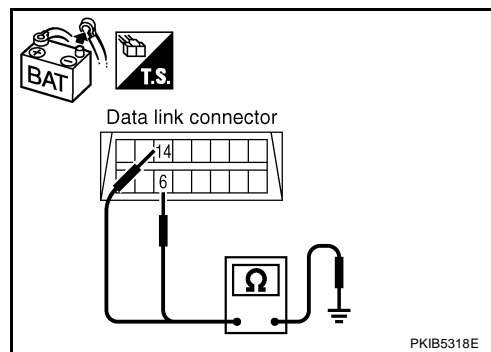
**14 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 4.

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

- Harness between data link connector and ECM
- Harness between data link connector and Intelligent Key unit
- Harness between data link connector and harness connector M82
- Harness between data link connector and low tire pressure warning control unit
- Harness between data link connector and BCM
- Harness between data link connector and display control unit
- Harness between data link connector and unified meter and A/C amp.
- Harness between data link connector and steering angle sensor
- Harness between data link connector and harness connector M9



### 4. CHECK HARNESS FOR SHORT CIRCUIT

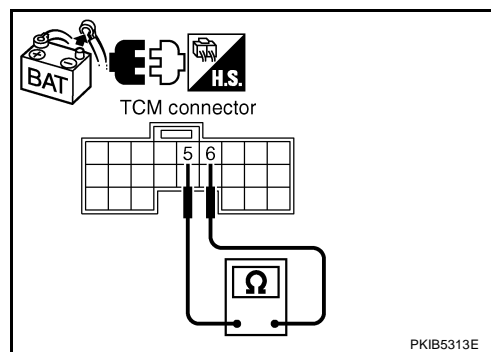
1. Disconnect TCM connector.
2. Check continuity between TCM harness connector F103 terminals 5 (L) and 6 (Y).

**5 (L) - 6 (Y) : Continuity should not exist.**

#### OK or NG

OK >> GO TO 5.

NG >> Repair harness between TCM and harness connector F102.



### 5. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between TCM harness connector F103 terminals 5 (L), 6 (Y) and ground.

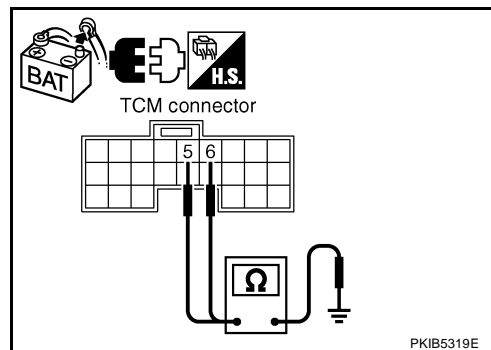
**5 (L) - Ground : Continuity should not exist.**

**6 (Y) - Ground : Continuity should not exist.**

#### OK or NG

OK >> GO TO 6.

NG >> Repair harness between TCM and harness connector F102.



## 6. CHECK HARNESS FOR SHORT CIRCUIT

1. Disconnect harness connector B4 and harness connector B9.
2. Check continuity between harness connector B4 terminals 4 (L) and 10 (Y).

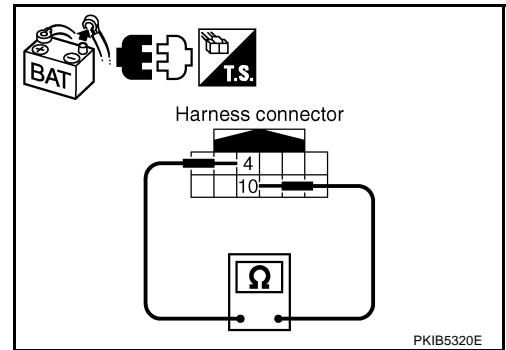
**4 (L) - 10 (Y) : Continuity should not exist.**

### OK or NG

OK >> GO TO 7.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 7. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between harness connector B4 terminals 4 (L), 10 (Y) and ground.

**4 (L) - Ground : Continuity should not exist.**

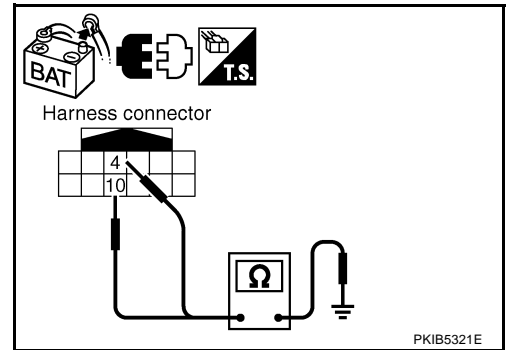
**10 (Y) - Ground : Continuity should not exist.**

### OK or NG

OK >> GO TO 8.

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

- Harness between harness connector B4 and harness connector B2
- Harness between harness connector B4 and harness connector B9



## 8. CHECK HARNESS FOR SHORT CIRCUIT

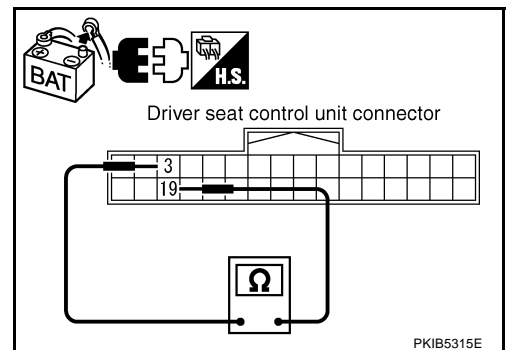
1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y) and 19 (BR/W).

**3 (L/Y) - 19 (BR/W) : Continuity should not exist.**

### OK or NG

OK >> GO TO 9.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 9. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between driver seat control unit harness connector B303 terminals 3 (L/Y), 19 (BR/W) and ground.

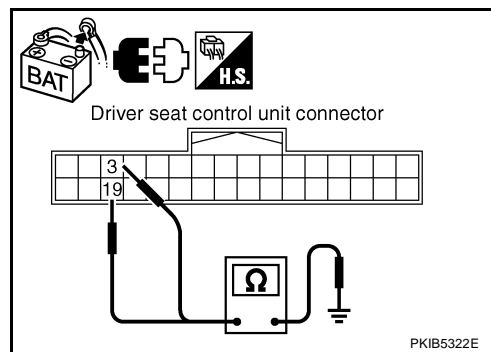
**3 (L/Y) - Ground : Continuity should not exist.**

**19 (BR/W) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 10.

NG >> Repair harness between driver seat control unit and harness connector B301.



## 10. CHECK HARNESS FOR SHORT CIRCUIT

- Disconnect following connectors.
  - AWD control unit connector
  - ABS actuator and electric unit (control unit) connector
  - IPDM E/R connector
- Check continuity between IPDM E/R harness connector E9 terminals 48 (L) and 49 (Y).

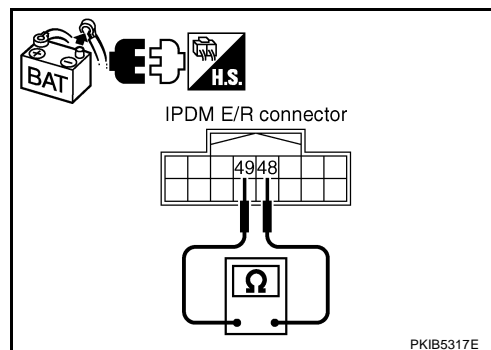
**48 (L) - 49 (Y) : Continuity should not exist.**

OK or NG

OK >> GO TO 11.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 11. CHECK HARNESS FOR SHORT CIRCUIT

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

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

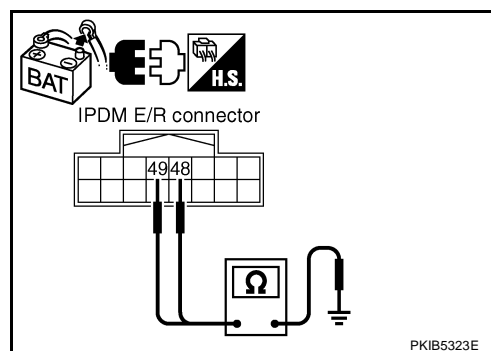
**49 (Y) - Ground : Continuity should not exist.**

OK or NG

OK >> GO TO 12.

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

- Harness between IPDM E/R and AWD control unit
- Harness between IPDM E/R and ABS actuator and electric unit (control unit)
- Harness between IPDM E/R and harness connector E105



## 12. CHECK ECM AND IPDM E/R INTERNAL CIRCUIT

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

**94 - 86** : **Approx. 108 – 132 Ω**

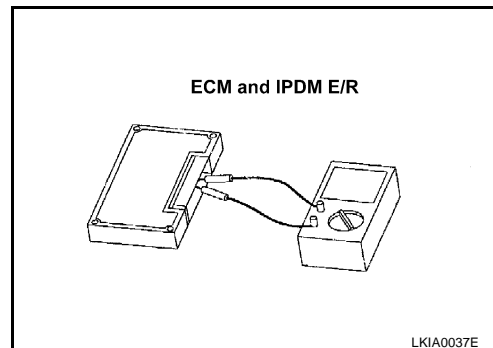
3. Check resistance between IPDM E/R terminals 48 and 49.

**48 - 49** : **Approx. 108 – 132 Ω**

### OK or NG

OK >> GO TO 13.

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



## 13. CHECK SYMPTOM

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

### OK or NG

OK >> GO TO 14.

NG >> Refer to [LAN-17, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced"](#)

## 14. CHECK UNIT REPRODUCIBILITY

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

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

### Check results

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

Not reproduced>>Replace removed unit.



## IPDM E/R Ignition Relay Circuit Inspection

AKS00C1B

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

- IPDM E/R power supply circuit. Refer to [PG-27, "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" "](#) .

A

B

C

D

E

F

G

H

I

J

LAN

L

M

