

SECTION **LAN**  
LAN SYSTEM

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## PRECAUTIONS

PFP:00001

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

EKS0069U

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.

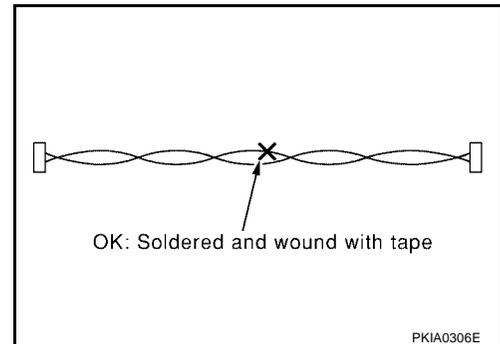
**WARNING:**

- 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.

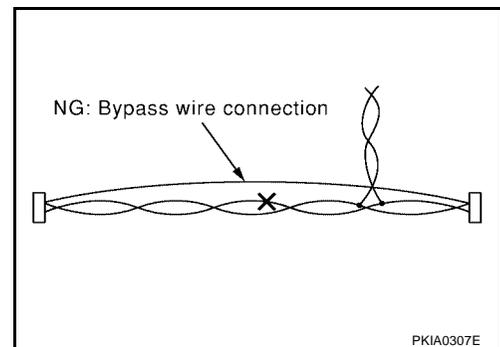
### Precautions for CAN System

EKS005RU

- Do not apply voltage of 7.0V or higher to terminal to be measured.
- Maximum open terminal voltage of tester in use must be less than 7.0V.
- Before checking harnesses, turn ignition switch OFF and disconnect negative battery terminal.
- Area to be repaired must be soldered and wrapped with tape. Make sure that fraying of twisted wire is within 110 mm (4.33 in).



- Do not make a bypass connection to repaired area. (If the circuit is bypassed, characteristics of twisted wire will be lost.)



### Precautions When Using CONSULT-II

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

**CAUTION:**

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

#### CHECK POINTS FOR USING CONSULT-II

1. Has CONSULT-II been used without connecting CONSULT-II CONVERTER on this vehicle?
  - If YES, GO TO 2.
  - If NO, GO TO 5.
2. Is there any indication other than indications relating to CAN communication system in the self-diagnosis results?
  - If YES, GO TO 3.
  - If NO, GO TO 4.
3. Based on self-diagnosis results unrelated to CAN communication, carry out the inspection.
4. Malfunctions may be detected in self-diagnosis depending on control units carrying out CAN communication. Therefore, erase the self-diagnosis results.
5. Diagnose CAN communication system. Refer to [LAN-6, "CAN COMMUNICATION"](#) .

EKS005RV

## Wiring Diagrams and Trouble Diagnosis

When you read wiring diagrams, refer to the following:

- [GI-12, "How to Read Wiring Diagrams"](#)
- [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#)

When you perform trouble diagnosis, refer to the following:

- [GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#)
- [GI-25, "How to Perform Efficient Diagnosis for an Electrical Incident"](#)

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# CAN COMMUNICATION

[CAN]

PFP:23710

## CAN COMMUNICATION

### System Description

EKS005RW

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

EKS005RX

Refer to the following table to determine CAN system type.

Axle	2WD			
Engine	VQ35DE			
Transmission	4 A/T		5 A/T	
Brake control	TCS		VDC	
Navigation system		X		X
Automatic drive positioner			X	X
CAN communication unit				
ECM	X	X	X	X
TCM	X	X	X	X
ABS actuator and electric unit (control unit)	X	X	X	X
Front air control	X	X	X	X
Display control unit		X		X
Display unit	X		X	
BCM	X	X	X	X
Steering angle sensor			X	X
Driver seat control unit			X	X
Data link connector	X	X	X	X
Combination meter	X	X	X	X
IPDM E/R	X	X	X	X
CAN communication type	<a href="#">LAN-7, "TYPE 1/TYPE 2"</a>		<a href="#">LAN-9, "TYPE 3/TYPE 4"</a>	
CAN system trouble diagnosis	1	2	3	4
	<a href="#">LAN-11</a>	<a href="#">LAN-33</a>	<a href="#">LAN-55</a>	<a href="#">LAN-79</a>

X: Applicable

# CAN COMMUNICATION

[CAN]

## TYPE 1/TYPE 2 Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	ABS actuator and electric unit (control unit)	Front air control	Display control unit	Display unit	BCM	Combination meter	IPDME/R
Engine speed signal	T		R		R	R		R	
Engine coolant temperature signal	T			R				R	
Ignition switch signal							T		R
Fuel consumption monitor signal	T							R	
					R	R		T	
A/C switch signal	R			R			T		
A/C compressor request signal	T			R					R
Blower fan motor switch signal	R						T		
A/C switch/indicator signal				R	T	T			
				T	R	R			
Cooling fan speed request signal	T								R
Cooling fan speed signal	R								T
Position light request signal							T	R	R
Low beam request signal							T		R
Low beam status signal	R								T
High beam request signal							T	R	R
High beam status signal	R								T
Front fog light request signal							T		R
Vehicle speed signal			T	R				R	
	R				R	R	R	T	
Sleep wake up signal							T	R	R
Door switch signal					R	R	T	R	R
Turn indicator signal							T	R	
Cornering lamp request signal							T		R
Oil pressure switch signal								R	T
Buzzer output signal							T	R	
Fuel level sensor signal	R							T	
ASCD SET indicator signal	T							R	
ASCD CRUISE indicator signal	T							R	
Malfunction indicator lamp signal	T							R	
Front wiper request signal							T		R
Front wiper stop position signal							R		T
Rear window defogger switch signal				R			T		R
Rear window defogger control signal	R								T
Horn chirp signal							T		R
ABS warning lamp signal			T					R	

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	ABS actua- tor and elec- tric unit (con- trol unit)	Front air control	Dis- play con- trol unit	Dis- play unit	BCM	Com- bina- tion meter	IPDM E/R
Brake warning lamp signal			T					R	
System setting signal					T	T	R		
					R	R	T		
Distance to empty signal					R	R		T	
A/T self-diagnosis signal	R	T							
Engine and A/T integrated control signal	T	R							
	R	T							
Accelerator pedal position signal	T		R						
Closed throttle position signal	T	R							
Wide open throttle position signal	T	R							
P range signal		T	R						
Stop lamp switch signal		R						T	
Input shaft revolution signal	R	T							
Output shaft revolution signal	R	T							
ASCD operation signal	T	R							
ASCD OD cancel request signal	T	R							
SLIP indicator lamp signal			T					R	
O/D OFF indicator lamp signal		T						R	
A/T position indicator lamp signal		T						R	
A/T shift schedule change demand signal		R	T						
Overdrive control switch signal		R						T	
Tire pressure signal							T	R	
Tire pressure data signal					R	R	T		

# CAN COMMUNICATION

[CAN]

## TYPE 3/TYPE 4 Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	ABS actuator and electric unit (control unit)	Front air control	Display control unit	Display unit	BCM	Steering angle sensor	Driver seat control unit	Combination meter	IPDM E/R
Engine speed signal	T	R	R		R	R				R	
Engine coolant temperature signal	T	R								R	
Key switch signal							T		R		
Ignition switch signal							T		R		R
ABS operation signal	R	R	T								
Fuel consumption monitor signal	T									R	
					R	R				T	
A/C switch signal	R						T				
A/C compressor request signal	T										R
Blower fan motor switch signal	R						T				
A/C switch/indicator signal				R	T	T					
				T	R	R					
Cooling fan speed request signal	T										R
Cooling fan speed signal	R										T
Position light request signal							T			R	R
Low beam request signal							T				R
Low beam status signal	R										T
High beam request signal							T			R	R
High beam status signal	R										T
Front fog light request signal							T				R
Vehicle speed signal			T	R						R	
	R	R			R	R	R		R	T	
Sleep wake up signal							T			R	R
Door switch signal					R	R	T		R	R	R
Turn indicator signal							T			R	
Cornering lamp request signal							T				R
Key fob ID signal							T		R		
Key fob door unlock signal							T		R		
Oil pressure switch signal										R	T
Buzzer output signal							T			R	
Fuel level sensor signal	R									T	
ASCD SET indicator signal	T									R	
ASCD CRUISE indicator signal	T									R	
Malfunction indicator lamp signal	T									R	
Front wiper request signal							T				R

# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	ABS actuator and electric unit (control unit)	Front air control	Display control unit	Display unit	BCM	Steering angle sensor	Driver seat control unit	Combination meter	IPDM E/R
Front wiper stop position signal							R				T
Rear window defogger switch signal				R			T				R
Rear window defogger control signal	R										T
Horn chirp signal							T				R
ABS warning lamp signal			T							R	
Brake warning lamp signal			T							R	
System setting signal					T	T	R		R		
					R	R	T		T		
Distance to empty signal					R	R				T	
A/T self-diagnosis signal	R	T									
Engine and A/T integrated control signal	T	R									
	R	T									
Accelerator pedal position signal	T	R	R								
P range signal		T	R						R		
R range signal		T							R		
Stop lamp switch signal		R								T	
VDC operation signal		R	T								
Input shaft revolution signal	R	T									
Output shaft revolution signal	R	T									
ASCD operation signal	T	R									
ASCD OD cancel request signal	T	R									
Steering angle sensor signal			R					T			
SLIP indicator lamp signal			T							R	
O/D OFF indicator lamp signal		T								R	
A/T position indicator lamp signal		T								R	
A/T shift schedule change demand signal		R	T								
Tire pressure signal							T			R	
Tire pressure data signal					R	R	T				

## CAN SYSTEM (TYPE 1)

PFP:23710

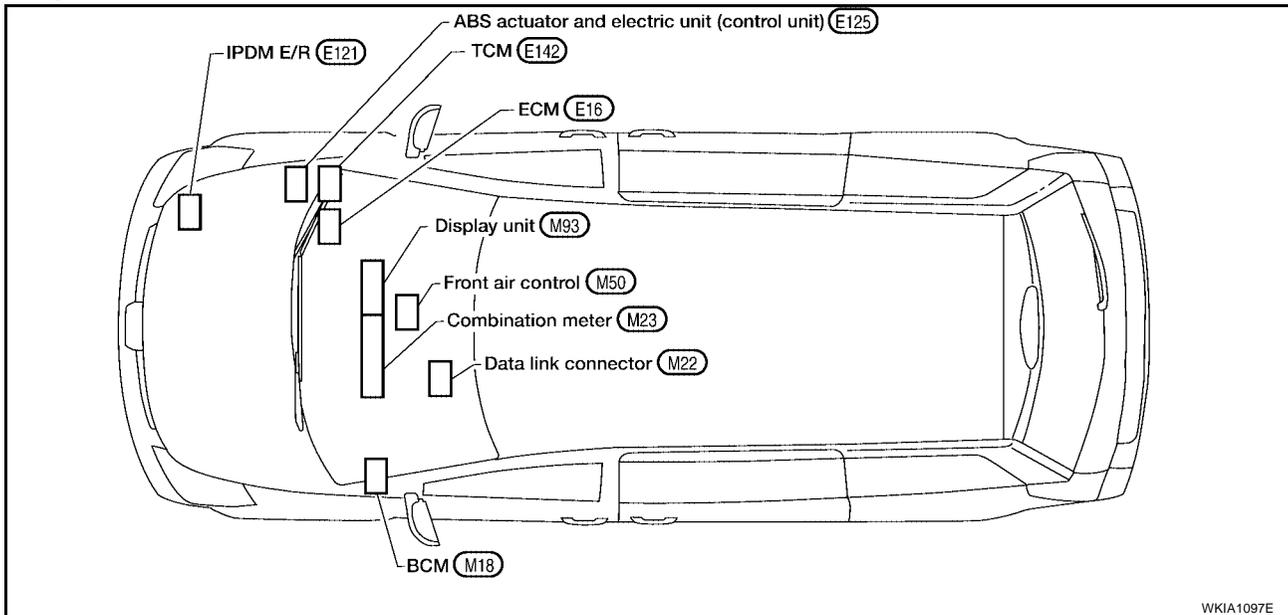
### System Description

EKS0067B

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

### Component Parts and Harness Connector Location

EKS0067C



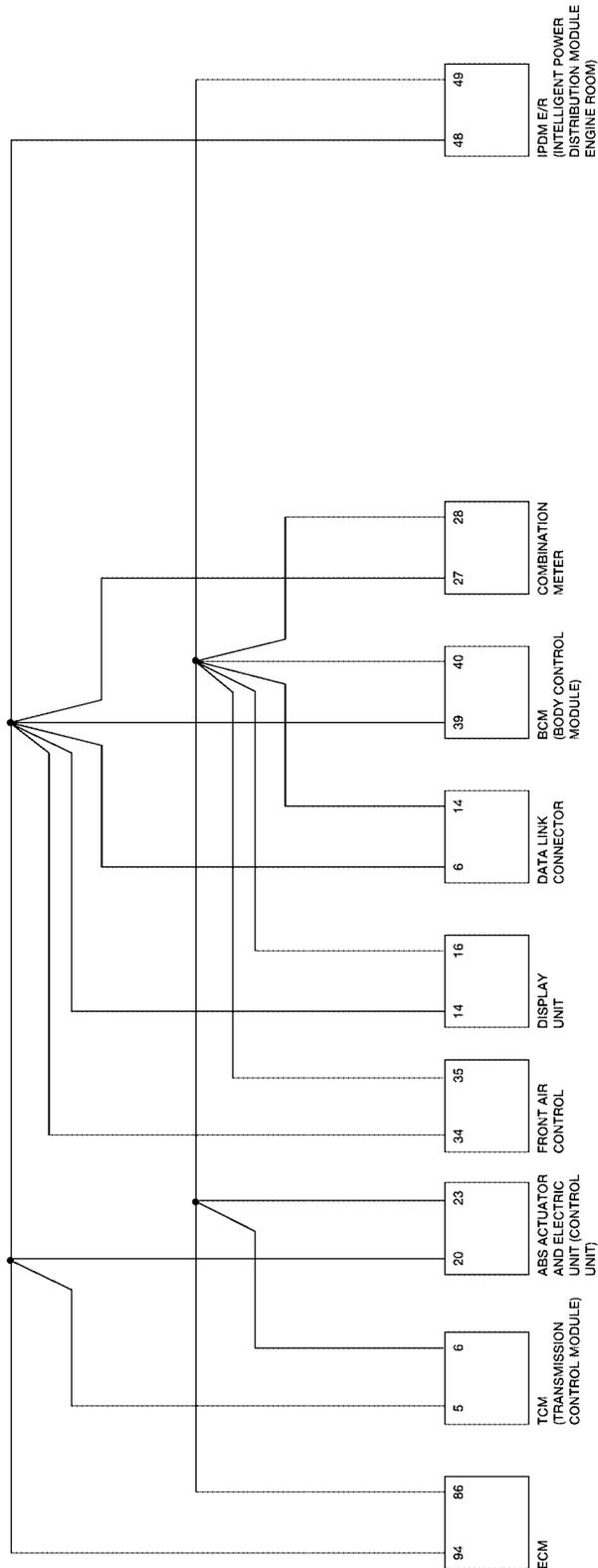
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# CAN SYSTEM (TYPE 1)

[CAN]

## Schematic

EKS0067D



WKWA0599E

# CAN SYSTEM (TYPE 1)

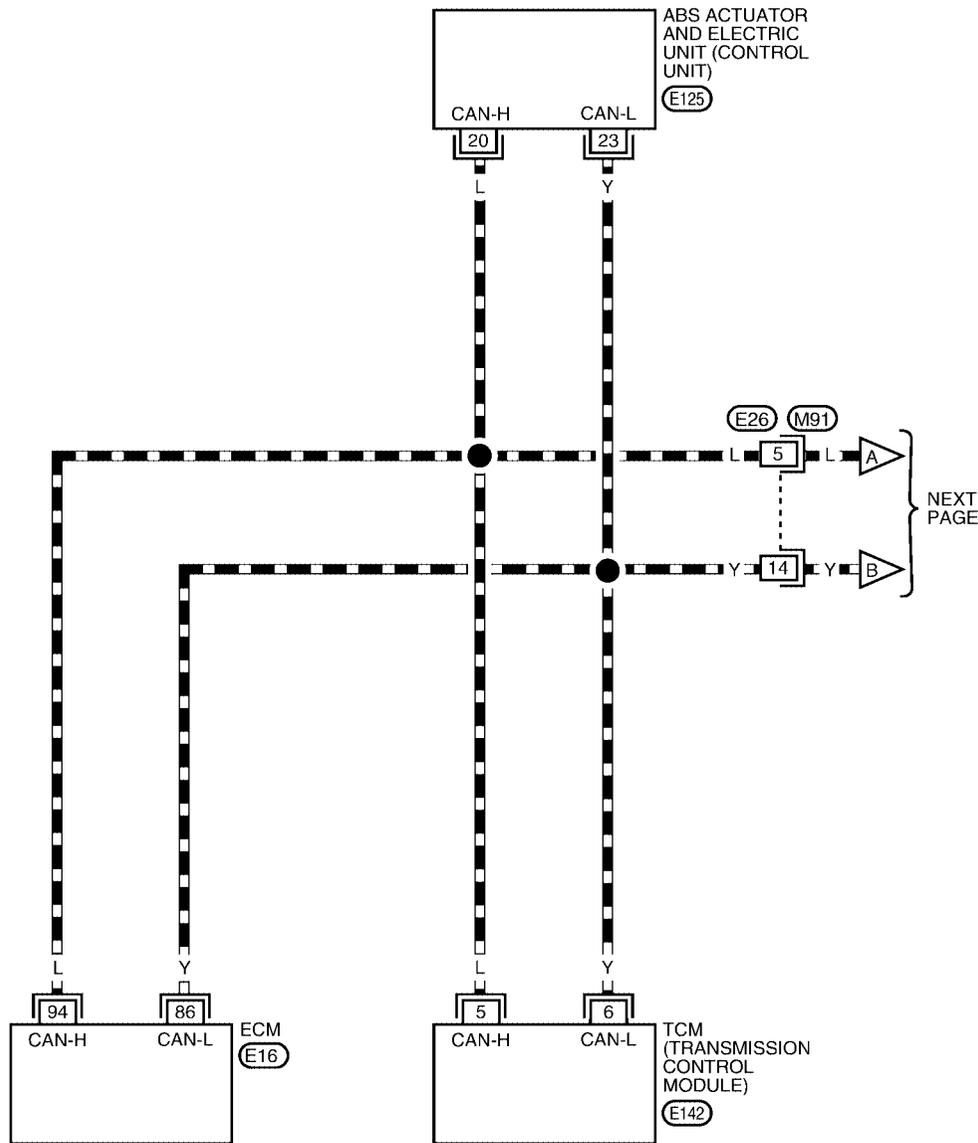
[CAN]

## Wiring Diagram — CAN —

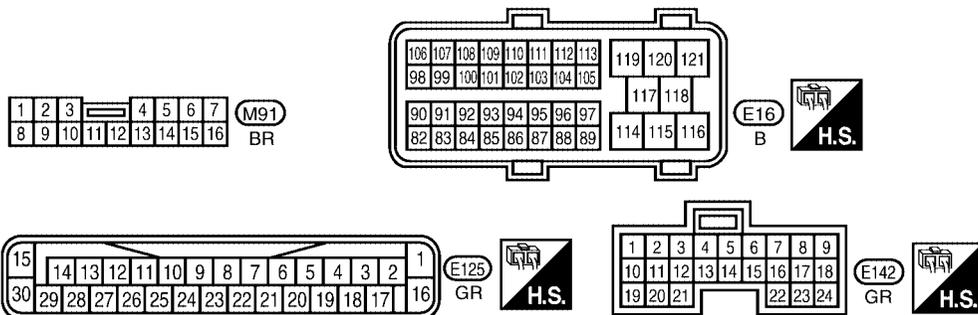
EKS0067E

LAN-CAN-01

— — — : DATA LINE



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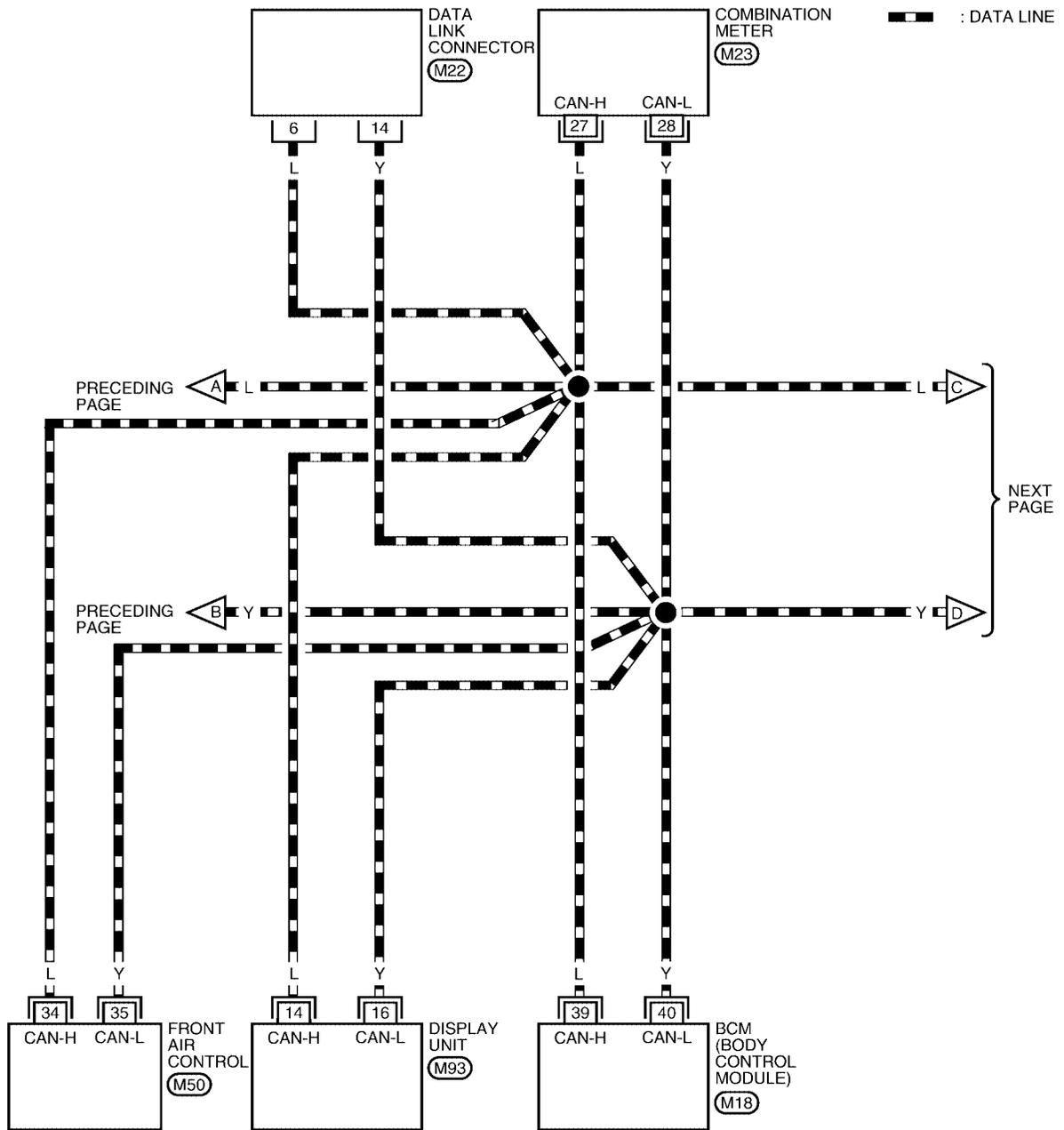


WKWA0600E

# CAN SYSTEM (TYPE 1)

[CAN]

## LAN-CAN-02



16	15	14	13	12	11	10	9
8	7	6	5	4	3	2	1

(M22)  
W

25	26	27	28	29	30
31	32	33	34	35	36

(M23)  
W

27	28	29	30	31	32	33	34	35
36	37	38	39	40	41	42	43	44

(M50)  
W

24	22	20	18	16	14	12	10	8	6	4	2
23	21	19	17	15	13	11	9	7	5	3	1

(M93)  
W

1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

(B37)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

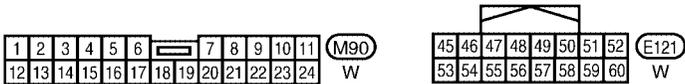
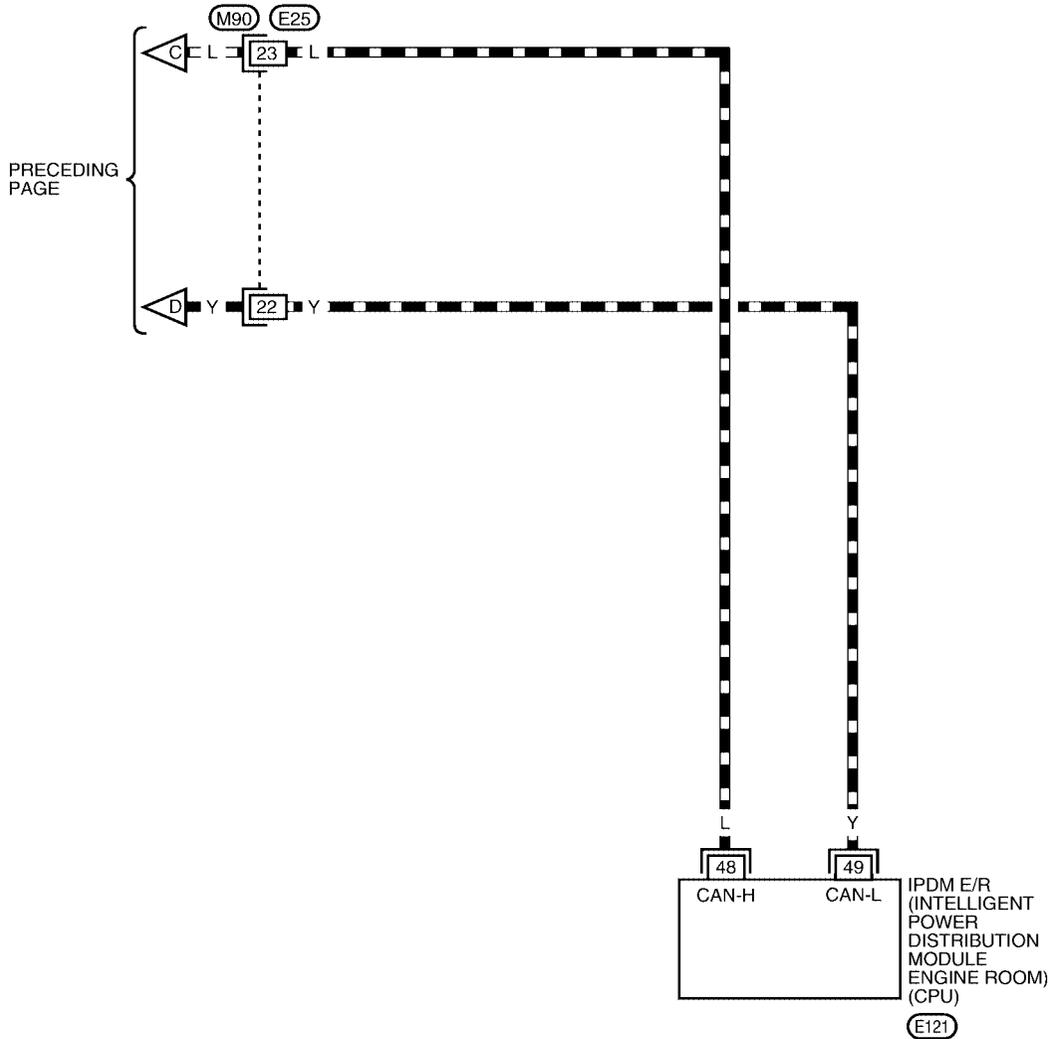
WKWA0601E

# CAN SYSTEM (TYPE 1)

[CAN]

LAN-CAN-03

▬ : DATA LINE



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WKWA0602E

# CAN SYSTEM (TYPE 1)

[CAN]

EKS0067F

## Work Flow

- When there are no indications of "BCM" or "IPDM E/R" on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".

(Example)

NISSAN	
CONSULT-II	
ENGINE	
START (NISSAN BASED VHCL)	
START (RENAULT BASED VHCL)	
SUB MODE	
	LIGHT COPY

SELECT SYSTEM		
ENGINE		
A/T		
ABS		
AIR BAG		
BCM		
METER A/C AMP		
	BACK	LIGHT COPY

PKIA2093E

- Print all the data of "SELF-DIAG RESULTS" for "ENGINE", "A/T", "BCM", "IPDM E/R" and "ABS" displayed on CONSULT-II.

(Example)

SELECT DIAG MODE	
WORK SUPPORT	
SELF-DIAG RESULTS	
DATA MONITOR	
DATA MONITOR (SPEC)	
CAN DIAG SUPPORT MNTR	
ACTIVE TEST	
Scroll Down	
	BACK LIGHT COPY

SELF-DIAG RESULTS	
DTC RESULTS	
TIME	
CAN COMM CIRCUIT (U1000)	0
F.F.DATA	
ERASE	PRINT
MODE	BACK LIGHT COPY

PKIA8260E

- Print all the data of "CAN DIAG SUPPORT MNTR" for "ENGINE", "A/T", "BCM", "IPDM E/R" and "ABS" displayed on CONSULT-II.

(Example)

SELECT DIAG MODE	
WORK SUPPORT	
SELF-DIAG RESULTS	
DATA MONITOR	
DATA MONITOR (SPEC)	
CAN DIAG SUPPORT MNTR	
ACTIVE TEST	
Scroll Down	
	BACK LIGHT COPY

CAN DIAG SUPPORT MNTR	
ENGINE	
	PRSN
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	UNKWN
PRINT	Scroll Down
MODE	BACK LIGHT COPY

PKIA8343E

- Attach the printed sheet of "SELECT SYSTEM", "SELF-DIAG RESULTS" and "CAN DIAG SUPPORT MNTR" onto the check sheet. Refer to [LAN-18, "CHECK SHEET"](#).
- Based on the indications of "SELECT SYSTEM" and the results of "CAN DIAG SUPPORT MNTR", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

SELECT SYSTEM screen	CAN DIAG SUPPORT MNTR									
	Initial diagnosis	Transmit diagnosis	ECM	TCM	VDC/TCS/ABS	Receive diagnosis	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	UNKWN	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2559E

# CAN SYSTEM (TYPE 1)

[CAN]

**NOTE:**

- If “NG” is displayed on “INITIAL DIAG (Initial diagnosis)” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.
- The “CAN DIAG SUPPORT MNTR” items which are not in check sheet table are not related to diagnostic procedure on service manual.  
Therefore, it is not necessary to check the status of the “CAN DIAG SUPPORT MNTR” items not in check sheet table.

6. Check CAN communication line of the integrated display system. Refer to [AV-114, "AV Communication Line Check"](#) .
7. Attach the CAN DIAG MONITOR check sheet onto the check sheet. Refer to [LAN-18, "CHECK SHEET"](#) .
8. Mark the “NG” or “UNKWN” item of the check sheet table from the result of CAN DIAG MONITOR check sheet.

**NOTE:**

If “NG” is displayed on “CAN COMM” as “CAN DIAG MNTR” for the diagnosed control unit, replace the control unit.

9. According to the Check Sheet Results, start inspection.

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# CAN SYSTEM (TYPE 1)

[CAN]

## CHECK SHEET

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

Symptoms:

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Attach copy of  
display unit  
CAN DIAG MONITOR  
check sheet

WKIA2563E

# CAN SYSTEM (TYPE 1)

[CAN]

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

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

LAN

WKIA2564E

# CAN SYSTEM (TYPE 1)

[CAN]

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	✓	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2565E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	✓	✓	-	✓	✓	✓
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2566E

### Case 2

Replace ABS actuator and electric unit (control unit).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	✓	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2567E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	✓	✓	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2568E

# CAN SYSTEM (TYPE 1)

[CAN]

## Case 3

Replace TCM.

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	✓	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2569E

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	✓	-	✓	-	-	✓	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2570E

## Case 4

Replace display unit.

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	✓	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2571E

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	✓3	-	-	✓4	✓2	✓5	✓7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2573E

# CAN SYSTEM (TYPE 1)

[CAN]

## Case 5

Replace BCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCSP/ABS	Front air control	BCM/SEC	MF-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	✓	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2572E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCSP/ABS	Front air control	BCM/SEC	MF-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	✓	-	-	-	-	✓	✓
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2574E

## Case 6

Replace IPDM E/R.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCSP/ABS	Front air control	BCM/SEC	MF-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	✓	-	-	-	✓	-	-

WKIA2575E

## Case 7

Check harness between TCM and data link connector. Refer to [LAN-26](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCSP/ABS	Front air control	BCM/SEC	MF-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	✓	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	✓	-	-	-	UNKWN	-	-

WKIA2576E

## Case 8

Check ECM circuit. Refer to [LAN-26](#).

S/ELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VIX/TCS/ABS	Front air control	BCM/SEC	MH-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN ✓	-	UNKWN ✓	UNKWN ✓	-	UNKWN ✓	UNKWN ✓	UNKWN ✓
A/T	-	NG	UNKWN	UNKWN ✓	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	UNKWN ✓	UNKWN ✓	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2577E

## Case 9

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-27](#).

S/ELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VIX/TCS/ABS	Front air control	BCM/SEC	MH-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN ✓	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN ✓	-	-	UNKWN	-
ABS	-	NG	UNKWN ✓	UNKWN	UNKWN ✓	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2578E

## Case 10

Check TCM circuit. Refer to [LAN-27](#).

S/ELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VIX/TCS/ABS	Front air control	BCM/SEC	MH-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN ✓	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN ✓	-	-	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2579E

## Case 11

Check display unit circuit. Refer to [LAN-28](#).

S/ELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR						
				Receive diagnosis						
				ECM	TCM	VIX/TCS/ABS	Front air control	BCM/SEC	MH-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display unit	-	CAN COMM	UNKWN ✓	UNKWN ✓	-	UNKWN ✓	UNKWN ✓	UNKWN ✓	UNKWN ✓	UNKWN ✓
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2580E

## Case 12

Check data link connector circuit. Refer to [LAN-28](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						M-TER/ M&A	IPDM E/R
				ECM	TCM	VDCT/CSI/ ABS	Front air control	BCM/SEC			
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-	
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	CAN 7	
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	
IPDM E/R	No indication	✓	UNKWN	UNKWN	-	-	-	UNKWN	-	-	

WKIA2581E

## Case 13

Check BCM circuit. Refer to [LAN-29](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						M-TER/ M&A	IPDM E/R
				ECM	TCM	VDCT/CSI/ ABS	Front air control	BCM/SEC			
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-	
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	✓ CAN 2	CAN 5	CAN 7	
BCM	No indication	✓	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	
IPDM E/R	No indication	✓	UNKWN	UNKWN	-	-	-	UNKWN	-	-	

WKIA2582E

## Case 14

Check combination meter circuit. Refer to [LAN-29](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						M-TER/ M&A	IPDM E/R
				ECM	TCM	VDCT/CSI/ ABS	Front air control	BCM/SEC			
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	✓ CAN 5	CAN 7	
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	
IPDM E/R	No indication	✓	UNKWN	UNKWN	-	-	-	UNKWN	-	-	

WKIA2583E

## Case 15

Check front air control circuit. Refer to [LAN-30](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						M-TER/ M&A	IPDM E/R
				ECM	TCM	VDCT/CSI/ ABS	Front air control	BCM/SEC			
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	✓ CAN 4	CAN 2	CAN 5	CAN 7	
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	
IPDM E/R	No indication	✓	UNKWN	UNKWN	-	-	-	UNKWN	-	-	

WKIA2584E



## Circuit Check Between TCM and Data Link Connector

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E142 and ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

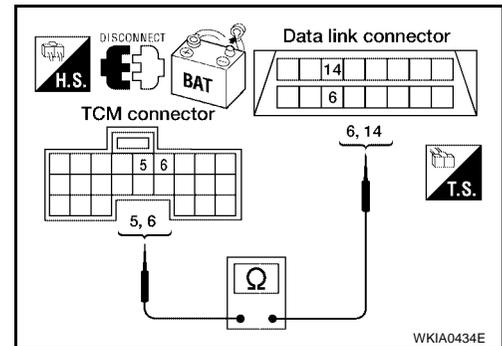
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector E142 terminals 5 (L), 6 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

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

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-16, "Work Flow"](#).  
 NG >> Repair harness.



EKS0067I

## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

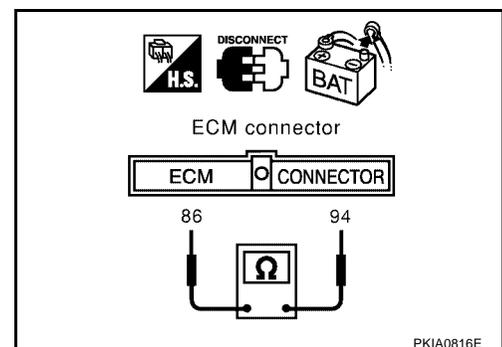
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between ECM connector E16 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector E16 and TCM connector E142.



**ABS Actuator and Electric Unit (Control Unit) Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ABS actuator and electric unit (control unit) connector E125.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

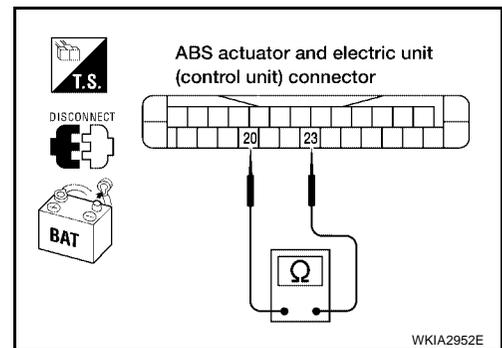
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 20 (L) and terminal 23 (Y).

**20 (L) - 23 (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) connector E125 and ECM connector E16.



EKS0067J

**TCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E142.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

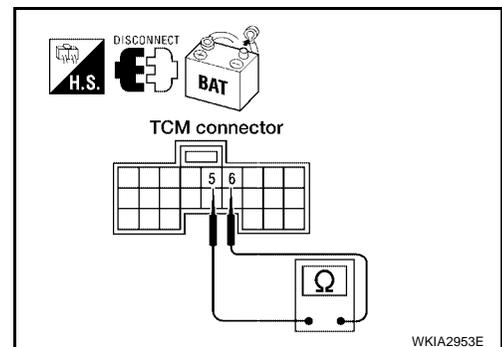
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector E142 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector E142 and ECM connector E16.



## Display Unit Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect display unit connector M93.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

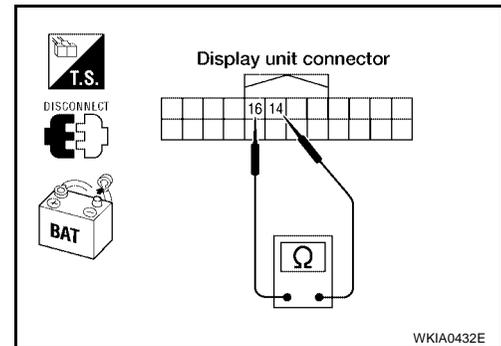
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between display unit connector M93 terminal 14 (L) and terminal 16 (Y).

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

OK or NG

- OK >> Replace display unit.  
 NG >> Repair harness between display unit connector M93 and data link connector M22.



## Data Link Connector Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Check data link connector M22 terminals for deformation, disconnection, looseness or damage.

OK or NG

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

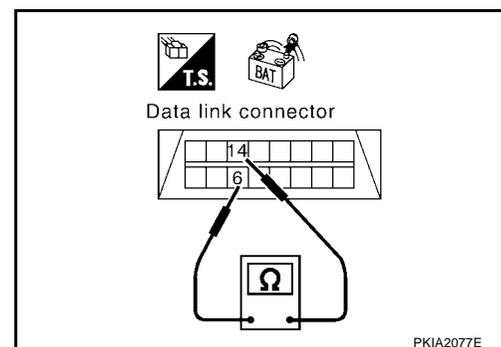
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-16](#) .  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



**BCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect BCM connector M18.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

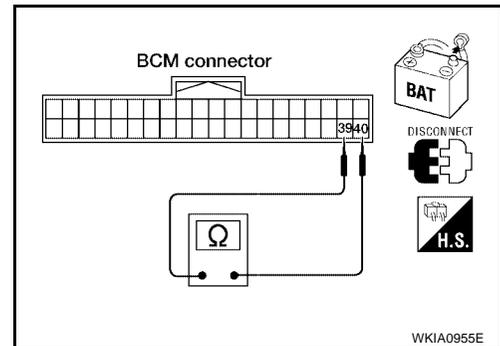
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

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

**OK or NG**

- OK >> Replace BCM.  
 NG >> Repair harness between BCM connector M18 and data link connector M22.

**Combination Meter Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect combination meter connector M23.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

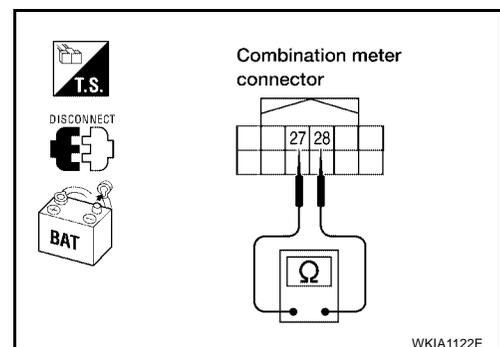
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between combination meter connector M23 terminal 27 (L) and terminal 28 (Y).

**27 (L) - 28 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace combination meter.  
 NG >> Repair harness between combination meter connector M23 and data link connector M22.



## Front Air Control Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect front air control connector M50.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

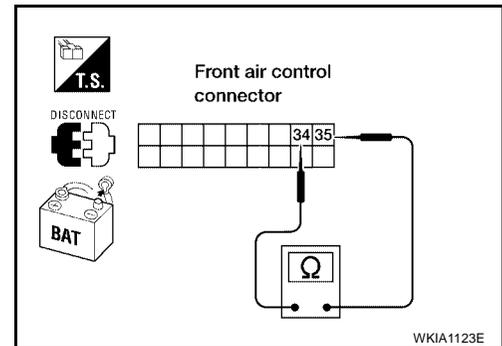
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between front air control connector M50 terminal 34 (L) and terminal 35 (Y).

**34 (L) - 35 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace front air control.  
 NG >> Repair harness between front air control connector M50 and data link connector M22.



## IPDM E/R Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect IPDM E/R connector E121.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

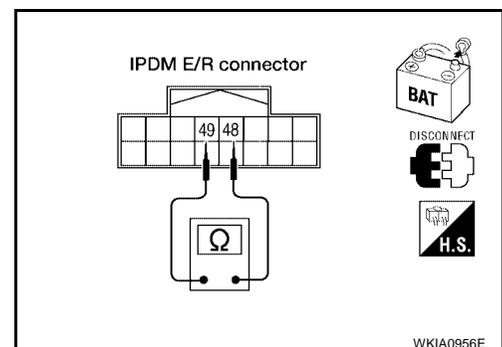
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

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

#### OK or NG

- OK >> Replace IPDM E/R.  
 NG >> Repair harness between IPDM E/R connector E121 and data link connector M22.



**CAN Communication Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect the following module and control unit connectors and check terminals for deformation, disconnection, looseness or damage.
  - ECM
  - ABS actuator and electric unit (control unit)
  - TCM (Transmission control module)
  - Display unit
  - BCM (Body control module)
  - Combination meter
  - Front air control
  - IPDM E/R (Intelligent power distribution module engine room)

OK or NG

OK &gt;&gt; GO TO 2.

NG &gt;&gt; Repair or replace as necessary.

**2. CHECK HARNESS FOR SHORTED CIRCUITS**

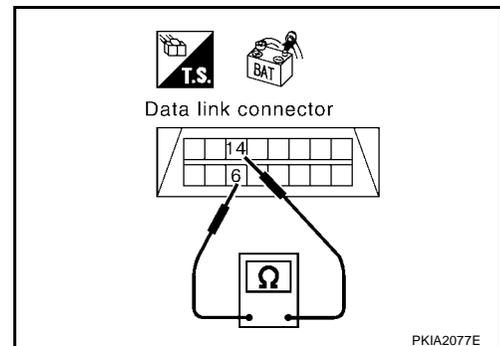
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

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

OK or NG

OK &gt;&gt; GO TO 3.

NG &gt;&gt; Repair the harness.

**3. CHECK HARNESS FOR SHORT TO GROUND**

Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

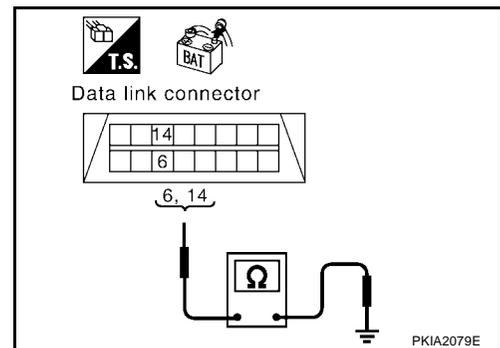
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-32, "Component Inspection"](#).

NG >> Repair the harness.

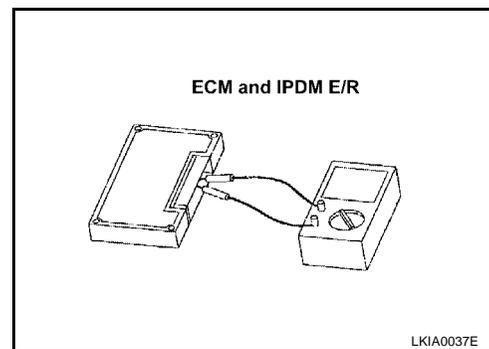
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-25, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-12, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

**Component Inspection****ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION**

- Disconnect ECM and IPDM E/R harness connectors.
- Check resistance between ECM terminals 94 and 86.  
**94 - 86 : Approx. 108 - 132 $\Omega$**
- Check resistance between IPDM E/R terminals 48 and 49.  
**48 - 49 : Approx. 108 - 132 $\Omega$**



## CAN SYSTEM (TYPE 2)

PFP:23710

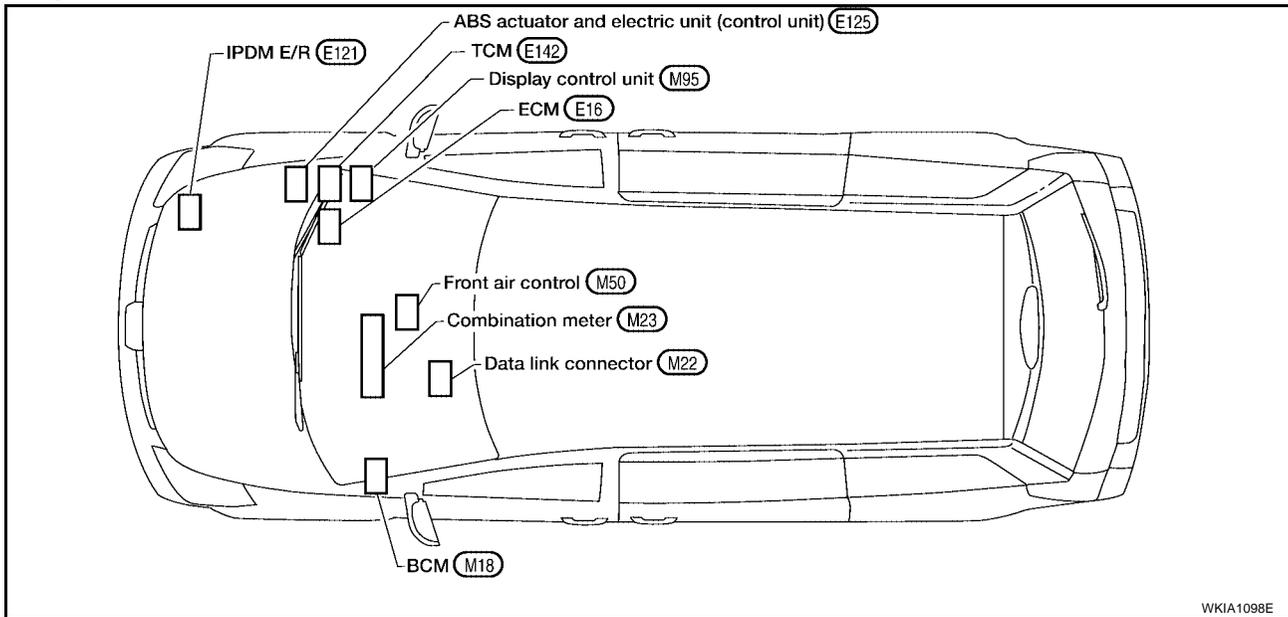
### System Description

EKS0067T

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

### Component Parts and Harness Connector Location

EKS0067U



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

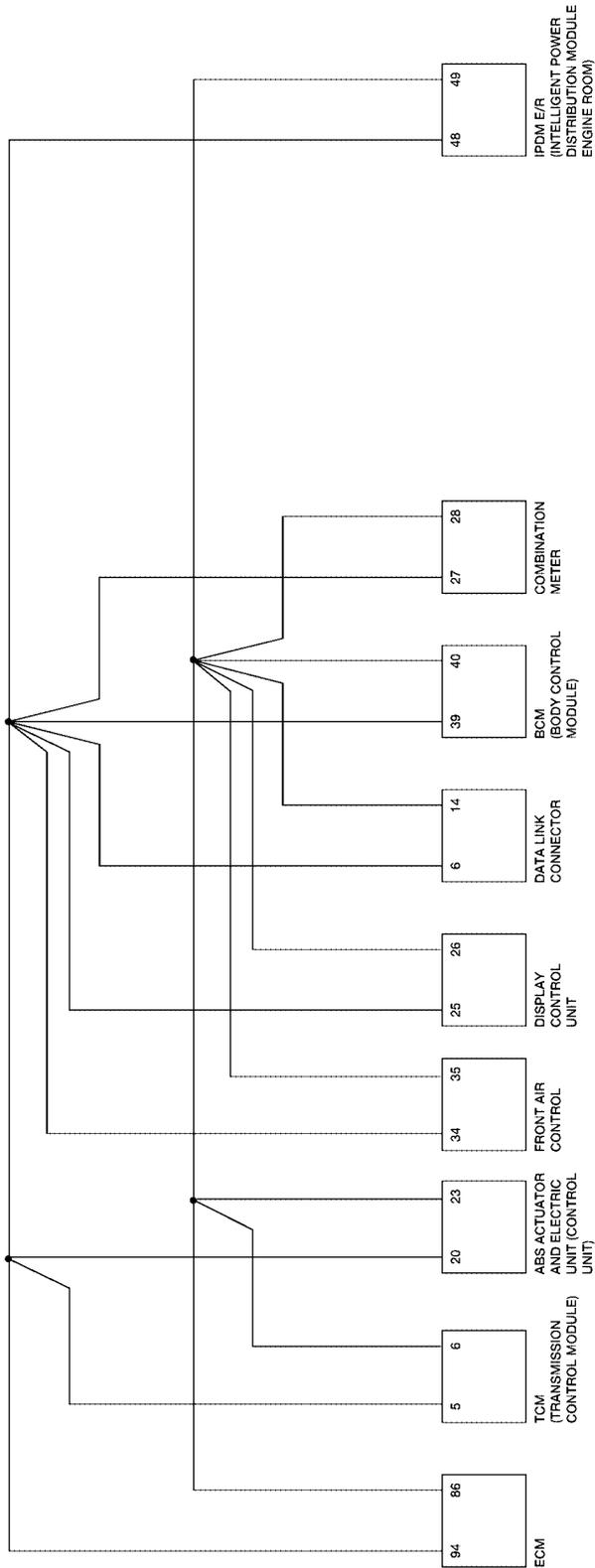
LAN

# CAN SYSTEM (TYPE 2)

[CAN]

## Schematic

EKS0067V



WKWA0595E

# CAN SYSTEM (TYPE 2)

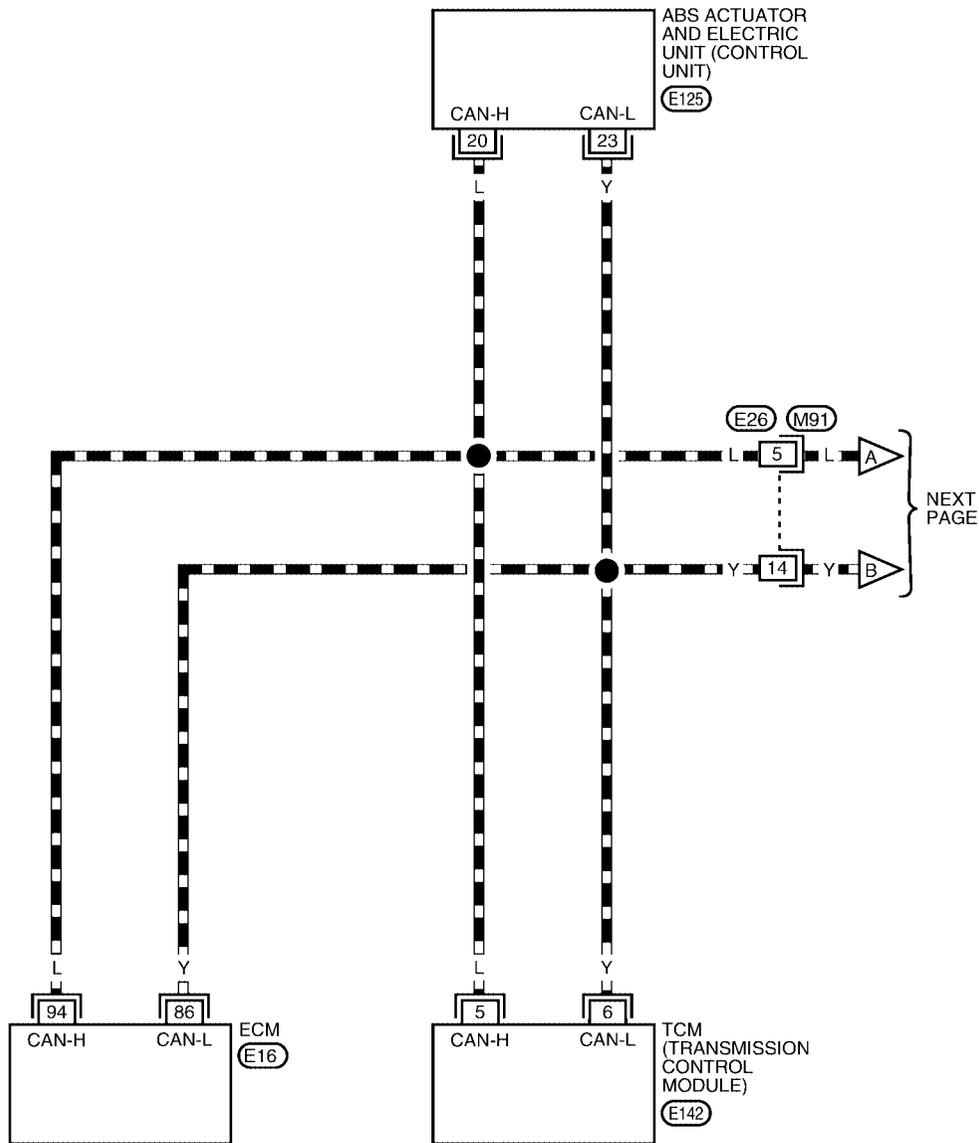
[CAN]

## Wiring Diagram — CAN —

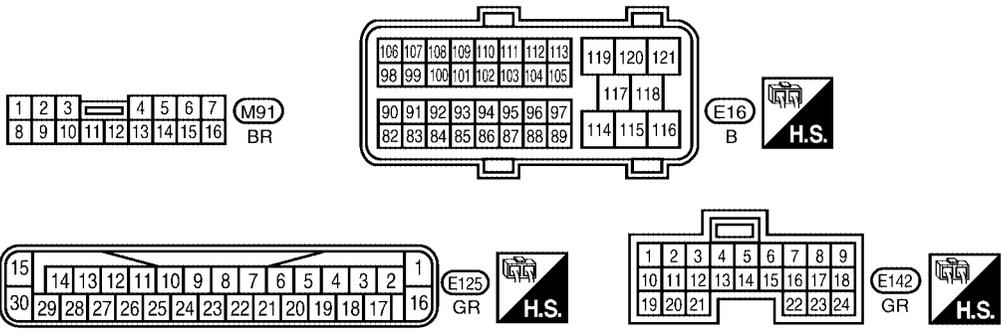
EKS0067W

### LAN-CAN-04

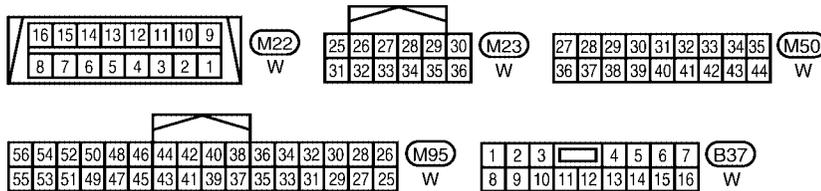
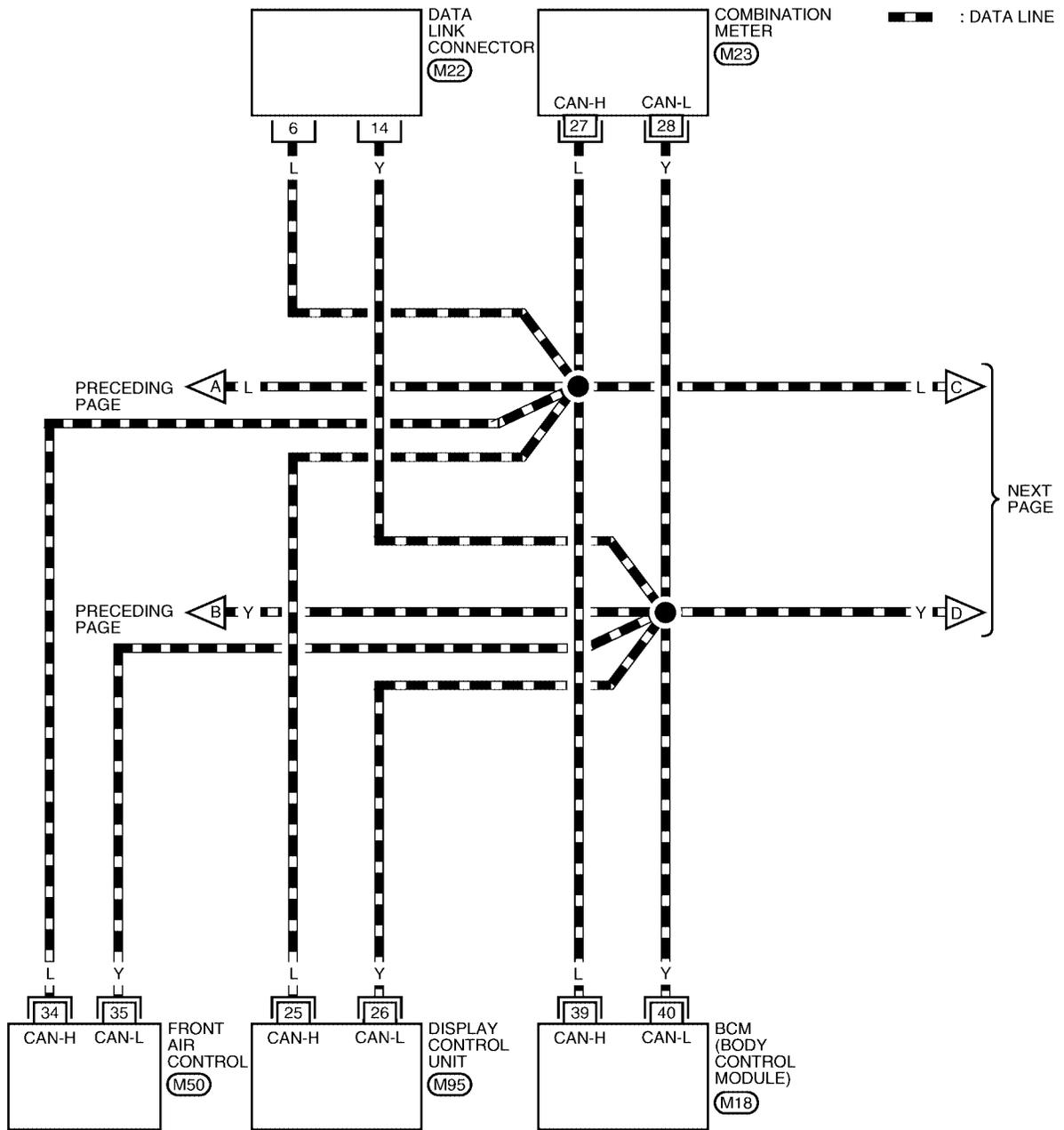
— : DATA LINE



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



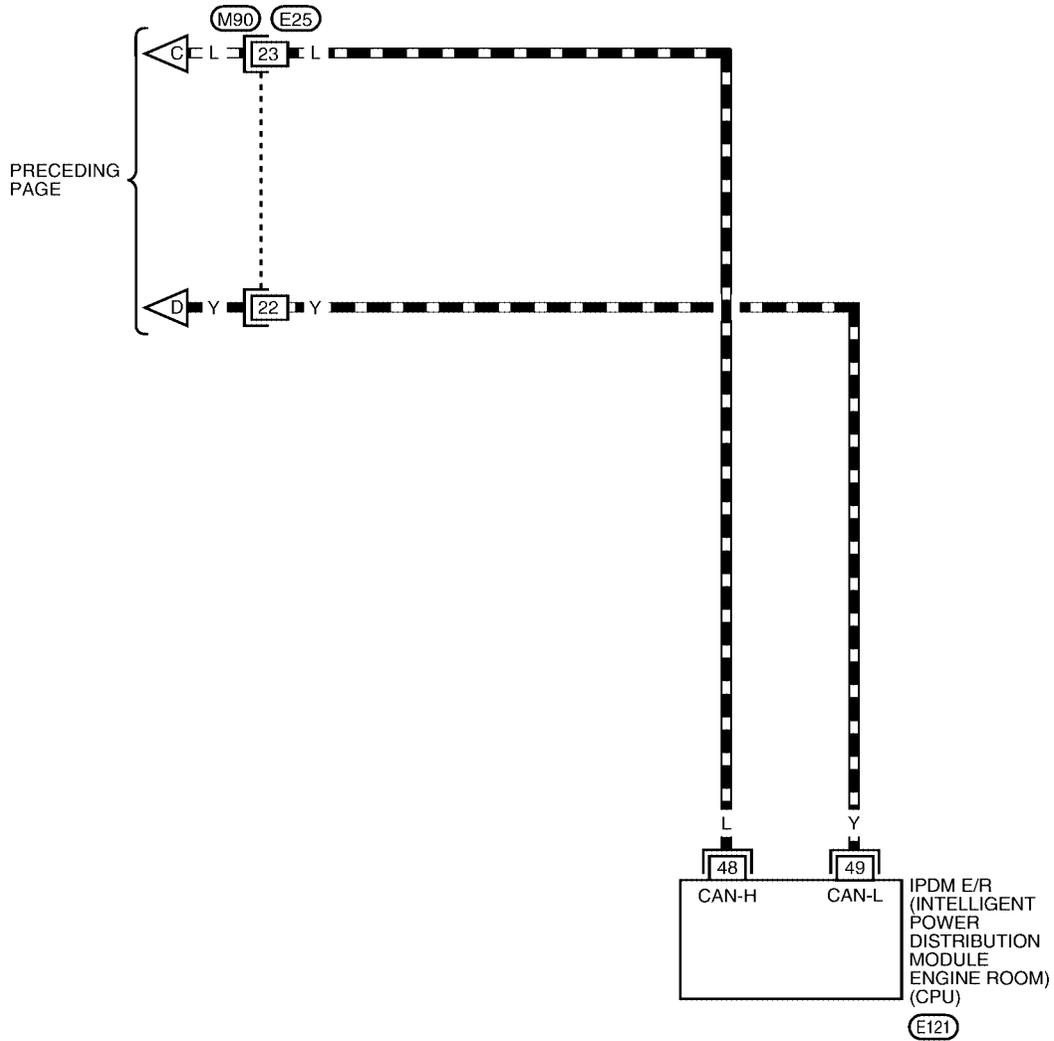
WKWA0596E



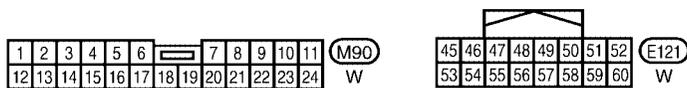
REFER TO THE FOLLOWING.  
**M18** - ELECTRICAL UNITS

LAN-CAN-06

▬ : DATA LINE



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



WKWA0598E



**NOTE:**

- If “NG” is displayed on “INITIAL DIAG (Initial diagnosis)” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.
- The “CAN DIAG SUPPORT MNTR” items which are not in check sheet table are not related to diagnostic procedure on service manual.  
Therefore, it is not necessary to check the status of the “CAN DIAG SUPPORT MNTR” items not in check sheet table.

6. Check CAN communication line of the navigation system.
7. Check the CAN DIAG SUPPORT MONITOR check sheet onto the check sheet. Refer to [LAN-40](#), "[CHECK SHEET](#)".
8. Mark the “NG” or “UNKWN” item of the check sheet table from the result of CAN DIAG SUPPORT MONITOR check sheet.

**NOTE:**

If “NG” is displayed on “CAN COMM” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.

9. According to the Check Sheet Results, start inspection.

A

B

C

D

E

F

G

H

I

J

LAN

L

M

# CAN SYSTEM (TYPE 2)

[CAN]

## CHECK SHEET

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

Symptoms:

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

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

WKIA2589E

# CAN SYSTEM (TYPE 2)

[CAN]

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

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

LAN

WKIA2590E

# CAN SYSTEM (TYPE 2)

[CAN]

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2591E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2592E

### Case 2

Replace ABS actuator and electric unit (control unit).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2593E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2594E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 3

Replace TCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	✓	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2595E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	✓	-	✓	-	-	✓	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2596E

## Case 4

Replace display control unit.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	✓	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2597E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCM/ABS	Front air control	BCM/SEC	METER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	✓	CAN CIRC 3	-	-	✓	✓	✓
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2598E

## Case 5

Replace BCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VIDC/TCS/ABS	Front air control	BCM/SEC	MF-TER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	✓	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2599E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VIDC/TCS/ABS	Front air control	BCM/SEC	MF-TER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	✓	-	-	-	-	✓	✓
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2600E

## Case 6

Replace IPDM E/R.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VIDC/TCS/ABS	Front air control	BCM/SEC	MF-TER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	✓	-	-	-	✓	-	-

WKIA2601E

## Case 7

Check harness between TCM and data link connector. Refer to [LAN-48](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VIDC/TCS/ABS	Front air control	BCM/SEC	MF-TER/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	✓	✓	✓
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	✓	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	✓	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5
BCM	No indication	NG	UNKWN	✓	UNKWN	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	✓	UNKWN	-	-	UNKWN	-	-

WKIA2602E

## Case 8

Check ECM circuit. Refer to [LAN-48](#).

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	M-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN ✓	-	UNKWN ✓	UNKWN ✓	-	UNKWN ✓	UNKWN ✓	UNKWN ✓
A/T	-	NG	UNKWN	UNKWN ✓	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2603E

## Case 9

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-49](#).

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	M-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN ✓	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN ✓	UNKWN ✓	UNKWN ✓	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2604E

## Case 10

Check TCM circuit. Refer to [LAN-49](#).

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	M-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN ✓	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2605E

## Case 11

Check display control unit circuit. Refer to [LAN-50](#).

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SEC	M-TR/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1 ✓	CAN CIRC 3 ✓	-	-	CAN CIRC 4 ✓	CAN CIRC 2 ✓	CAN CIRC 5 ✓	CAN CIRC 7 ✓
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2606E

## Case 12

Check data link connector circuit. Refer to [LAN-50](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDCT/CSI/ABS	Front air control	BCM/SEC	M-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	NG	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2607E

## Case 13

Check BCM circuit. Refer to [LAN-51](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDCT/CSI/ABS	Front air control	BCM/SEC	M-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	NG	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2608E

## Case 14

Check combination meter circuit. Refer to [LAN-51](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDCT/CSI/ABS	Front air control	BCM/SEC	M-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	NG	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2609E

## Case 15

Check front air control circuit. Refer to [LAN-52](#) .

S-LECT SYSTEM screen		CAN DIAG SUPPORT MNTR								
		Initial diagnosis	Transmit diagnosis	Receive diagnosis						
				ECM	TCM	VDCT/CSI/ABS	Front air control	BCM/SEC	M-TE/R/M&A	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN
A/T	-	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	NG	UNKWN	UNKWN	-	-	-	UNKWN	-	-

WKIA2610E



## Circuit Check Between TCM and Data Link Connector

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E142 and ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

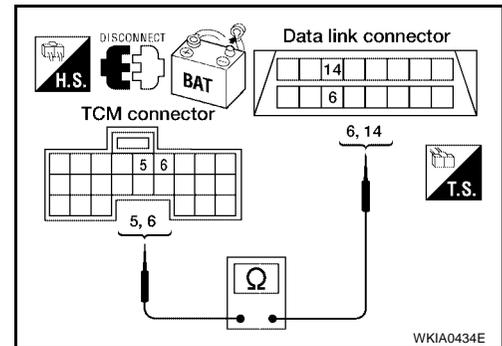
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector E142 terminals 5 (L), 6 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

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

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-38, "Work Flow"](#).  
 NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

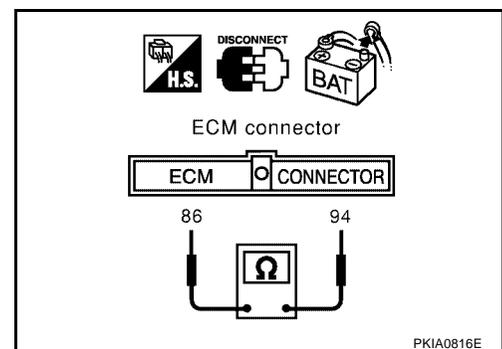
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between ECM connector E16 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector E16 and TCM connector E142.



**ABS Actuator and Electric Unit (Control Unit) Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ABS actuator and electric unit (control unit) connector E125.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

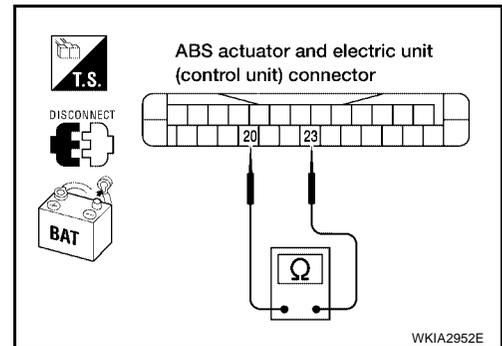
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 20 (L) and terminal 23 (Y).

**20 (L) - 23 (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) connector E125 and ECM connector E16.

**TCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E142.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

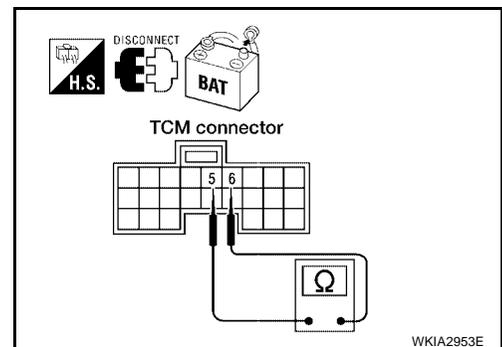
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector E142 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector E142 and ECM connector E16.



## Display Control Unit Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect display control unit connector M95.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

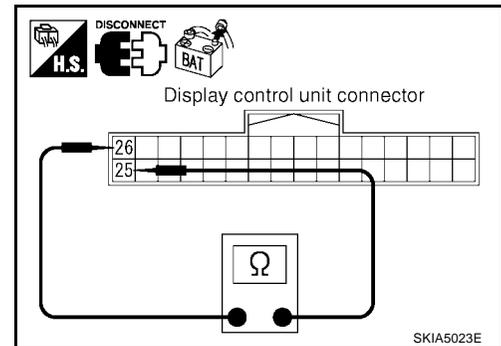
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

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

OK or NG

- OK >> Replace display control unit.  
 NG >> Repair harness between display control unit connector M95 and data link connector M22.



## Data Link Connector Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Check data link connector M22 terminals for deformation, disconnection, looseness or damage.

OK or NG

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

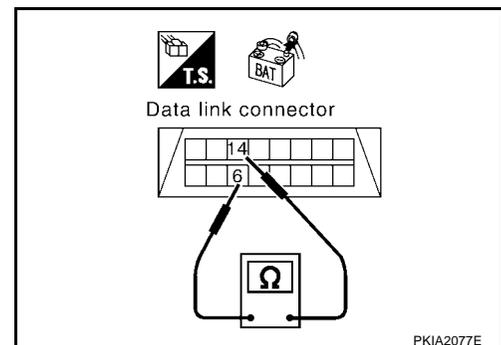
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-38](#) .  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



**BCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect BCM connector M18.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

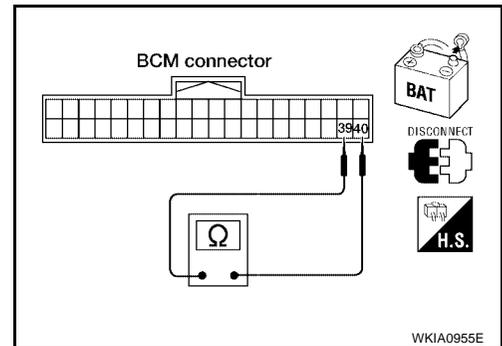
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

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

**OK or NG**

- OK >> Replace BCM.  
 NG >> Repair harness between BCM connector M18 and data link connector M22.

**Combination Meter Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect combination meter connector M23.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

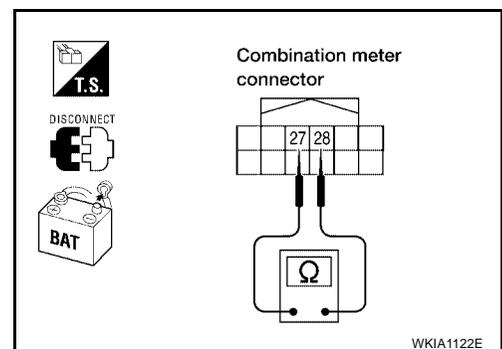
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between combination meter connector M23 terminal 27 (L) and terminal 28 (Y).

**27 (L) - 28 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace combination meter.  
 NG >> Repair harness between combination meter connector M23 and data link connector M22.



## Front Air Control Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect front air control connector M50.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

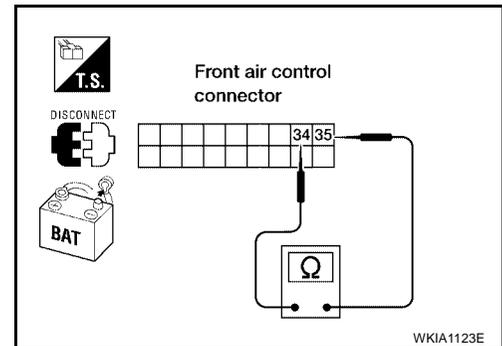
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between front air control connector M50 terminal 34 (L) and terminal 35 (Y).

**34 (L) - 35 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace front air control.  
 NG >> Repair harness between front air control connector M50 and data link connector M22.



## IPDM E/R Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect IPDM E/R connector E121.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

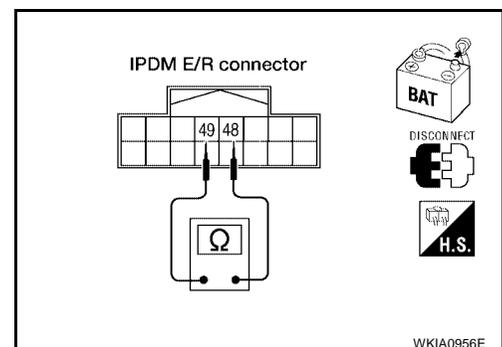
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

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

#### OK or NG

- OK >> Replace IPDM E/R.  
 NG >> Repair harness between IPDM E/R connector E121 and data link connector M22.



**CAN Communication Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect the following module and control unit connectors and check terminals for deformation, disconnection, looseness or damage.
  - ECM
  - ABS actuator and electric unit (control unit)
  - TCM (Transmission control module)
  - Display control unit
  - BCM (Body control module)
  - Combination meter
  - Front air control
  - IPDM E/R (Intelligent power distribution module engine room)

OK or NG

OK &gt;&gt; GO TO 2.

NG &gt;&gt; Repair or replace as necessary.

**2. CHECK HARNESS FOR SHORTED CIRCUITS**

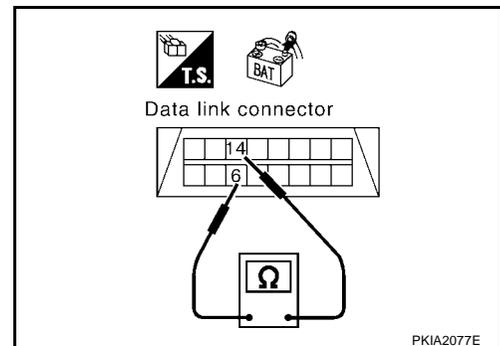
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

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

OK or NG

OK &gt;&gt; GO TO 3.

NG &gt;&gt; Repair the harness.

**3. CHECK HARNESS FOR SHORT TO GROUND**

Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

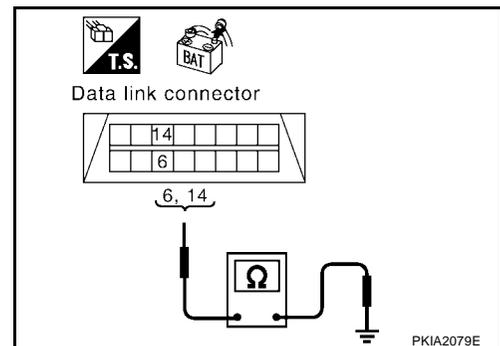
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-54, "Component Inspection"](#).

NG >> Repair the harness.

**IPDM E/R Ignition Relay Circuit Check**

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

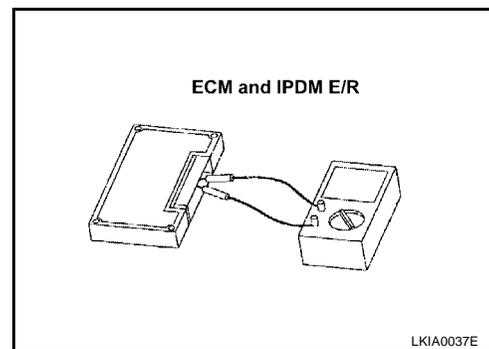
- IPDM E/R power supply circuit. Refer to [PG-25, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-12, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

**Component Inspection**

EKS0068C

**ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION**

- Disconnect ECM and IPDM E/R harness connectors.
- Check resistance between ECM terminals 94 and 86.  
**94 - 86 : Approx. 108 - 132Ω**
- Check resistance between IPDM E/R terminals 48 and 49.  
**48 - 49 : Approx. 108 - 132Ω**



## CAN SYSTEM (TYPE 3)

PFP:23710

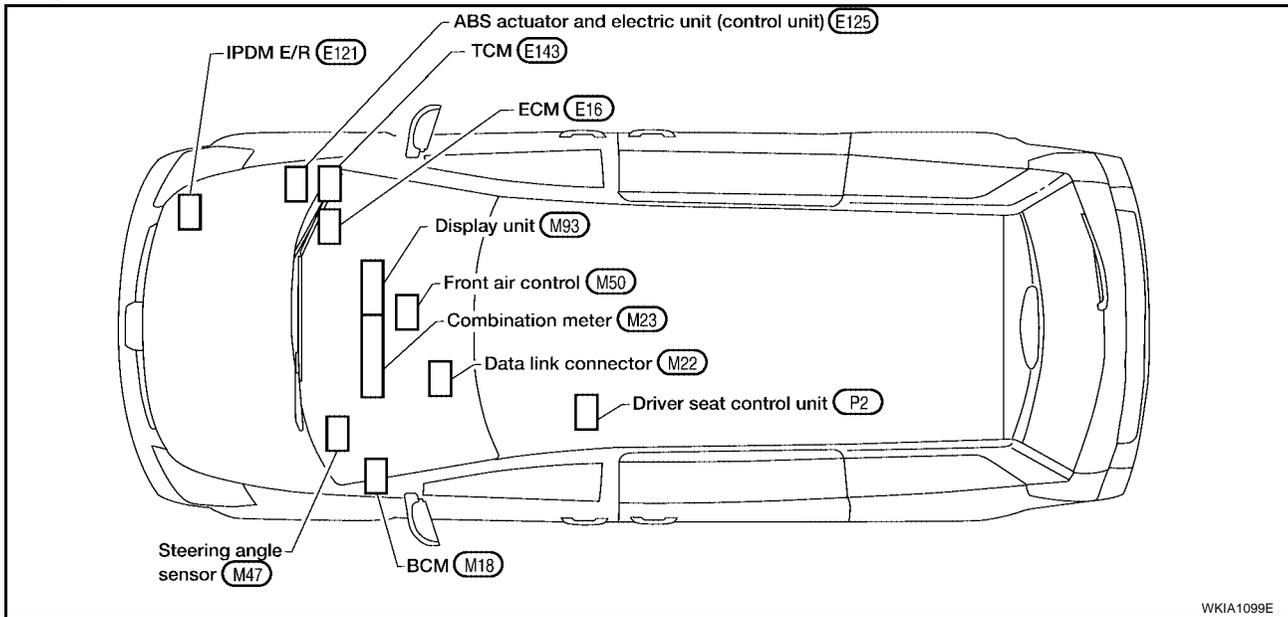
### System Description

EKS0068D

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

### Component Parts and Harness Connector Location

EKS0068E



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

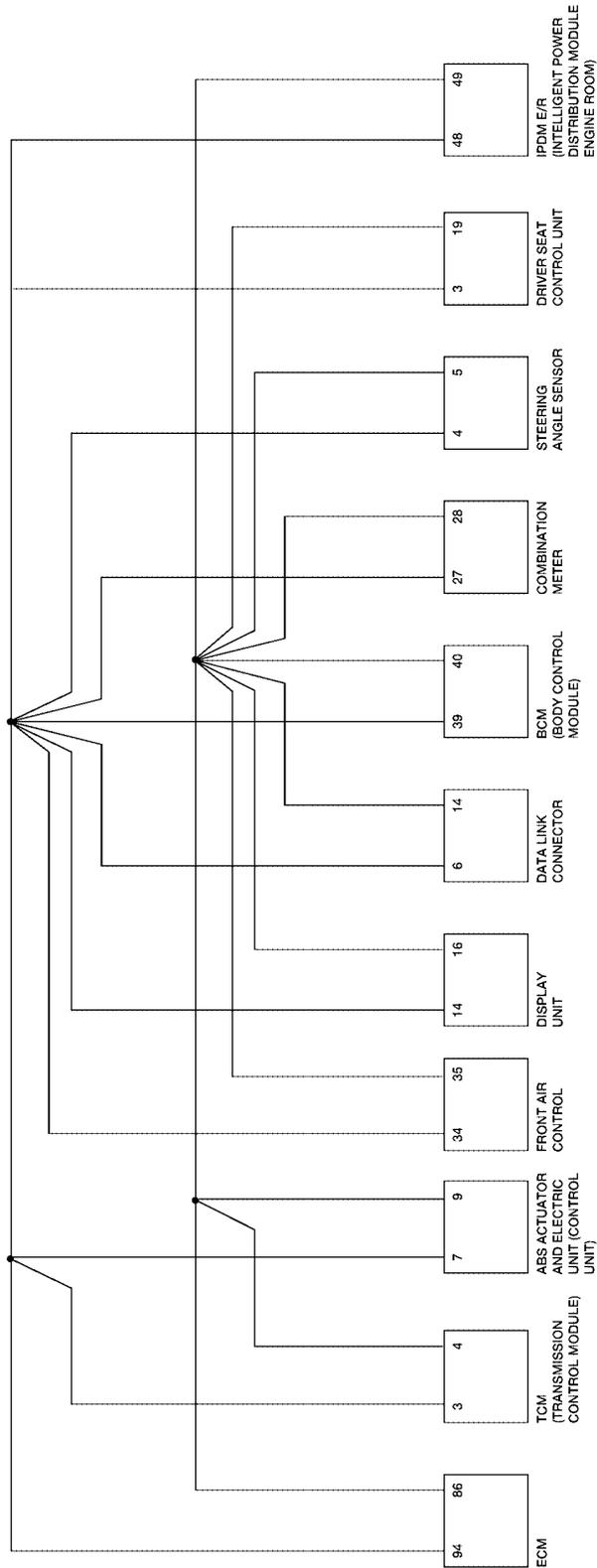
LAN

# CAN SYSTEM (TYPE 3)

[CAN]

## Schematic

EKS0068F



WKWA0591E

# CAN SYSTEM (TYPE 3)

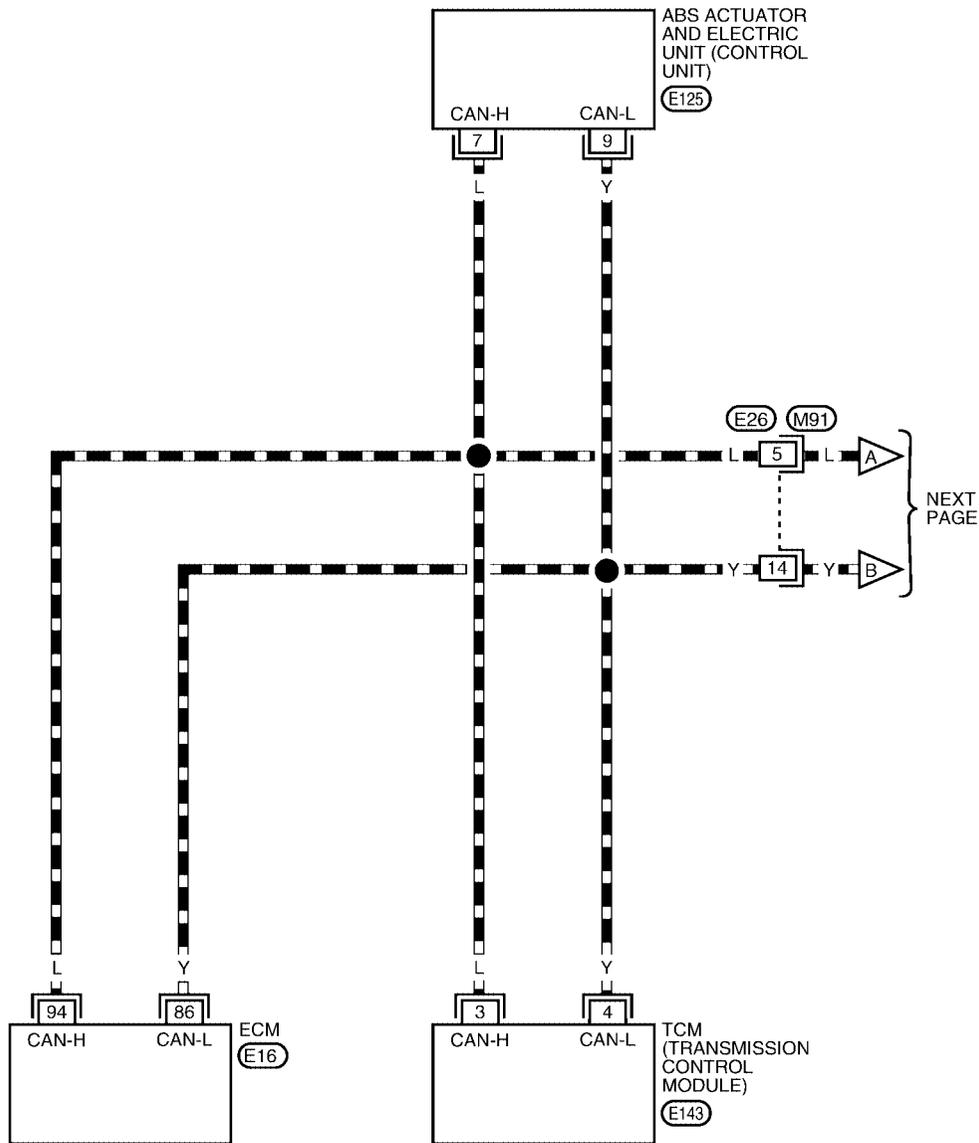
[CAN]

## Wiring Diagram — CAN —

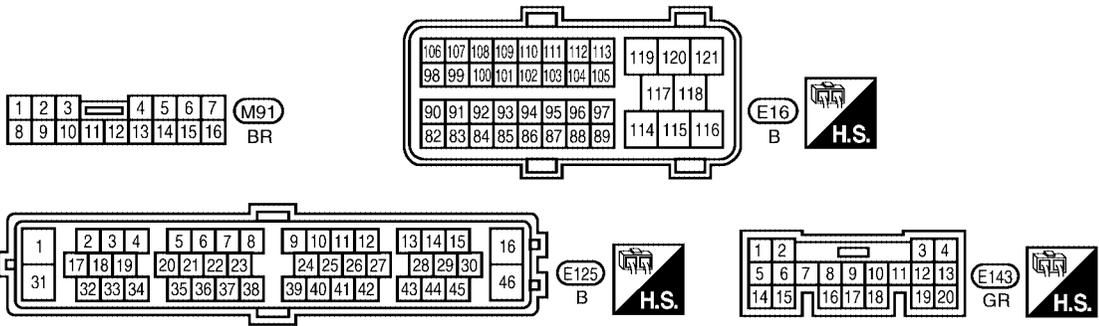
EKS0068G

### LAN-CAN-07

— — : DATA LINE



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

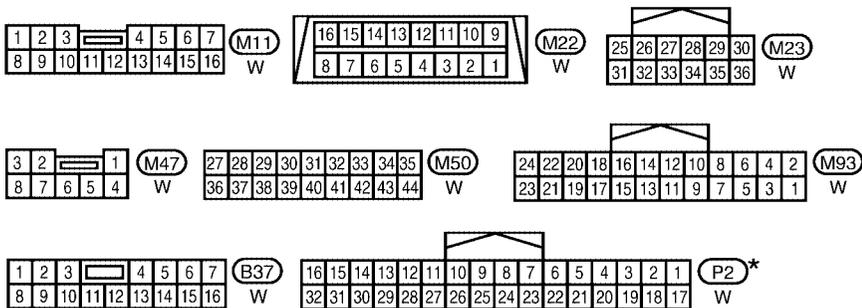
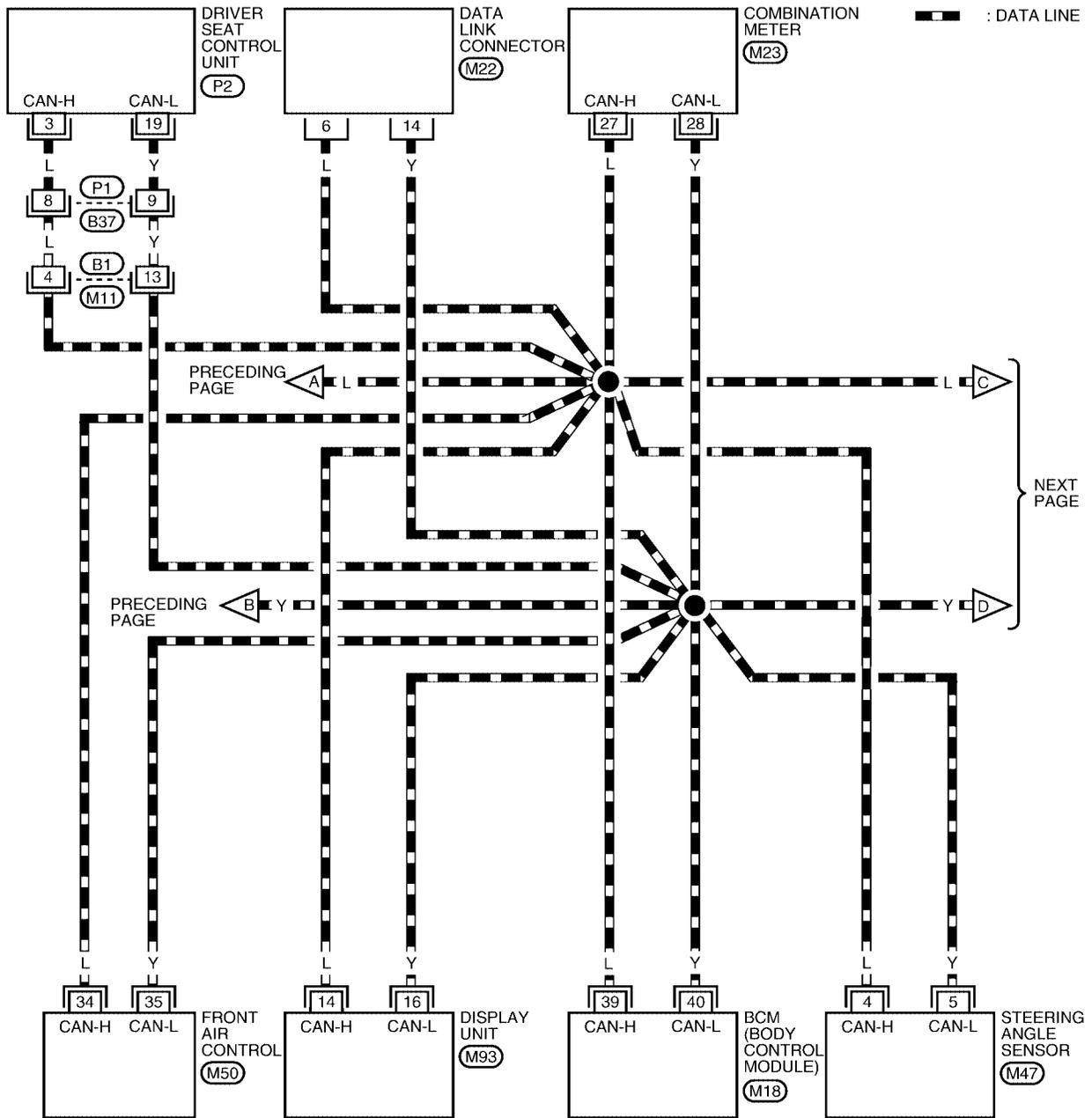


WKWA0592E

# CAN SYSTEM (TYPE 3)

[CAN]

LAN-CAN-08

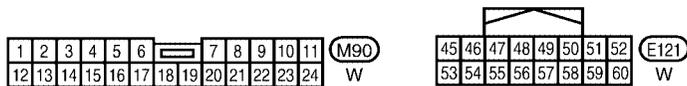
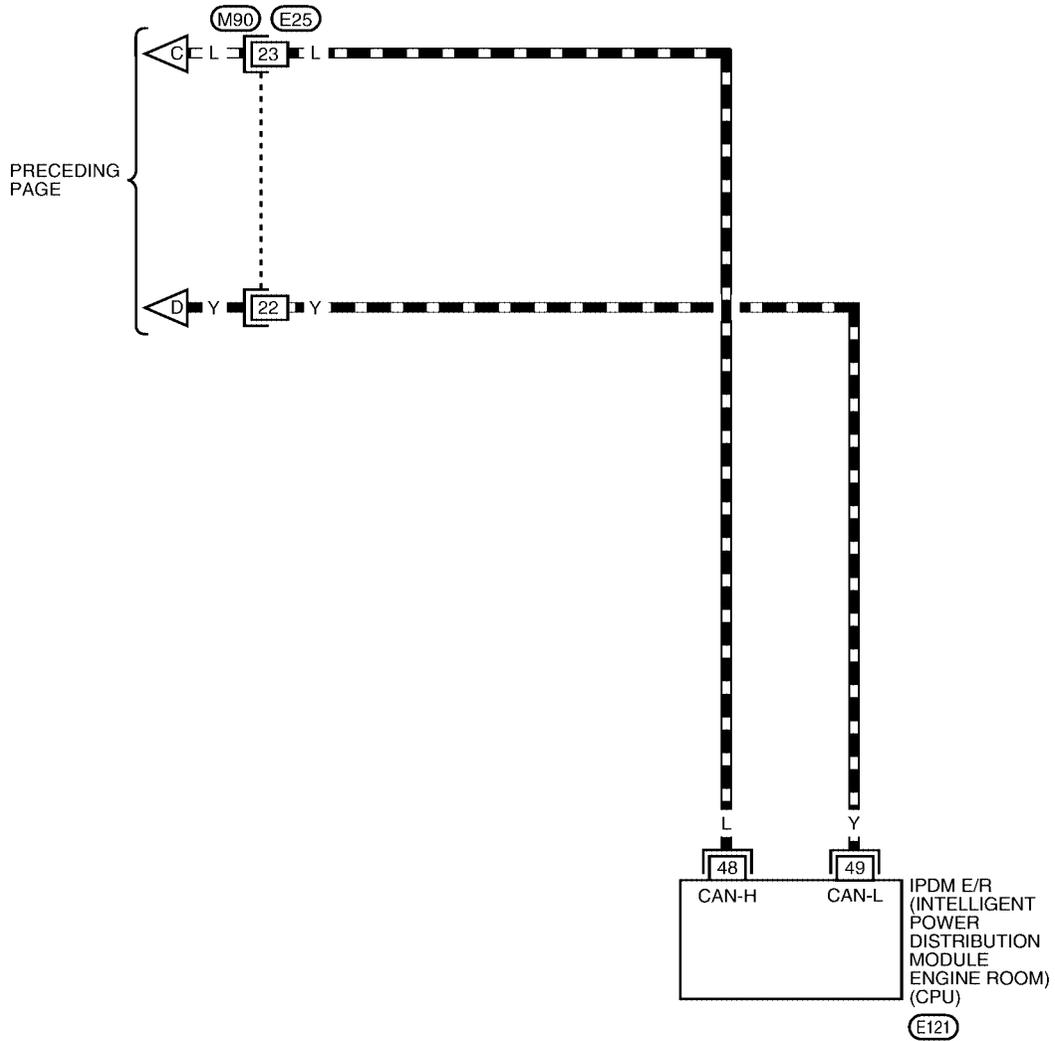


REFER TO THE FOLLOWING.  
**(M18)** - ELECTRICAL UNITS

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

WKWA0593E

▬ : DATA LINE



WKWA0594E



## CAN SYSTEM (TYPE 3)

[CAN]

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**NOTE:**

- If “NG” is displayed on “INITIAL DIAG (Initial diagnosis)” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.
- The “CAN DIAG SUPPORT MNTR” items which are not in check sheet table are not related to diagnostic procedure on service manual.  
Therefore, it is not necessary to check the status of the “CAN DIAG SUPPORT MNTR” items not in check sheet table.

6. Check CAN communication line of the integrated display system. Refer to [AV-114, "AV Communication Line Check"](#) .
7. Attach the DIAG DIAG MONITOR check sheet onto the check sheet. Refer to [LAN-62, "CHECK SHEET"](#) .
8. Mark the “NG” or “UNKWN” item of the check sheet table from the result of CAN DIAG MONITOR check sheet.

**NOTE:**

If “NG” is displayed on “CAN COMM” as “CAN DIAG MNTR” for the diagnosed control unit, replace the control unit.

9. According to the Check Sheet Results, start inspection.

A

B

C

D

E

F

G

H

I

J

LAN

L

M

# CAN SYSTEM (TYPE 3)

[CAN]

## CHECK SHEET

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
ECM	TCM			VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	STRG	IPDM E/R		
ENGINE	-	NG	UNKWVN	-	UNKWVN	UNKWVN	-	UNKWVN	UNKWVN	-	UNKWVN
TRANSMISSION	No indication	NG	UNKWVN	UNKWVN	-	UNKWVN	-	-	UNKWVN	-	-
ABS	-	NG	UNKWVN	UNKWVN	UNKWVN	-	-	-	-	UNKWVN	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWVN	UNKWVN	-	-	-	-	UNKWVN	-	UNKWVN
AUTO DRIVE POS.	No indication	NG	UNKWVN	-	UNKWVN	-	-	UNKWVN	UNKWVN	-	-
IPDM E/R	No indication	-	UNKWVN	UNKWVN	-	-	-	UNKWVN	-	-	-

Symptoms:

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

Attach copy of  
display unit  
CAN DIAG MONITOR  
check sheet

WKIA2615E

# CAN SYSTEM (TYPE 3)

[CAN]

Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of TRANSMISSION SELF-DIAG RESUL	Attach copy of ABS SELF-DIAG RESULTS
Attach copy of BCM SELF-DIAG RESULTS	Attach copy of AUTO DRIVE POS. SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS
Attach copy of ENGINE CAN DIAG SUPPORT MNTR	Attach copy of TRANSMISSION CAN DIAG SUPPORT MNTR	Attach copy of ABS CAN DIAG SUPPORT MNTR
Attach copy of BCM CAN DIAG SUPPORT MNTR	Attach copy of AUTO DRIVE POS. CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR

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

LAN

WKIA2616E

# CAN SYSTEM (TYPE 3)

[CAN]

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R
ENGINE	-	✓	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-	UNKWN
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-

WKIA2617E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	✓	✓	-	✓	✓	-	✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	-	UNKWN
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-

WKIA2618E

### Case 2

Replace ABS actuator and electric unit (control unit).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	-	-
ABS	-	✓	UNKWN	UNKWN	UNKWN	-	-	-	-	-	UNKWN
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-

WKIA2619E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	-	-
ABS	-	NG	UNKWN	✓	✓	-	-	-	-	-	✓
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	-	UNKWN	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	-	-	UNKWN	UNKWN
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	-	UNKWN	-

WKIA2620E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 3

Replace TCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	✓	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2621E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	✓	-	✓	-	-	✓	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2622E

## Case 4

Replace display unit.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-
Display unit	-	✓	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2623E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-
Display unit	-	CAN COMM	CAN 1	✓ <sup>3</sup>	-	-	✓ <sup>4</sup>	✓ <sup>2</sup>	✓ <sup>5</sup>	-	-	✓ <sup>7</sup>
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2624E

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LAN

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 5

Replace BCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	✓ NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2625E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	✓ UNKWN	-	-	-	-	✓ UNKWN	-	-	✓ UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2626E

## Case 6

Replace driver seat control unit.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	✓ NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2627E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	✓ UNKWN	-	-	✓ UNKWN	✓ UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2628E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 7

Replace IPDM E/R.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKW	-	UNKW	UNKW	-	-	-	-	UNKW
TRANSMISSION	No indication	NG	UNKW	UNKW	-	UNKW	-	-	-	-	-
ABS	-	NG	UNKW	UNKW	UNKW	-	-	-	-	UNKW	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKW	UNKW	-	-	-	-	UNKW	-	UNKW
AUTO DRIVE POS.	No indication	NG	UNKW	UNKW	UNKW	-	-	-	UNKW	-	-
IPDM E/R	No indication	-	UNKW	✓	-	-	-	-	✓	-	-

WKIA2629E

## Case 8

Check harness between TCM and data link connector. Refer to LAN-71.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKW	-	UNKW	UNKW	-	✓	✓	-	✓
TRANSMISSION	No indication	NG	UNKW	UNKW	-	UNKW	-	-	-	-	-
ABS	-	NG	UNKW	UNKW	UNKW	-	-	-	-	UNKW	-
Display unit	-	CAN COMM	CAN 1	✓	CAN 3	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKW	UNKW	-	-	-	-	UNKW	-	UNKW
AUTO DRIVE POS.	No indication	NG	UNKW	UNKW	✓	UNKW	-	-	UNKW	-	-
IPDM E/R	No indication	-	UNKW	✓	-	-	-	-	UNKW	-	-

WKIA2630E

## Case 9

Check ECM circuit. Refer to LAN-71.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	✓	-	✓	✓	-	✓	✓	-	✓
TRANSMISSION	No indication	NG	UNKW	UNKW	-	UNKW	-	-	-	-	-
ABS	-	NG	UNKW	UNKW	UNKW	-	-	-	-	UNKW	-
Display unit	-	CAN COMM	CAN 1	✓	CAN 3	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKW	UNKW	-	-	-	-	UNKW	-	UNKW
AUTO DRIVE POS.	No indication	NG	UNKW	UNKW	UNKW	-	-	UNKW	UNKW	-	-
IPDM E/R	No indication	-	UNKW	✓	-	-	-	-	UNKW	-	-

WKIA2631E

## Case 10

Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-72.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKW	-	UNKW	✓	-	UNKW	UNKW	-	UNKW
TRANSMISSION	No indication	NG	UNKW	UNKW	-	UNKW	-	-	-	-	-
ABS	-	NG	✓	✓	UNKW	-	-	-	-	UNKW	-
Display unit	-	CAN COMM	CAN 1	✓	CAN 3	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKW	UNKW	-	-	-	-	UNKW	-	UNKW
AUTO DRIVE POS.	No indication	NG	UNKW	UNKW	UNKW	-	-	UNKW	UNKW	-	-
IPDM E/R	No indication	-	UNKW	UNKW	-	-	-	-	UNKW	-	-

WKIA2632E

## Case 11

Check TCM circuit. Refer to [LAN-72](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2633E

## Case 12

Check display unit circuit. Refer to [LAN-73](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
Display unit	-	CAN COMM	✓1	✓3	-	-	✓4	✓2	✓5	-	✓7
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2634E

## Case 13

Check data link connector circuit. Refer to [LAN-73](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication ✓	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication ✓	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication ✓	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2635E

## Case 14

Check BCM circuit. Refer to [LAN-74](#) .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MKA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	✓2	CAN 5	-	CAN 7
BCM	No indication ✓	NG	UNKWN	UNKWN	-	-	-	✓1	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2636E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 15

Check combination meter circuit. Refer to [LAN-74](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2637E

## Case 16

Check steering angle sensor circuit. Refer to [LAN-75](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2638E

## Case 17

Check driver seat control unit circuit. Refer to [LAN-75](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2639E

## Case 18

Check front air control circuit. Refer to [LAN-76](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	UNKWN	-	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	UNKWN	CAN 2	CAN 5	-	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2640E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 19

Check IPDM E/R circuit. Refer to [LAN-76](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	UNKWN
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-

WKIA2641E

## Case 20

Check CAN communication circuit. Refer to [LAN-77](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	UNKWN
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-

WKIA2642E

## Case 21

Check IPDM E/R Ignition relay circuit. Refer to [LAN-77](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-

WKIA2643E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display unit	-	CAN COMM	CAN 1	CAN 3	-	-	CAN 4	CAN 2	CAN 5	-	CAN 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-

WKIA2644E

**Circuit Check Between TCM and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E143 and ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

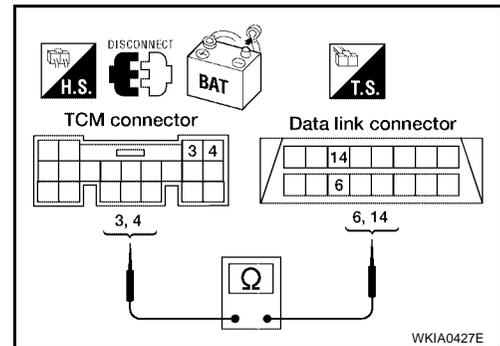
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector E143 terminals 3 (L), 4 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (L) - 6 (L) : Continuity should exist.**  
**4 (Y) - 14 (Y) : Continuity should exist.**

**OK or NG**

- OK >> Connect all connectors and diagnose again. Refer to [LAN-60, "Work Flow"](#).  
 NG >> Repair harness.

**ECM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

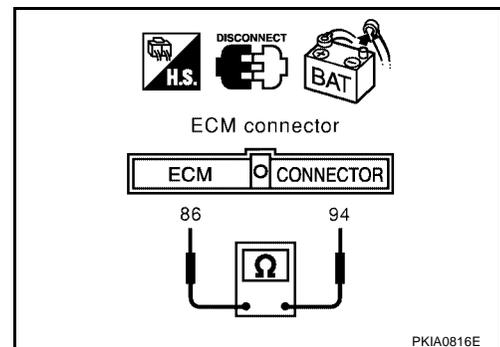
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ECM connector E16 terminal 94 (L) and terminal 86 (Y).

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

**OK or NG**

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector E16 and TCM connector E143.



**ABS Actuator and Electric Unit (Control Unit) Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ABS actuator and electric unit (control unit) connector E125.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

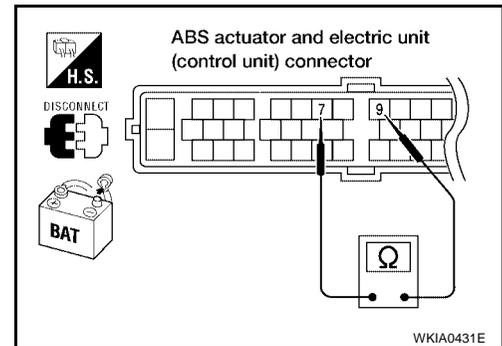
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**7 (L) - 9 (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) connector E125 and ECM connector E16.



EKS0068M

**TCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E143.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

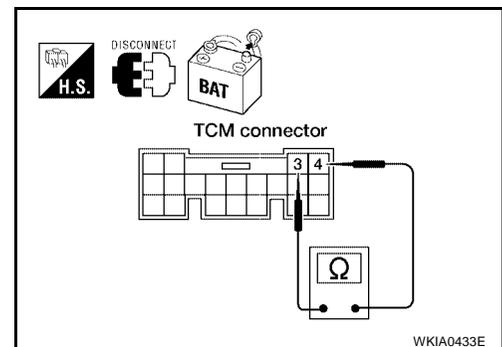
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector E143 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector E143 and ECM connector E16.



**Display Unit Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect display unit connector M93.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

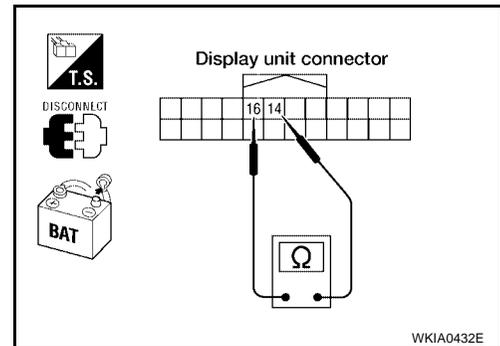
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between display unit connector M93 terminal 14 (L) and terminal 16 (Y).

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

**OK or NG**

- OK >> Replace display unit.  
 NG >> Repair harness between display unit connector M93 and data link connector M22.

**Data Link Connector Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Check data link connector M22 terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

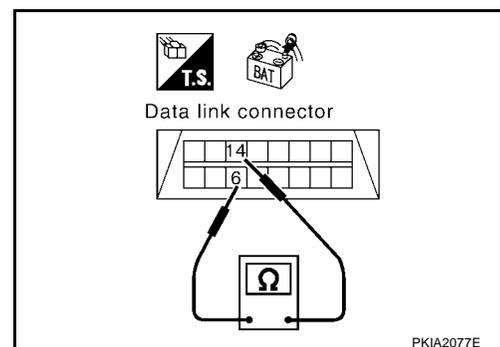
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Connect all connectors and diagnose again. Refer to [LAN-60](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



**BCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect BCM connector M18.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

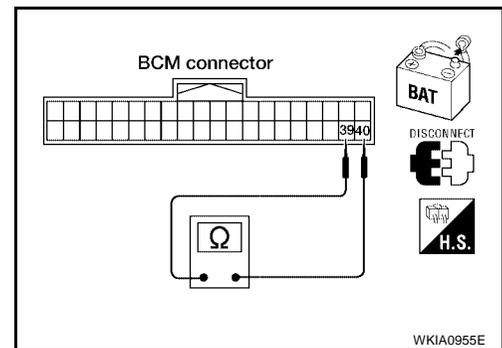
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

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

**OK or NG**

- OK >> Replace BCM.  
 NG >> Repair harness between BCM connector M18 and data link connector M22.

**Combination Meter Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect combination meter connector M23.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

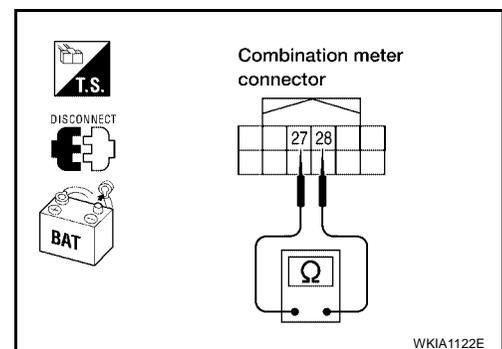
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between combination meter connector M23 terminal 27 (L) and terminal 28 (Y).

**27 (L) - 28 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace combination meter.  
 NG >> Repair harness between combination meter connector M23 and data link connector M22.



**Steering Angle Sensor Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect steering angle sensor connector M47.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

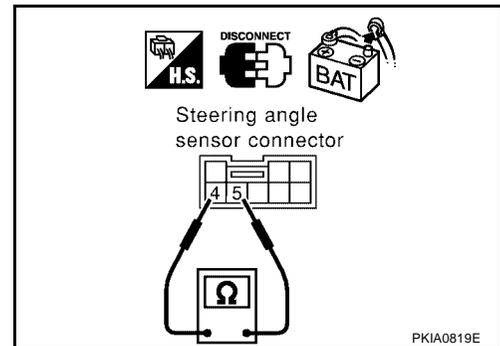
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**4 (L) - 5 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace steering angle sensor.  
 NG >> Repair harness between steering angle sensor connector M47 and data link connector M22.

**Driver Seat Control Unit Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

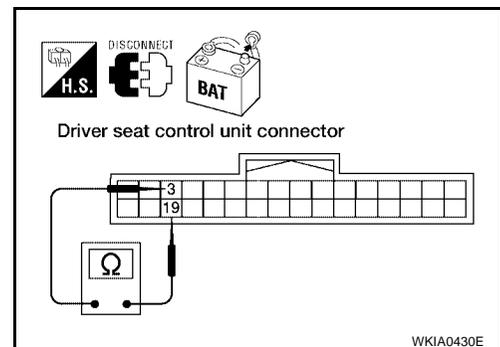
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between driver seat control unit connector P2 terminal 3 (L) and terminal 19 (Y).

**3 (L) - 19 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit connector P2 and data link connector M22.



## Front Air Control Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect front air control connector M50.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

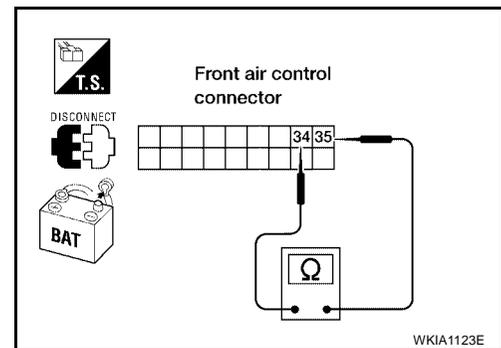
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between front air control connector M50 terminal 34 (L) and terminal 35 (Y).

**34 (L) - 35 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace front air control.  
 NG >> Repair harness between front air control connector M50 and data link connector M22.



## IPDM E/R Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect IPDM E/R connector E121.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

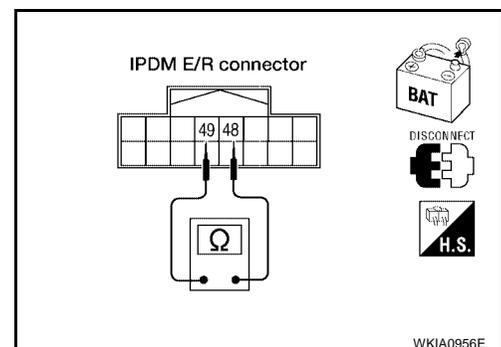
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

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

#### OK or NG

- OK >> Replace IPDM E/R.  
 NG >> Repair harness between IPDM E/R connector E121 and data link connector M22.



**CAN Communication Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect the following module and control unit connectors and check terminals for deformation, disconnection, looseness or damage.
  - ECM
  - ABS actuator and electric unit (control unit)
  - TCM (Transmission control module)
  - Display unit
  - BCM (Body control module)
  - Combination meter
  - Steering angle sensor
  - Driver seat control unit
  - Front air control
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

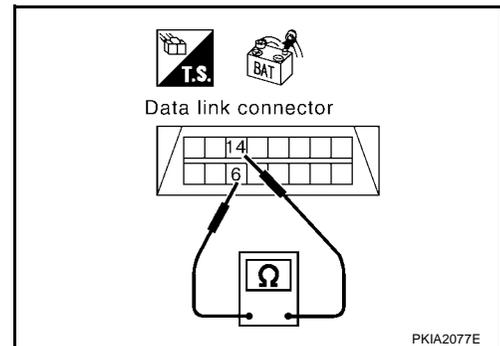
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

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

**OK or NG**

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

**3. CHECK HARNESS FOR SHORT TO GROUND**

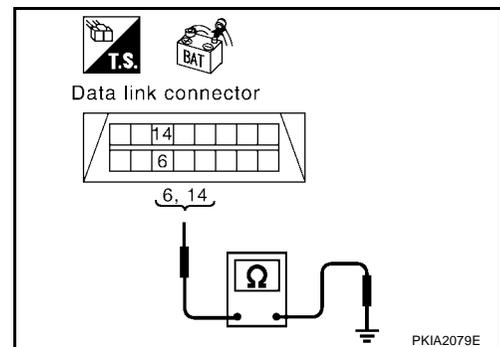
Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

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

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

**OK or NG**

- OK >> Check ECM and IPDM E/R. Refer to [LAN-78, "Component Inspection"](#).  
 NG >> Repair the harness.

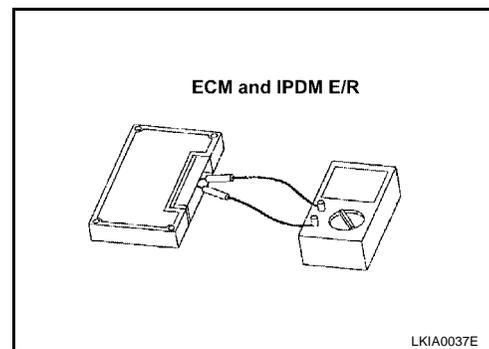
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-25, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-12, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

**Component Inspection****ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION**

- Disconnect ECM and IPDM E/R harness connectors.
- Check resistance between ECM terminals 94 and 86.  
**94 - 86 : Approx. 108 - 132 $\Omega$**
- Check resistance between IPDM E/R terminals 48 and 49.  
**48 - 49 : Approx. 108 - 132 $\Omega$**



## CAN SYSTEM (TYPE 4)

PFP:23710

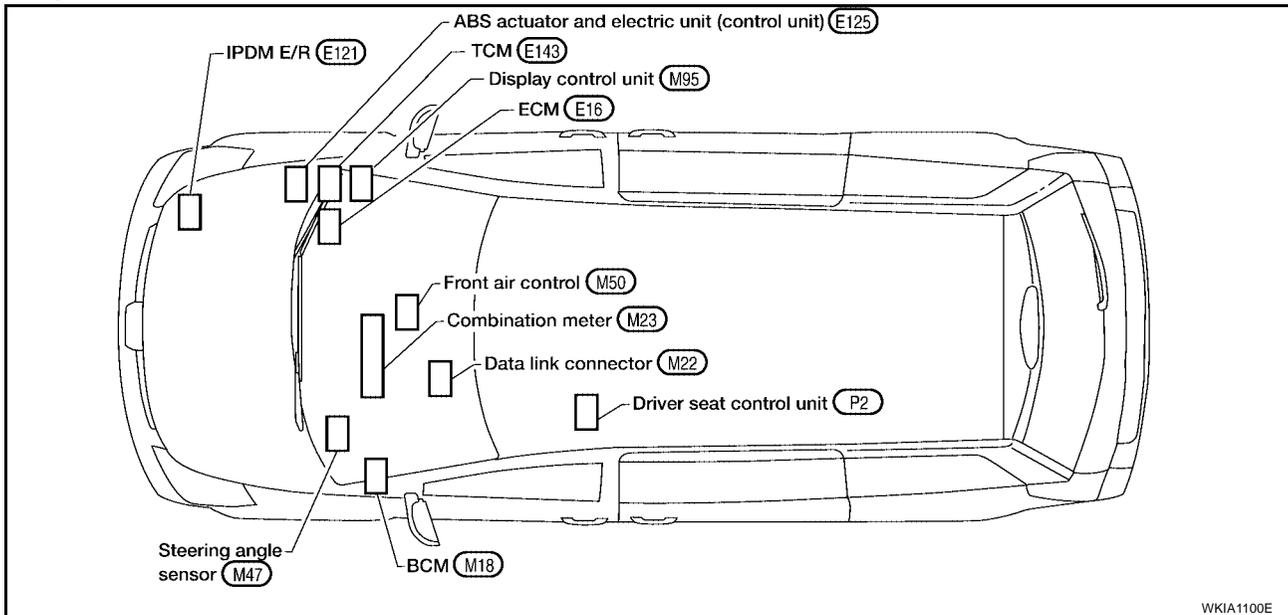
### System Description

EKS0068Y

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

### Component Parts and Harness Connector Location

EKS0068Z



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

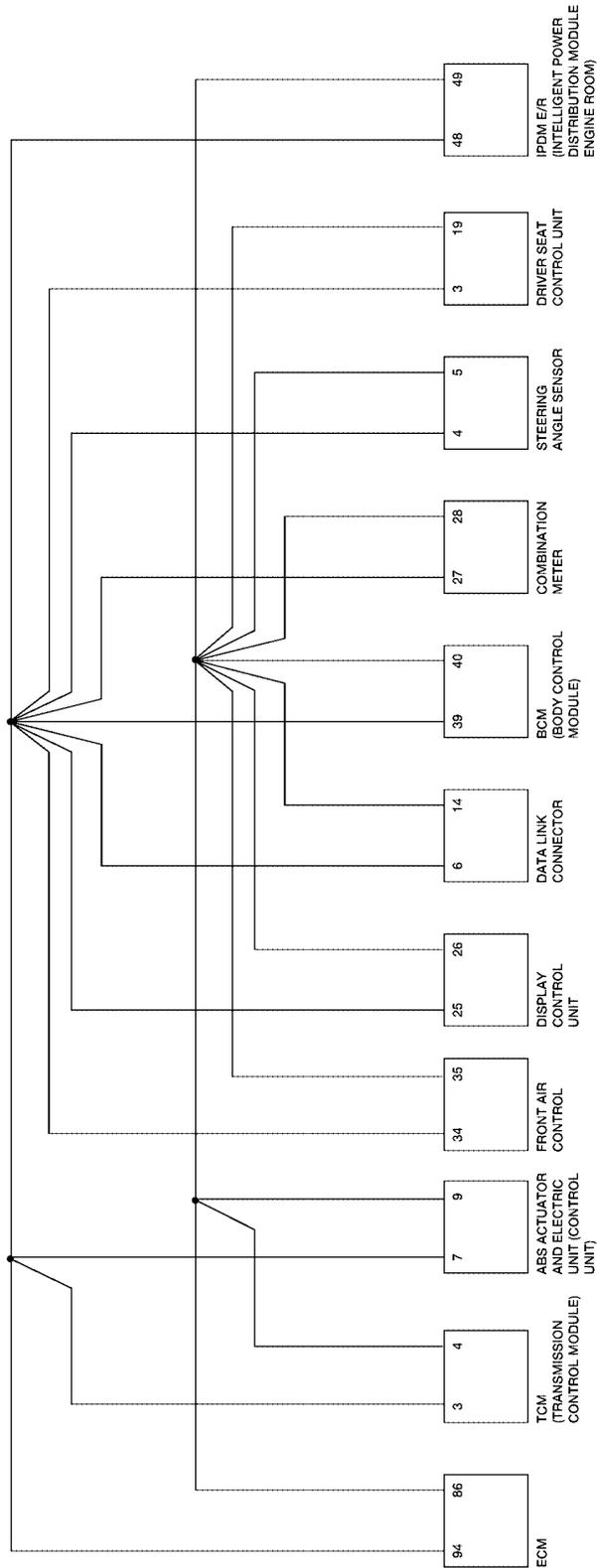
LAN

# CAN SYSTEM (TYPE 4)

[CAN]

## Schematic

EKS00690



WKWA0587E

# CAN SYSTEM (TYPE 4)

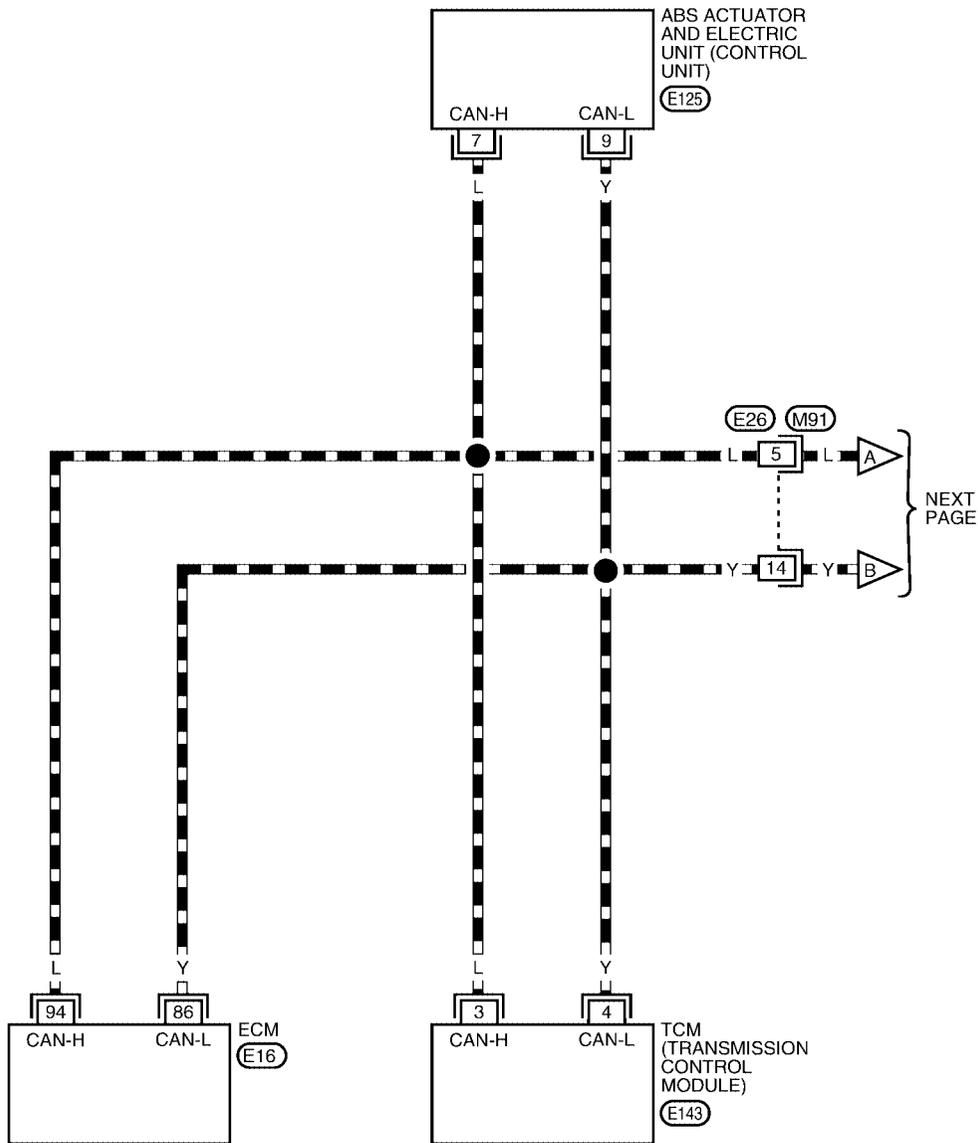
[CAN]

## Wiring Diagram — CAN —

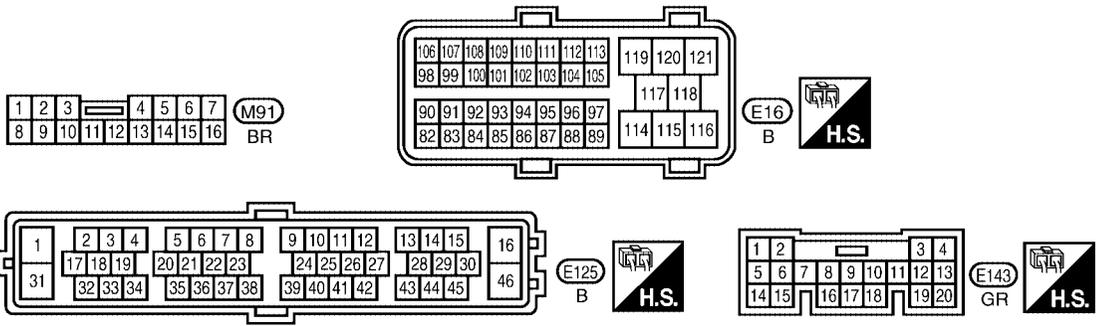
EKS00691

### LAN-CAN-10

— — : DATA LINE



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

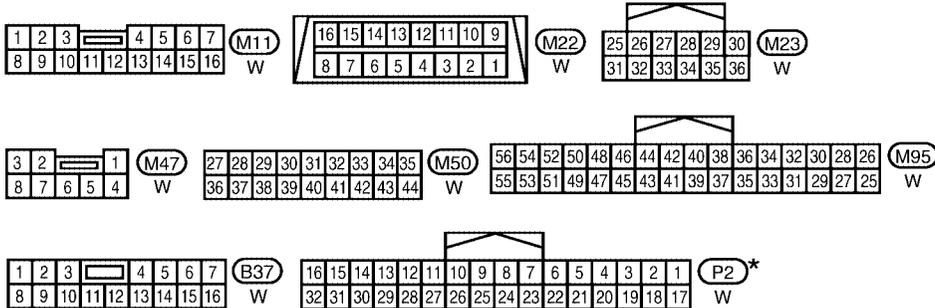
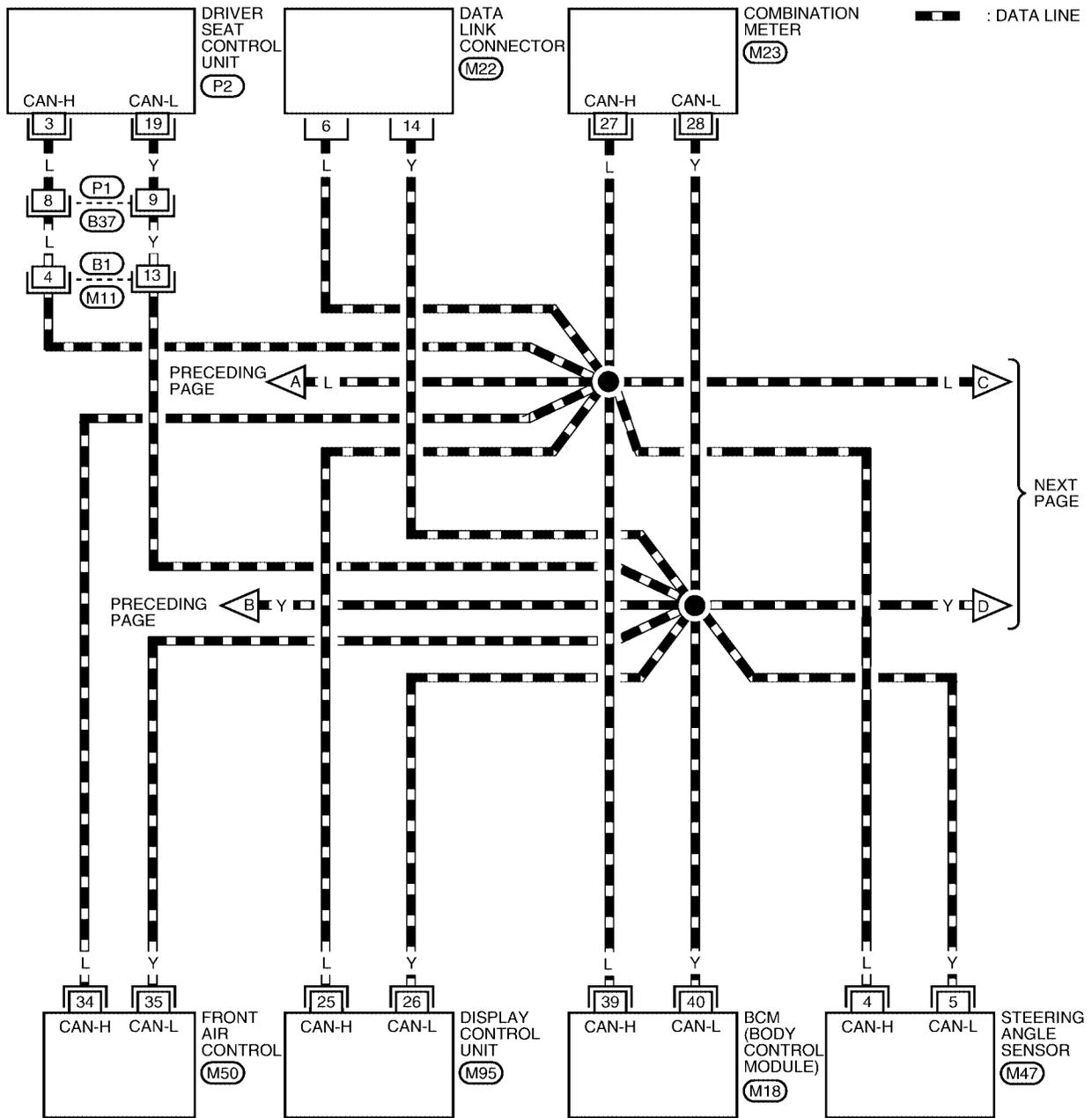


WKWA0588E

# CAN SYSTEM (TYPE 4)

[CAN]

## LAN-CAN-11



REFER TO THE FOLLOWING.  
 (M18) - ELECTRICAL UNITS

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

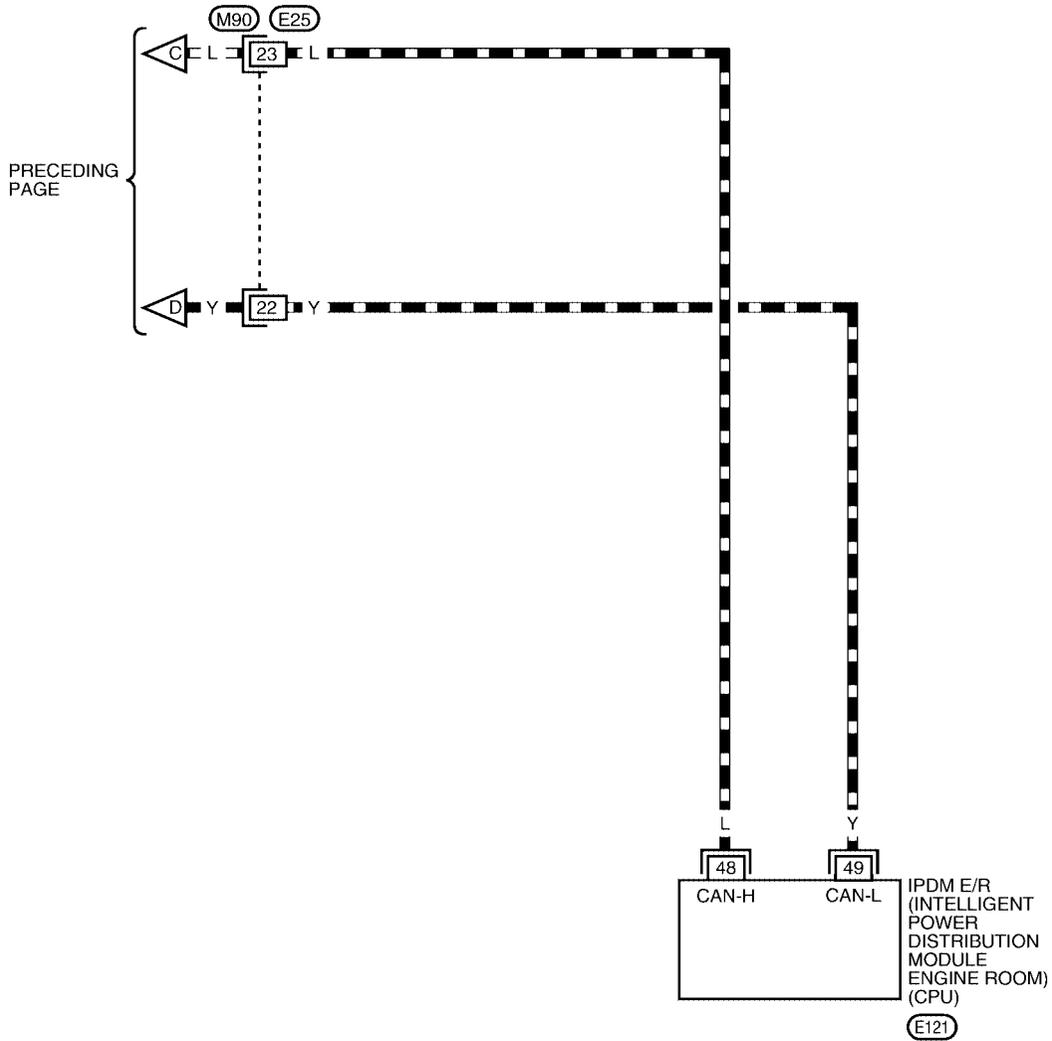
WKWA0589E

# CAN SYSTEM (TYPE 4)

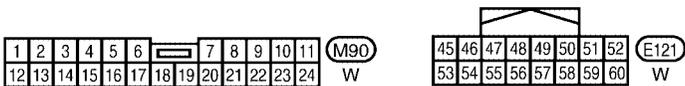
[CAN]

LAN-CAN-12

▬ : DATA LINE



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



WKWA0590E

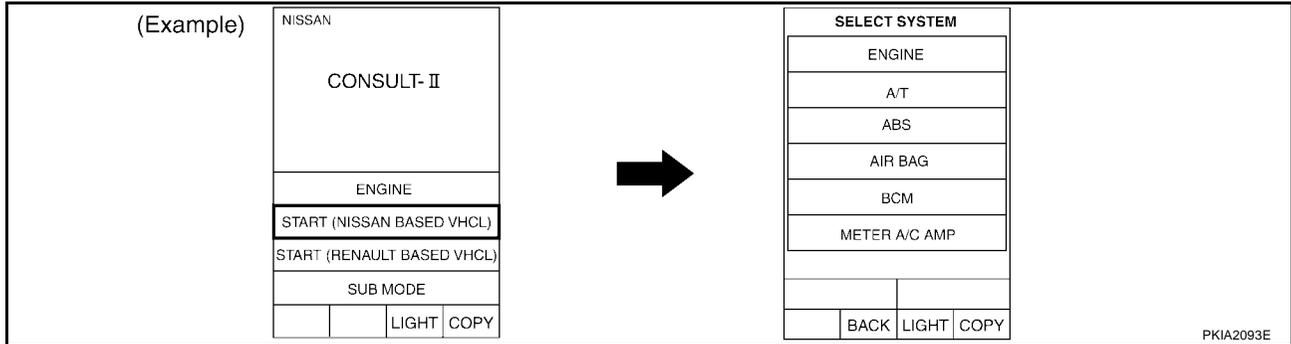
# CAN SYSTEM (TYPE 4)

[CAN]

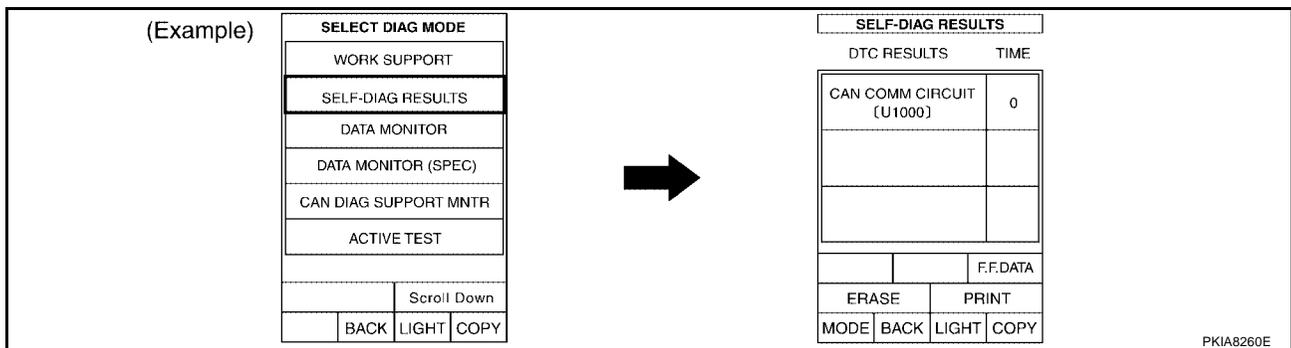
EKS00692

## Work Flow

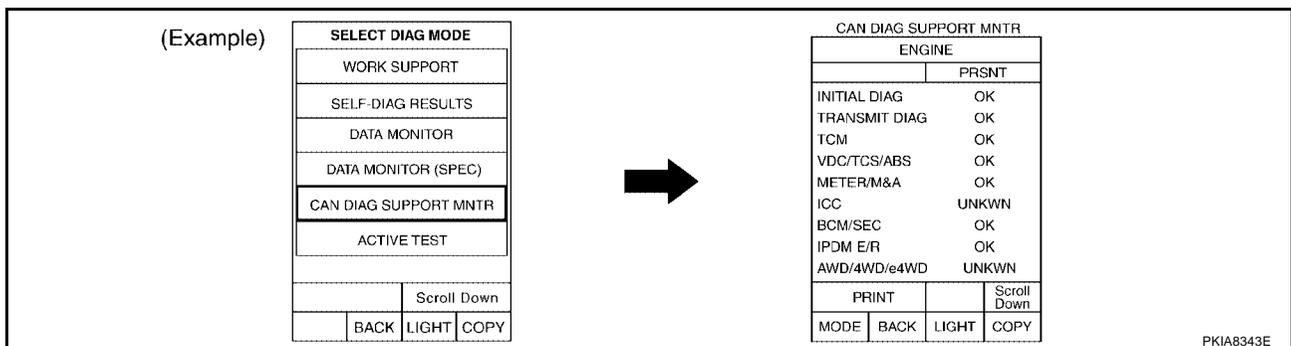
- When there are no indications of "TRANSMISSION", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



- Print all the data of "SELF-DIAG RESULTS" for "ENGINE", "TRANSMISSION", "BCM", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Print all the data of "CAN DIAG SUPPORT MNTR" for "ENGINE", "TRANSMISSION", "BCM", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Attach the printed sheet of "SELECT SYSTEM", SELF-DIAG RESULTS and "CAN DIAG SUPPORT MNTR" onto the check sheet. Refer to [LAN-86, "CHECK SHEET"](#) .
- Based on the indications of "SELECT SYSTEM" and the results of "CAN DIAG SUPPORT MNTR", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

SELECT SYSTEM screen	CAN DIAG SUPPORT MNTR										
	Initial diagnosis	Transmit diagnosis	ECM	TCM	Receive diagnosis						
					VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2562E

## CAN SYSTEM (TYPE 4)

[CAN]

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**NOTE:**

- If “NG” is displayed on “INITIAL DIAG (Initial diagnosis)” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.
- The “CAN DIAG SUPPORT MNTR” items which are not in check sheet table are not related to diagnostic procedure on service manual.  
Therefore, it is not necessary to check the status of the “CAN DIAG SUPPORT MNTR” items not in check sheet table.

6. Check CAN communication line of the navigation system.
7. Attach the CAN DIAG SUPPORT MONITOR check sheet onto the check sheet. Refer to [LAN-86](#), "[CHECK SHEET](#)".
8. Mark the “NG” or “UNKWN” item of the check sheet table from the result of CAN DIAG SUPPORT MONITOR check sheet.

**NOTE:**

If “NG” is displayed on “CAN COMM” as “CAN DIAG SUPPORT MNTR” for the diagnosed control unit, replace the control unit.

9. According to the Check Sheet Results, start inspection.

A

B

C

D

E

F

G

H

I

J

LAN

L

M

# CAN SYSTEM (TYPE 4)

[CAN]

## CHECK SHEET

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
ECM	TCM			VDC/TCS/ABS	Front air control	BCM/SEC	METER/M&A	STRG			
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

Symptoms:

Attach copy of  
SELECT SYSTEM

Attach copy of  
SELECT SYSTEM

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

WKIA2645E

# CAN SYSTEM (TYPE 4)

[CAN]

Attach copy of ENGINE SELF-DIAG RESULTS	Attach copy of TRANSMISSION SELF-DIAG RESUL	Attach copy of ABS SELF-DIAG RESULTS
Attach copy of BCM SELF-DIAG RESULTS	Attach copy of AUTO DRIVE POS. SELF-DIAG RESULTS	Attach copy of IPDM E/R SELF-DIAG RESULTS
Attach copy of ENGINE CAN DIAG SUPPORT MNTR	Attach copy of TRANSMISSION CAN DIAG SUPPORT MNTR	Attach copy of ABS CAN DIAG SUPPORT MNTR
Attach copy of BCM CAN DIAG SUPPORT MNTR	Attach copy of AUTO DRIVE POS. CAN DIAG SUPPORT MNTR	Attach copy of IPDM E/R CAN DIAG SUPPORT MNTR

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

LAN

WKIA2646E

# CAN SYSTEM (TYPE 4)

[CAN]

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR								
				Receive diagnosis								
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2647E

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR								
				Receive diagnosis								
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2648E

### Case 2

Replace ABS actuator and electric unit (control unit).

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR								
				Receive diagnosis								
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2649E

SELECT SYSTEM screen		Initial diagnosis	Transmit diagnosis	CAN DIAG SUPPORT MNTR								
				Receive diagnosis								
				ECM	TCM	VDC/TCS/ ABS	Front air control	BCM/SEC	METER/ M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2650E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 3

Replace TCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	✓	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2651E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-
TRANSMISSION	No indication	NG	UNKWN	✓	-	✓	-	-	✓	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2652E

## Case 4

Replace display control unit.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN	-
Display control unit	-	✓	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2653E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	✓	✓	✓	✓	✓	✓	-	✓	✓
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2654E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 5

Replace BCM.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MMA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	✓	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2655E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MMA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	✓	UNKWN	-	-	-	✓	-	✓	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2656E

## Case 6

Replace driver seat control unit.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MMA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	✓	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2657E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MMA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	✓	UNKWN	-	✓	✓	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2658E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 7

Replace IPDM E/R.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2659E

## Case 8

Check harness between TCM and data link connector. Refer to [LAN-95](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2660E

## Case 9

Check ECM circuit. Refer to [LAN-95](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2661E

## Case 10

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-96](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2662E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 11

Check TCM circuit. Refer to [LAN-96](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MSA	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2663E

## Case 12

Check display control unit circuit. Refer to [LAN-97](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2664E

## Case 13

Check data link connector circuit. Refer to [LAN-97](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2665E

## Case 14

Check BCM circuit. Refer to [LAN-98](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	ICM	VDC/TCS/ AHS	Front air control	BCM/SF-C	METER/ MSA	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
AHS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2666E

## Case 15

Check combination meter circuit. Refer to [LAN-98](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	-	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7	-
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN	-
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-	-

WKIA2667E

## Case 16

Check steering angle sensor circuit. Refer to [LAN-99](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2668E

## Case 17

Check driver seat control unit circuit. Refer to [LAN-99](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2669E

## Case 18

Check front air control circuit. Refer to [LAN-100](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							
				ECM	TCM	VDC/TCS/ABS	Front air control	BCM/SH-C	ME-TR/M&A	STRG	IPDM E/R
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	-	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2670E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 19

Check IPDM E/R circuit. Refer to [LAN-100](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							IPDM E/R
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MXA	STRG	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	-	-	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2671E

## Case 20

Check CAN communication circuit. Refer to [LAN-101](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							IPDM E/R
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MXA	STRG	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2672E

## Case 21

Check IPDM E/R Ignition relay circuit. Refer to [LAN-101](#).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							IPDM E/R
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MXA	STRG	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	-	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2673E

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									
		Initial diagnosis	Transmit diagnosis	Receive diagnosis							IPDM E/R
				ECM	ICM	VDC/TCS/ABS	Front air control	BCM/SF-C	METER/MXA	STRG	
ENGINE	-	NG	UNKWN	-	UNKWN	UNKWN	-	UNKWN	UNKWN	-	UNKWN
TRANSMISSION	No indication	NG	UNKWN	UNKWN	-	UNKWN	-	-	UNKWN	-	-
ABS	-	NG	UNKWN	UNKWN	UNKWN	-	-	-	-	UNKWN	-
Display control unit	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 4	CAN CIRC 2	CAN CIRC 5	-	CAN CIRC 7
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	-	UNKWN	-	UNKWN
AUTO DRIVE POS.	No indication	NG	UNKWN	UNKWN	UNKWN	-	-	UNKWN	UNKWN	-	-
IPDM E/R	No indication	-	UNKWN	UNKWN	-	-	-	UNKWN	-	-	-

WKIA2674E

**Circuit Check Between TCM and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E143 and ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

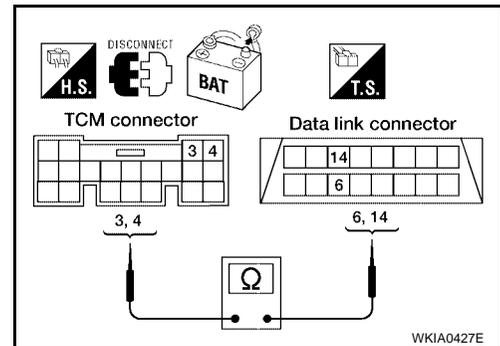
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector E143 terminals 3 (L), 4 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (L) - 6 (L) : Continuity should exist.**  
**4 (Y) - 14 (Y) : Continuity should exist.**

**OK or NG**

- OK >> Connect all connectors and diagnose again. Refer to [LAN-84, "Work Flow"](#).  
 NG >> Repair harness.

**ECM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector E16.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

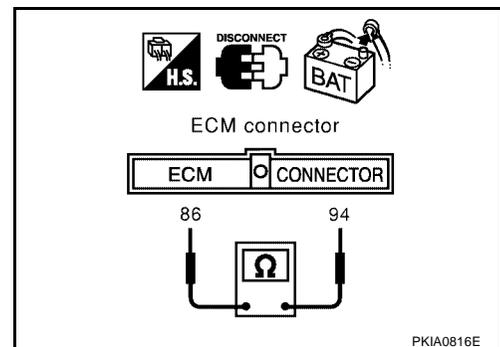
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ECM connector E16 terminal 94 (L) and terminal 86 (Y).

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

**OK or NG**

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector E16 and TCM connector E143.



**ABS Actuator and Electric Unit (Control Unit) Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ABS actuator and electric unit (control unit) connector E125.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

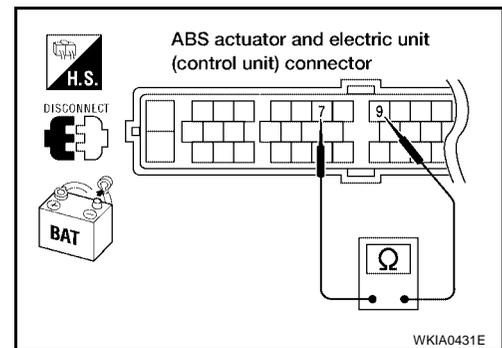
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**7 (L) - 9 (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) connector E125 and ECM connector E16.



EKS00697

**TCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector E143.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

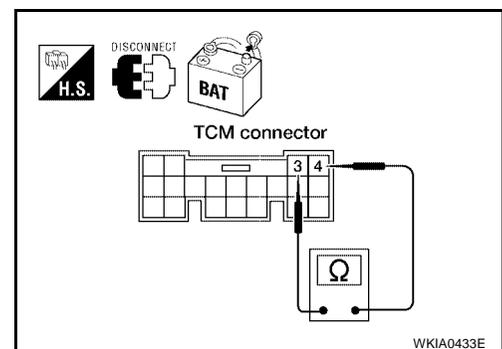
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector E143 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector E143 and ECM connector E16.



WKIA0433E

**Display Control Unit Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect display control unit connector M95.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

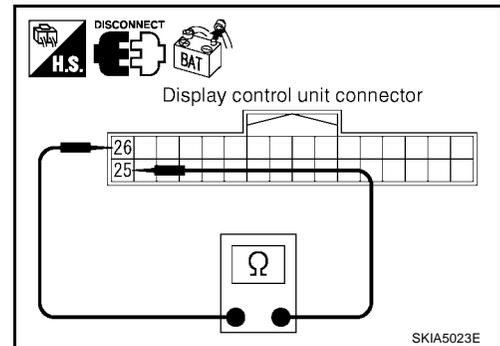
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

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

**OK or NG**

- OK >> Replace display control unit.  
 NG >> Repair harness between display control unit connector M95 and data link connector M22.

**Data Link Connector Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Check data link connector M22 terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

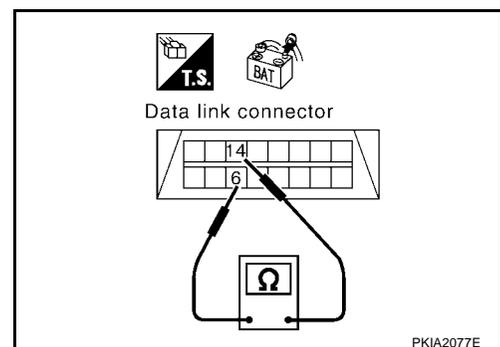
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Connect all connectors and diagnose again. Refer to [LAN-84](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



**BCM Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect BCM connector M18.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

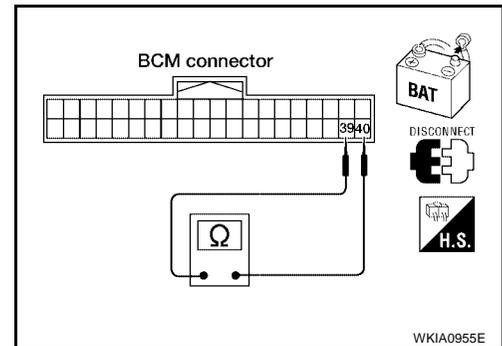
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

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

**OK or NG**

- OK >> Replace BCM.  
 NG >> Repair harness between BCM connector M18 and data link connector M22.

**Combination Meter Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect combination meter connector M23.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

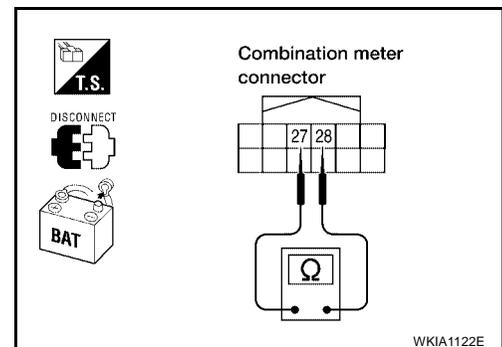
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between combination meter connector M23 terminal 27 (L) and terminal 28 (Y).

**27 (L) - 28 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace combination meter.  
 NG >> Repair harness between combination meter connector M23 and data link connector M22.



**Steering Angle Sensor Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect steering angle sensor connector M47.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

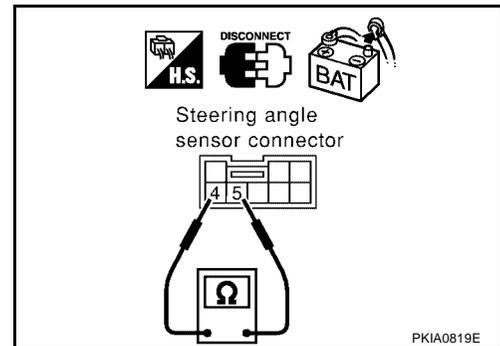
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**4 (L) - 5 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace steering angle sensor.  
 NG >> Repair harness between steering angle sensor connector M47 and data link connector M22.

**Driver Seat Control Unit Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2.
4. Check the terminals for deformation, disconnection, looseness or damage.

**OK or NG**

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

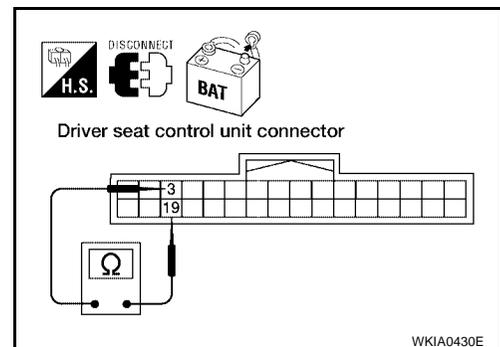
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between driver seat control unit connector P2 terminal 3 (L) and terminal 19 (Y).

**3 (L) - 19 (Y) : Approx. 54 - 66Ω**

**OK or NG**

- OK >> Replace driver seat control unit.  
 NG >> Repair harness between driver seat control unit connector P2 and data link connector M22.



## Front Air Control Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect front air control connector M50.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

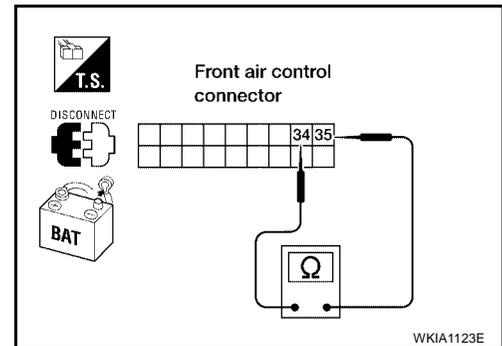
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between front air control connector M50 terminal 34 (L) and terminal 35 (Y).

**34 (L) - 35 (Y) : Approx. 54 - 66Ω**

#### OK or NG

- OK >> Replace front air control.  
 NG >> Repair harness between front air control connector M50 and data link connector M22.



## IPDM E/R Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect IPDM E/R connector E121.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

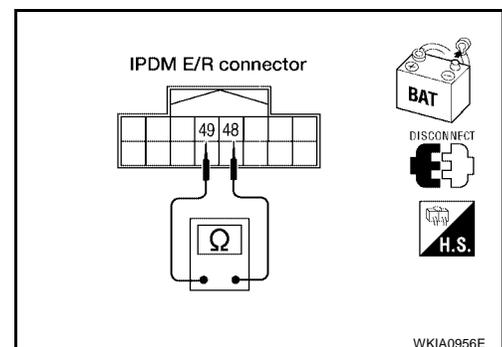
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

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

#### OK or NG

- OK >> Replace IPDM E/R.  
 NG >> Repair harness between IPDM E/R connector E121 and data link connector M22.



**CAN Communication Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect the following module and control unit connectors and check terminals for deformation, disconnection, looseness or damage.
  - ECM
  - TCM (Transmission control module)
  - ABS actuator and electric unit (control unit)
  - Display control unit
  - BCM (Body control module)
  - Combination meter
  - Steering angle sensor
  - Driver seat control unit
  - Front air control
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

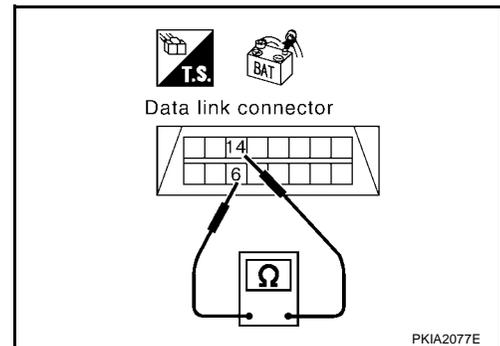
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

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

**OK or NG**

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

**3. CHECK HARNESS FOR SHORT TO GROUND**

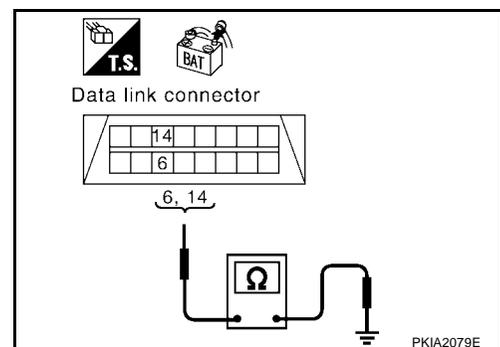
Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

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

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

**OK or NG**

- OK >> Check ECM and IPDM E/R. Refer to [LAN-102, "Component Inspection"](#) .  
 NG >> Repair the harness.

**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-25, "IPDM E/R Power/Ground Circuit Inspection"](#) .
- Ignition power supply circuit. Refer to [PG-12, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#) .

**Component Inspection****ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION**

- Disconnect ECM and IPDM E/R harness connectors.
- Check resistance between ECM terminals 94 and 86.  
**94 - 86 : Approx. 108 - 132Ω**
- Check resistance between IPDM E/R terminals 48 and 49.  
**48 - 49 : Approx. 108 - 132Ω**

