

# SECTION LAN

## LAN SYSTEM

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## PRECAUTIONS

PFP:00001

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

EKS004AL

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.

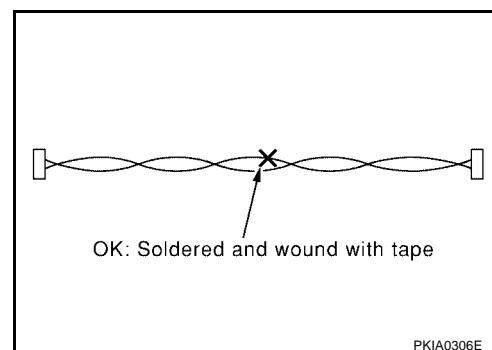
#### **WARNING:**

- 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.

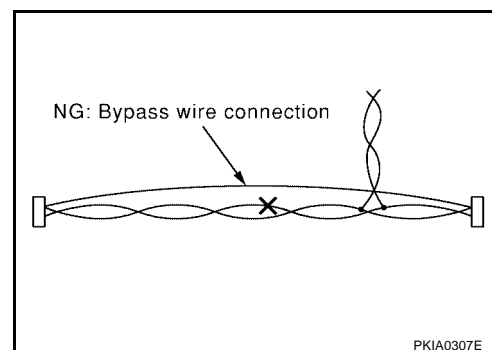
### Precautions for CAN System

EKS0050R

- 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 battery negative cable.
- 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.)



### Wiring Diagrams and Trouble Diagnosis

EKS0050S

When you read wiring diagrams, refer to the following:

- [GI-12, "How to Read Wiring Diagrams"](#)
- [PG-3, "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

## System Description

EKS004AP

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 System Type

EKS004AQ

Refer to the following table to determine CAN system type.

CAN system type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Input/output signal chart	<a href="#">LAN-9, "TYPE 1/ TYPE 2/TYPE 3"</a>			<a href="#">LAN-11, "TYPE 4/ TYPE 5/TYPE 6"</a>			<a href="#">LAN-13, "TYPE 7/ TYPE 7/ TYPE 8"</a>		<a href="#">LAN-15, "TYPE 9/ TYPE 10/TYPE 11"</a>			<a href="#">LAN-17, "TYPE 12/ TYPE 13"</a>		<a href="#">LAN-19, "TYPE 14/ TYPE 15/ TYPE 16"</a>		
CAN system trouble diagnosis	<a href="#">LAN-21</a>	<a href="#">LAN-39</a>	<a href="#">LAN-58</a>	<a href="#">LAN-77</a>	<a href="#">LAN-97</a>	<a href="#">LAN-119</a>	<a href="#">LAN-141</a>	<a href="#">LAN-165</a>	<a href="#">LAN-189</a>	<a href="#">LAN-209</a>	<a href="#">LAN-231</a>	<a href="#">LAN-253</a>	<a href="#">LAN-277</a>	<a href="#">LAN-301</a>	<a href="#">LAN-321</a>	<a href="#">LAN-343</a>
Transmission	M/T			4 A/T				5 A/T								
Brake control	ABS						VDC		ABS			VDC		TCS		
Navigation system			x			x		x			x		x			x
Automatic drive positioner		x	x		x	x	x	x		x	x	x	x		x	x

x: Applicable

# CAN COMMUNICATION

[CAN]

EKS0050Q

## Input/Output Signal Chart TYPE 1/TYPER 2/TYPER 3

T: Transmit R: Receive

Signals	ECM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine speed signal	T	R			R		R	
Engine status signal	T			R				
Engine coolant temperature signal	T				R			
Key switch signal				T		R		
Ignition switch signal				T		R		R
ABS operation signal	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 control signal		T	T		R			
		R	R		T			
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
Day time running light request signal				T	R			
Vehicle speed signal					R		T	
	R	R		R	T	R		
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
Key fob ID signal				T		R		
Key fob door unlock signal				T		R		
Oil pressure switch signal				R				T
				T	R			
Buzzer output signal				T	R			
Fuel level sensor signal	R				T			
ASCD SET indicator signal	T				R			
ASCD CRUISE indicator signal	T				R			

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# CAN COMMUNICATION

[CAN]

Signals	ECM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/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				T				R
Rear window defogger control signal	R	R	R					T
Hood switch signal				R				T
Theft warning horn request signal				T				R
Horn chirp signal				T				R
ABS warning lamp signal					R		T	
Brake warning lamp signal					R		T	
System setting signal		T	T	R		R		
		R	R	T		T		
Distance to empty signal		R	R		T			
Seat belt buckle switch signal				R	T			
Parking brake switch signal				R	T			

# CAN COMMUNICATION

[CAN]

## TYPE 4/TYPER 5/TYPER 6

T: Transmit R: Receive

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine speed signal	T		R			R		R	
Engine status signal	T				R				
Engine coolant temperature signal	T					R			
Key switch signal					T		R		
Ignition switch signal					T		R		R
ABS operation signal	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 control signal			T	T		R			
			R	R		T			
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
Day time running light request signal					T	R			
Vehicle speed signal						R		T	
	R		R		R	T	R		
Sleep wake up signal					T	R	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
					T	R			
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			

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	Dis- play con- trol unit	Dis- play unit	BCM	Uni- fied meter and A/ C amp.	Driver seat con- trol unit	ABS actua- tor and elec- tric unit (con- trol unit)	IPDM E/R
Front wiper request signal					T				R
Front wiper stop position signal					R				T
Rear window defogger switch signal					T				R
Rear window defogger control signal	R		R	R		R			T
Hood switch signal					R				T
Theft warning horn request signal					T				R
Horn chirp signal					T				R
ABS warning lamp signal						R		T	
Brake warning lamp signal						R		T	
System setting signal			T	T	R		R		
			R	R	T		T		
Distance to empty signal			R	R		T			
Seat belt buckle switch signal					R	T			
Parking brake switch signal					R	T			
A/T self-diagnosis signal	R	T							
Engine and A/T integrated control signal					R	T			
A/T self-diagnosis signal	R	T			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	R	
R 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	T	R							
A/T position indicator lamp signal		T				R			
A/T CHECK indicator lamp signal		T				R			
3rd position switch signal		R				T			



# CAN COMMUNICATION

[CAN]

## TYPE 7/TYPER 8

T: Transmit R: Receive

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine speed signal	T		R			R			R	
Engine status signal	T				R					
Engine coolant temperature signal	T					R				
Key switch signal					T			R		
Ignition switch signal					T			R		R
ABS operation signal	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 control signal			T	T		R				
			R	R		T				
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
Day time running light request signal					T	R				
Vehicle speed signal						R			T	
	R		R		R	T		R		
Sleep wake up signal					T	R		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
					T	R				
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				

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Front wiper request signal					T					R
Front wiper stop position signal					R					T
Rear window defogger switch signal					T					R
Rear window defogger control signal	R		R	R						T
Hood switch signal					R					T
Theft warning horn request signal					T					R
Horn chirp signal					T					R
ABS warning lamp signal						R			T	
Brake warning lamp signal						R			T	
System setting signal			T	T	R			R		
			R	R	T			T		
Distance to empty signal			R	R		T				
Seat belt buckle switch signal					R	T				
Parking brake switch signal					R	T				
A/T self-diagnosis signal	R	T								
Engine and A/T integrated control signal	T	R								
	R	T								
Accelerator pedal position sensor	T								R	
Closed throttle position signal	T	R								
Wide open throttle position signal	T	R								
P range signal		T						R	R	
R range signal		T						R		
Stop lamp switch signal		R				T				
TCS operation 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	T	R								
Steering angle sensor signal							T		R	
VDC OFF indicator lamp signal						R			T	
SLIP indicator lamp signal						R			T	
A/T CHECK indicator lamp signal		T				R				
A/T position indicator lamp signal		T				R				
A/T shift schedule change demand signal		R							T	
3rd position switch signal		R				T				

# CAN COMMUNICATION

[CAN]

## TYPE 9/TYPE 10/TYPE 11

T: Transmit R: Receive

Signals	ECM	TCM	Dis- play con- trol unit	Dis- play unit	BCM	Uni- fied meter and A/ C amp.	Driver seat con- trol unit	ABS actua- tor and elec- tric unit (con- trol unit)	IPDM E/R
Engine speed signal	T	R	R			R		R	
Engine status signal	T				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 control signal			T	T		R			
			R	R		T			
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
Day time running light request signal					T	R			
Vehicle speed signal						R		T	
	R	R	R		R	T	R		
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
					T	R			
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			

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	Dis- play control unit	Dis- play unit	BCM	Uni- fied meter and A/ C amp.	Driver seat con- trol unit	ABS actua- tor and elec- tric unit (con- trol unit)	IPDM E/R
Front wiper request signal					T				R
Front wiper stop position signal					R				T
Rear window defogger switch signal					T				R
Rear window defogger control signal	R		R	R					T
Hood switch signal					R				T
Theft warning horn request signal					T				R
Horn chirp signal					T				R
ABS warning lamp signal						R		T	
Brake warning lamp signal						R		T	
System setting signal			T	T	R		R		
			R	R	T		T		
Distance to empty signal			R	R		T			
Seat belt buckle switch signal					R	T			
Parking brake switch signal					R	T			
ASCD operation signal	T	R							
ASCD OD cancel request	T	R							
A/T CHECK indicator lamp signal		T				R			
A/T position indicator lamp signal		T				R			
Manual mode indicator signal		T				R			
A/T self-diagnosis signal	R	T							
Electric throttle control signal	T	R							
Engine and A/T integrated control signal	T	R							
	R	T							
Accelerator pedal position signal	T							R	
P range signal		T					R	R	
R range signal		T					R		
Stop lamp switch signal		R				T			
Input shaft revolution signal	R	T							
Output shaft revolution signal	R	T							

# CAN COMMUNICATION

[CAN]

## TYPE 12/TYPE 13

T: Transmit R: Receive

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine speed signal	T	R	R			R			R	
Engine status signal	T				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 control signal			T	T		R				
			R	R		T				
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
Day time running light request signal					T	R				
Vehicle speed signal						R			T	
	R	R	R		R	T		R		
Sleep wake up signal					T	R		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
					T	R				
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				

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Steering angle sensor	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Front wiper request signal					T					R
Front wiper stop position signal					R					T
Rear window defogger switch signal					T					R
Rear window defogger control signal	R		R	R						T
Hood switch signal					R					T
Theft warning horn request signal					T					R
Horn chirp signal					T					R
ABS warning lamp signal						R			T	
Brake warning lamp signal						R			T	
System setting signal			T	T	R			R		
			R	R	T			T		
Distance to empty signal			R	R		T				
Seat belt buckle switch signal					R	T				
Parking brake switch signal					R	T				
A/T self-diagnosis signal	R	T								
Electric throttle control signal	T	R								
Engine and A/T integrated control signal	T	R								
	R	T								
Accelerator pedal position signal	T								R	
P range signal		T						R	R	
R range signal		T						R		
Stop lamp switch signal		R				T				
TCS operation signal	R	R							T	
VDC operation signal	R	R							T	
Input shaft revolution signal	R	T								
Output shaft revolution signal	R	T								
ASCD operation signal	T	R								
ASCD OD cancel request	T	R								
Steering angle sensor signal							T		R	
VDC OFF indicator lamp signal						R			T	
SLIP indicator lamp signal						R			T	
A/T CHECK indicator lamp signal		T				R				
A/T position indicator lamp signal		T				R				
A/T shift schedule change demand signal		R							T	
Manual mode indicator signal		T				R				

# CAN COMMUNICATION

[CAN]

## TYPE 14/TYPER 15/TYPER 16

T: Transmit R: Receive

Signals	ECM	TCM	Display control unit	Display unit	BCM	Unified meter and A/C amp.	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
Engine speed signal	T	R	R			R		R	
Engine status signal	T				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 control signal			T	T		R			
			R	R		T			
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
Day time running light request signal					T	R			
Vehicle speed signal						R		T	
	R	R	R		R	T	R		
Sleep wake up signal					T	R	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
					T	R			
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			

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# CAN COMMUNICATION

[CAN]

Signals	ECM	TCM	Dis- play con- trol unit	Dis- play unit	BCM	Uni- fied meter and A/ C amp.	Driver seat con- trol unit	ABS actua- tor and elec- tric unit (con- trol unit)	IPDM E/R
Front wiper request signal					T				R
Front wiper stop position signal					R				T
Rear window defogger switch signal					T				R
Rear window defogger control signal	R		R	R					T
Hood switch signal					R				T
Theft warning horn request signal					T				R
Horn chirp signal					T				R
ABS warning lamp signal						R		T	
Brake warning lamp signal						R		T	
System setting signal			T	T	R		R		
			R	R	T		T		
Distance to empty signal			R	R		T			
Seat belt buckle switch signal					R	T			
Parking brake switch signal					R	T			
A/T self-diagnosis signal	R	T							
Electric throttle control signal	T	R							
Engine and A/T integrated control signal	T	R							
	R	T							
Accelerator pedal position signal	T							R	
P range signal		T					R	R	
R range signal		T					R		
Stop lamp switch signal		R				T			
TCS operation signal	R	R						T	
Input shaft revolution signal	R	T							
Output shaft revolution signal	R	T							
ASCD operation signal	T	R							
ASCD OD cancel request	T	R							
SLIP indicator lamp signal						R		T	
A/T CHECK indicator lamp signal		T				R			
A/T position indicator lamp signal		T				R			
A/T shift schedule change demand signal		R						T	
Manual mode indicator signal		T				R			

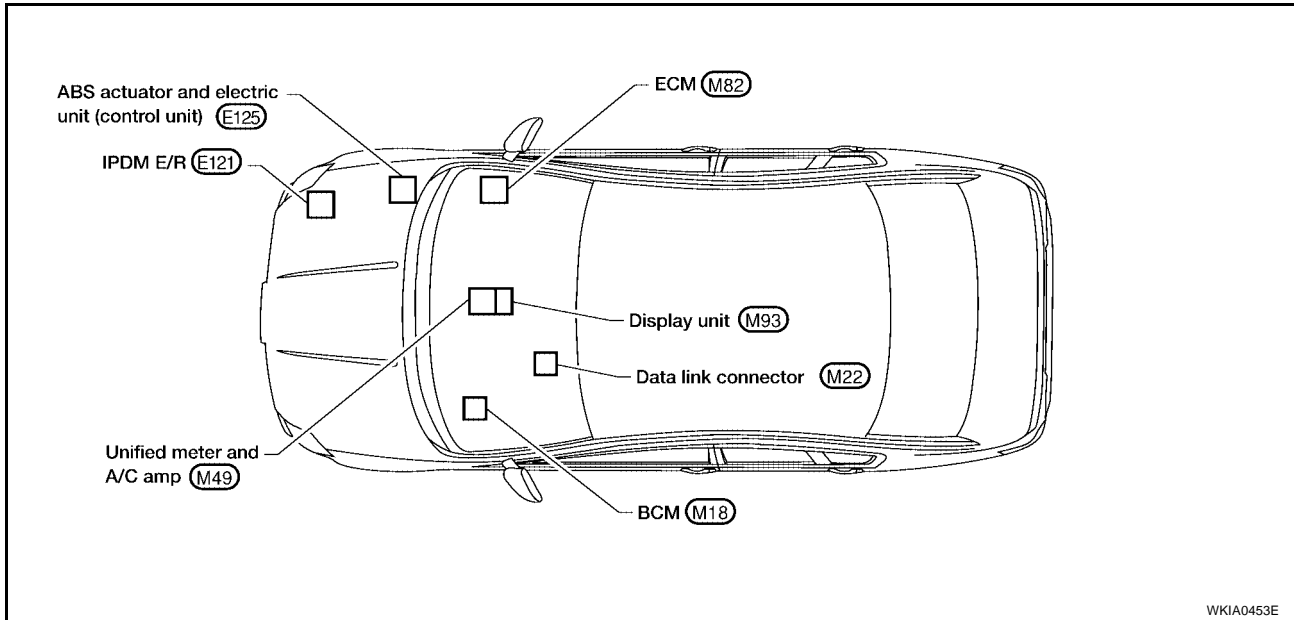


## CAN SYSTEM (TYPE 1)

## System Description

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

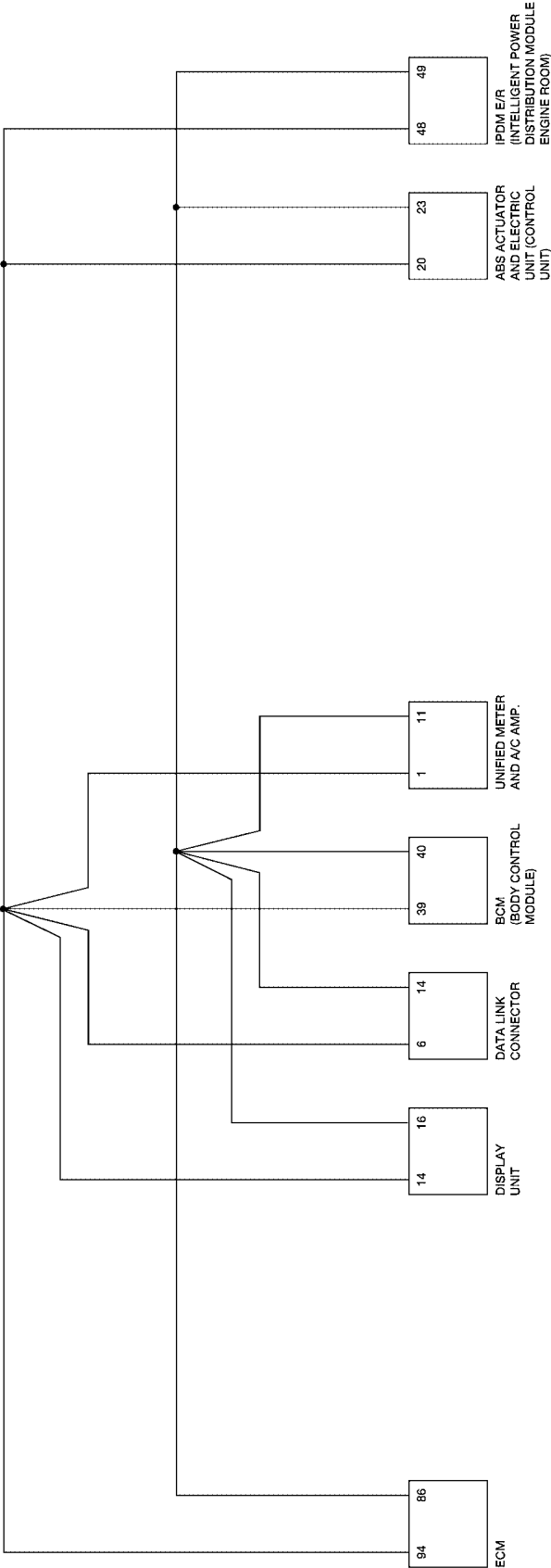
## Component Parts and Harness Connector Location



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Schematic

EKS0050A



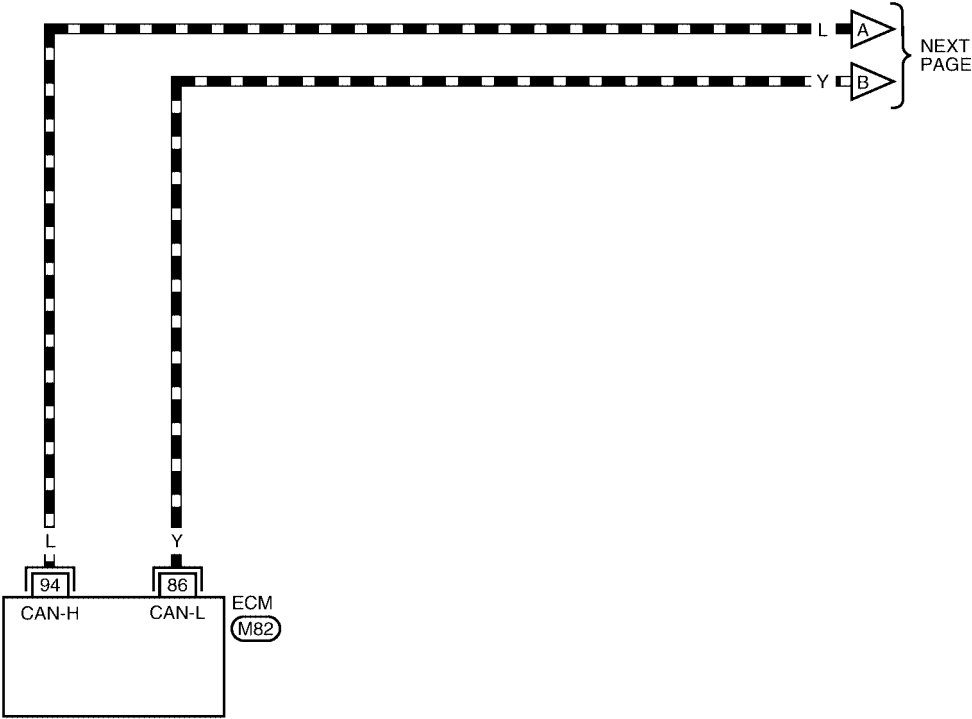
WKWA0453E

Wiring Diagram - CAN -

EKS0050B

LAN-CAN-1

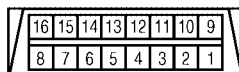
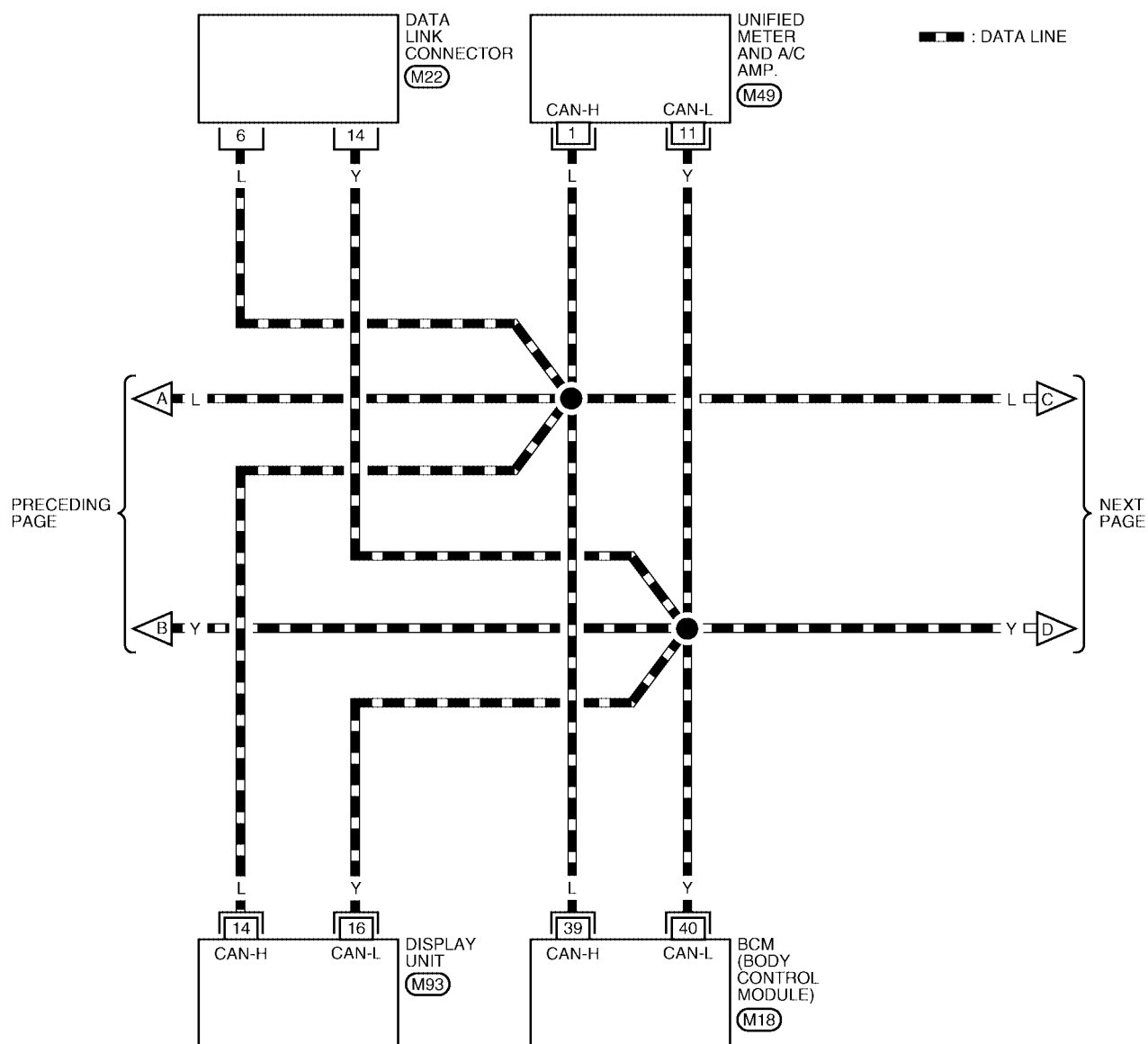
▬ : DATA LINE



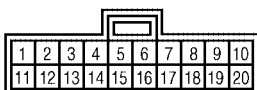
LAN

REFER TO THE FOLLOWING.  
(M82) - ELECTRICAL  
UNITS

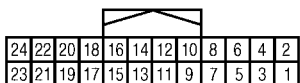
## LAN-CAN-2



(M22)  
W



(M49)  
GR

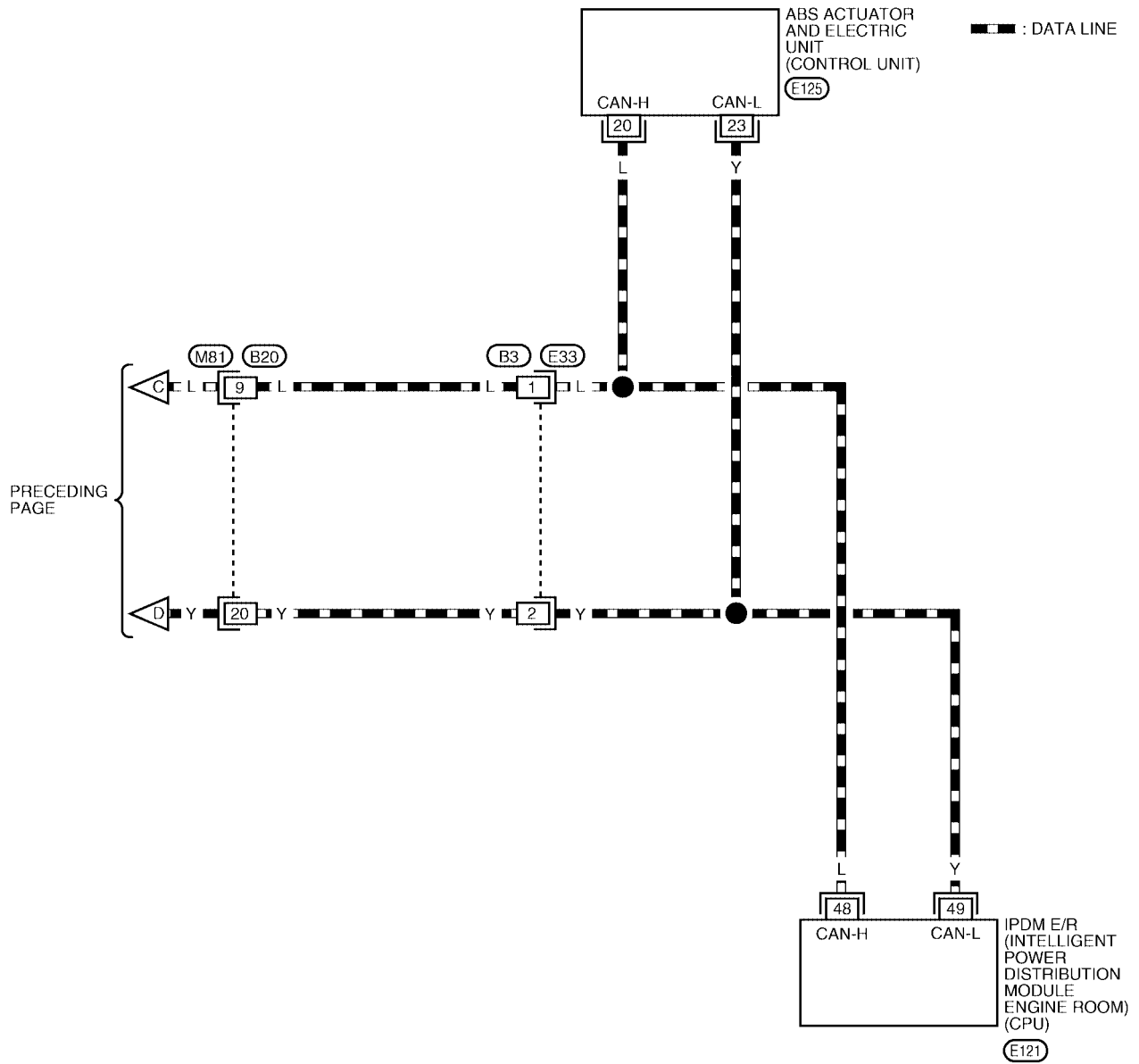


(M93)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-3



1	2	3	4	5	6	7	8	9	M81
10	11	12	13	14	15	16	17	18	GR

1	2	E33
3	4	W

45	46	47	48	49	50	51	52	E121
53	54	55	56	57	58	59	60	W

REFER TO THE FOLLOWING.  
(E125) - ELECTRICAL UNITS

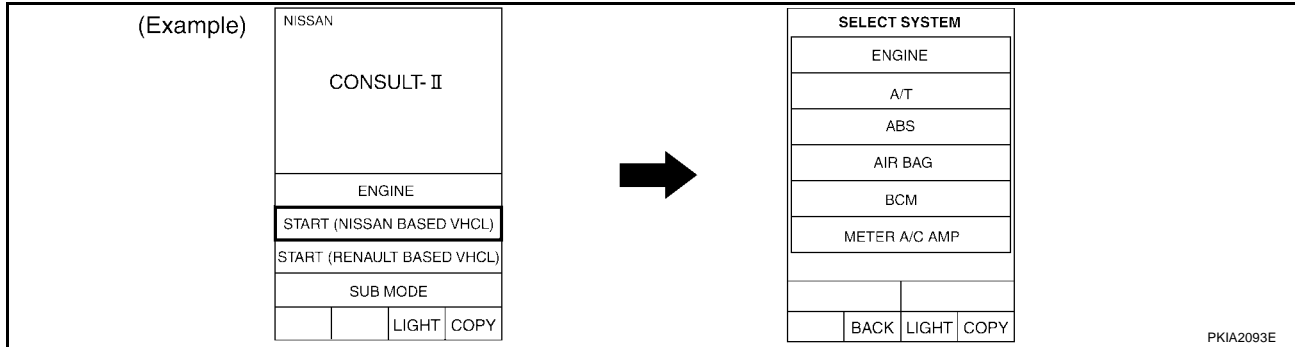
# CAN SYSTEM (TYPE 1)

[CAN]

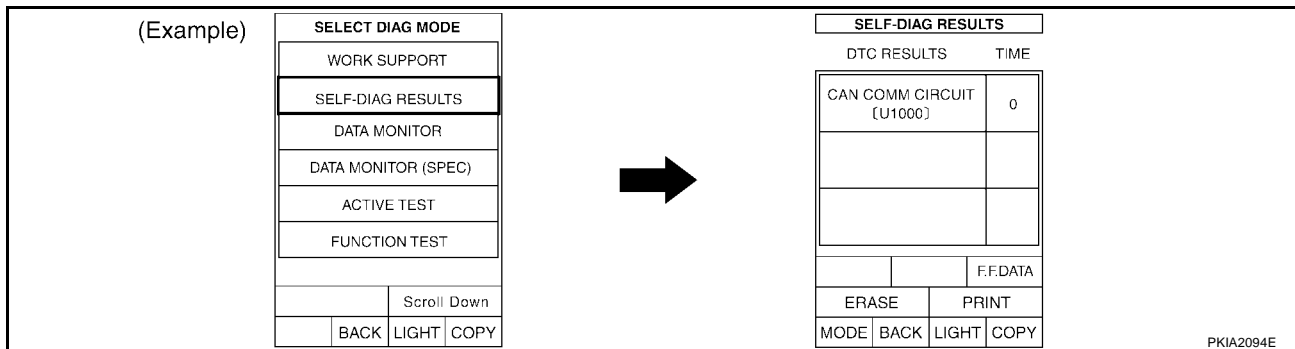
EKS0050C

## Work Flow

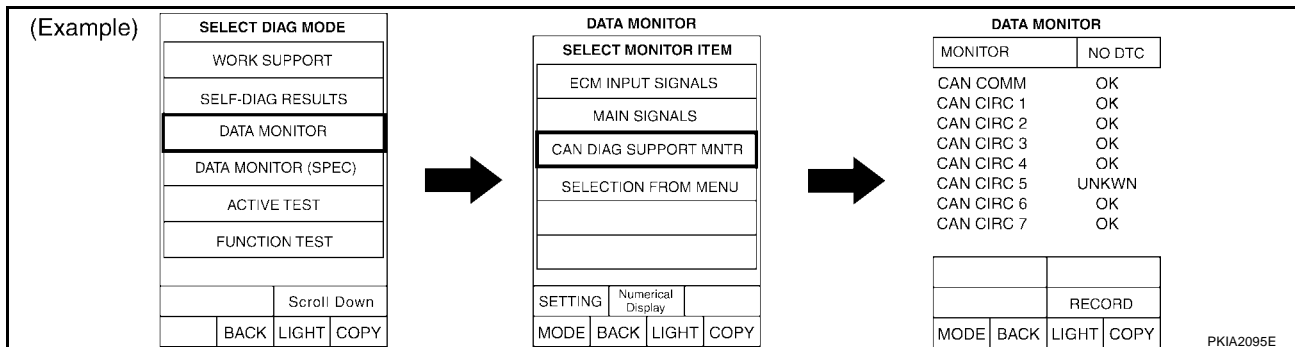
- When there are no indications of "METER A/C AMP", "BCM" or "IPDM E/R" on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "BCM", "METER A/C AMP", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No display", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0423E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 1)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

5. 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.

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

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

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	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

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# CAN SYSTEM (TYPE 1)

[CAN]

## Case 2

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	<del>CAN COMM</del>	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0633E

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	<del>CIRC 3</del>	-	<del>CIRC 5</del>	<del>CIRC 2</del>	-	<del>CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0634E

## Case 3

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	<del>CAN CIRC 4</del>	-	-	<del>CAN CIRC 3</del>
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0635E

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0636E



# CAN SYSTEM (TYPE 1)

[CAN]

## Case 4

Replace unified meter and A/C amp.

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓ CAN CIRC 2	✓ CAN CIRC 7	-	✓ CAN CIRC 4	✓ CAN CIRC 5	✓ CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0637E

## Case 5

Replace ABS actuator and electric unit (control unit).

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	✓ CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0638E

## Case 6

Replace IPDM E/R.

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓ CAN CIRC 3	-	-	✓ CAN CIRC 2	-	-

WKIA0639E

## Case 7

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to [LAN-32](#)

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	✓ CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	✓ CAN CIRC 5	✓ CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	✓ CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	✓ CAN CIRC 2	-	-	-	-	-
IPDM E/R	✓ No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0640E

# CAN SYSTEM (TYPE 1)

[CAN]

## Case 8

Check ECM circuit. Refer to [LAN-33](#).

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0641E

## Case 9

Check display unit circuit. Refer to [LAN-34](#).

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0642E

## Case 10

Check data link connector circuit. Refer to [LAN-34](#).

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0643E

## Case 11

Check BCM circuit. Refer to [LAN-35](#).

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0644E

# CAN SYSTEM (TYPE 1)

[CAN]

## Case 12

Check unified meter and A/C amp. circuit. Refer to [LAN-35](#).

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0645E

## Case 13

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-36](#).

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0646E

## Case 14

Check IPDM E/R circuit. Refer to [LAN-36](#).

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0647E

## Case 15

Check CAN communication circuit. Refer to [LAN-37](#).

	CONSUL I Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0648E

**Case 16**

Check IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0649E

**Case 17**Check IPDM E/R Ignition relay circuit. Refer to [LAN-37](#).

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0650E

**Circuit Check Between Data Link Connector and ABS Actuator and Electric Unit (Control Unit)**

EKS0050E

**1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect memory seat module connector P2, ABS actuator and electric unit (control unit) connector E125 and M82.
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 data link connector M22 terminals 6 (L), 14 (Y) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**6 (L) - 20 (L) : Continuity should exist.**

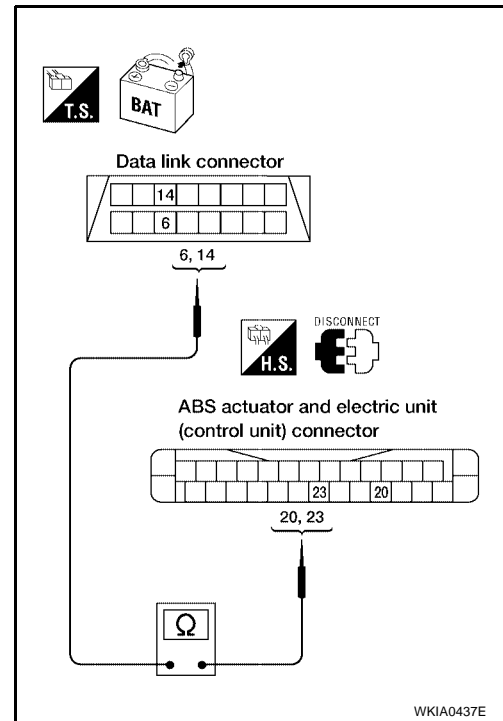
**14 (Y) - 23 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to

[LAN-26](#).

NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

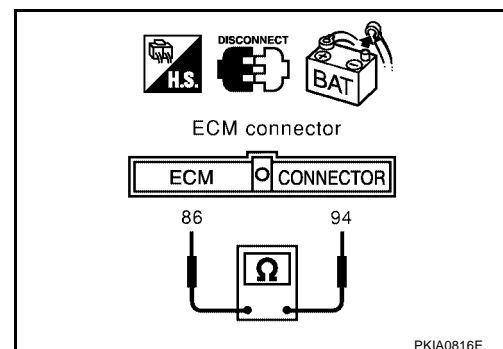
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM connector M82 and data link connector M22.



## 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.

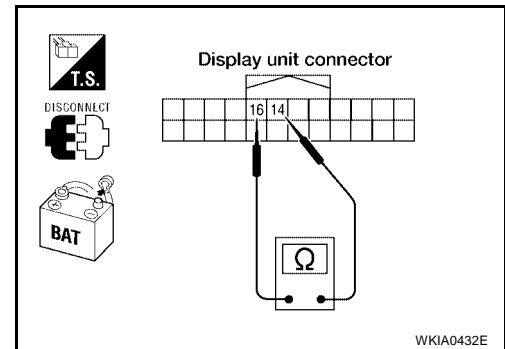
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between display unit connector M93 terminal 25 (L) and terminal 26 (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.

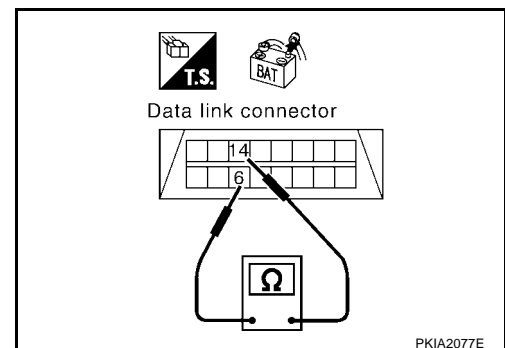
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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-26](#).  
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.

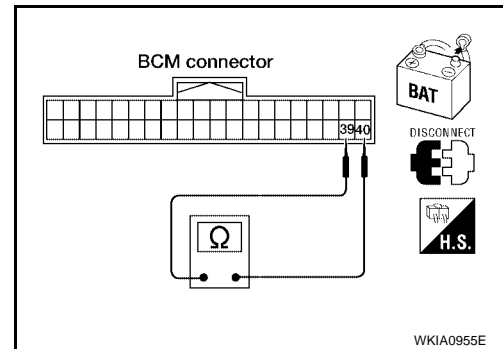
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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.

**Unified Meter and A/C Amp. Circuit Check****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

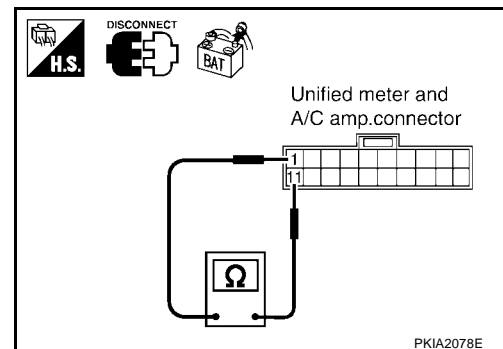
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



**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.

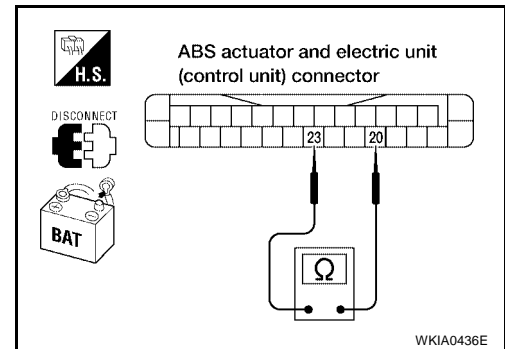
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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 IPDM E/R connector E121.



EKS0050M

**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.

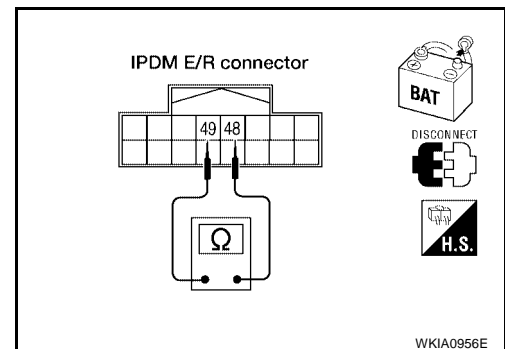
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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 ABS actuator and electric unit (control unit) connector E125.



WKIA0956E



**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
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

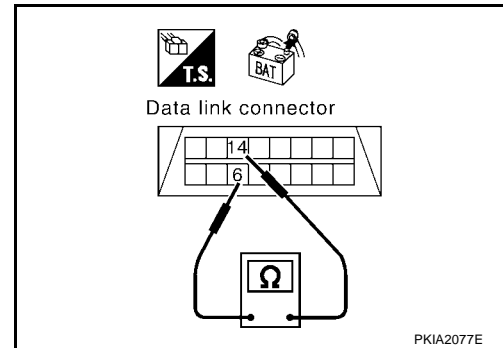
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

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**

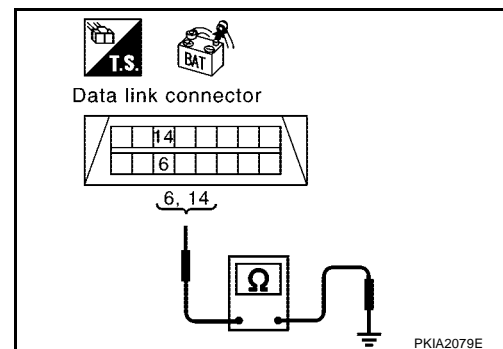
Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

**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-38, "Component Inspection"](#) .  
 NG     >> Repair the harness.

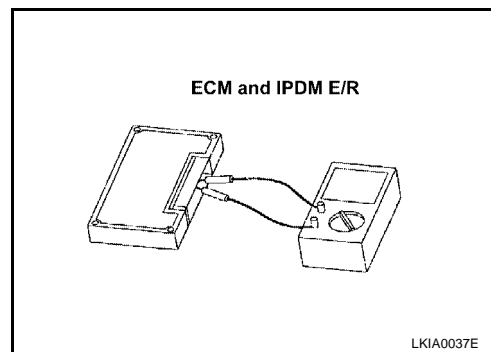
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#) .
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#) .

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

- Remove ECM and IPDM E/R from vehicle.
- 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 2)

PFP:23710

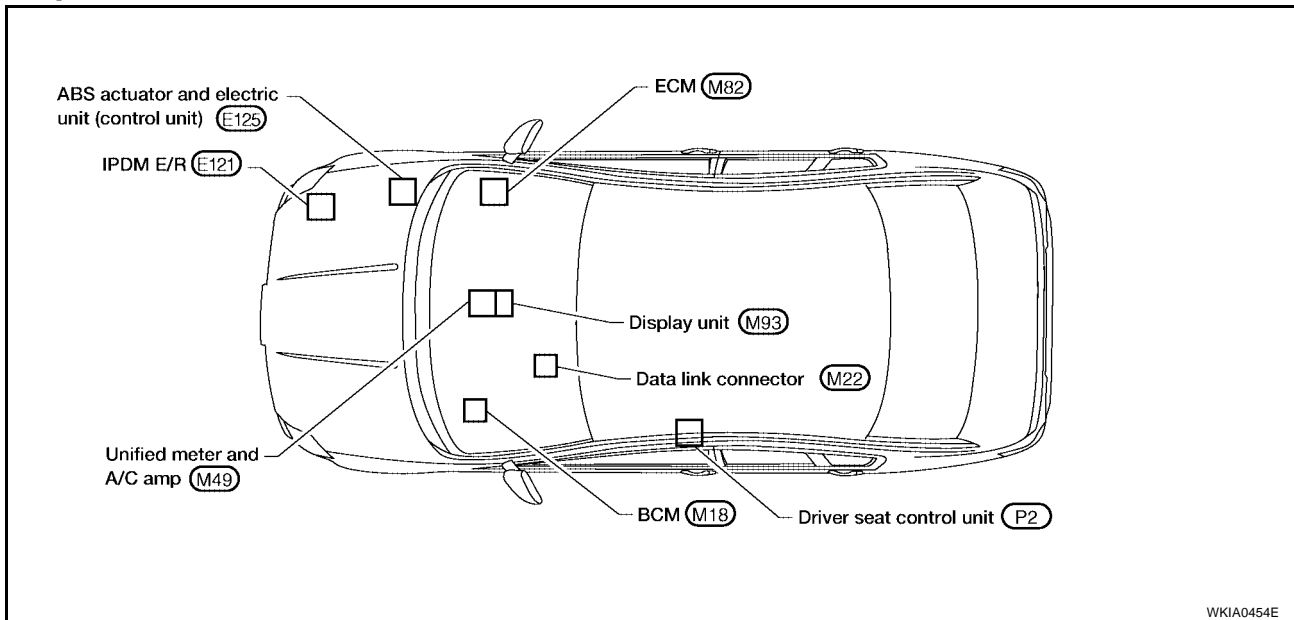
## System Description

EKS004ZO

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

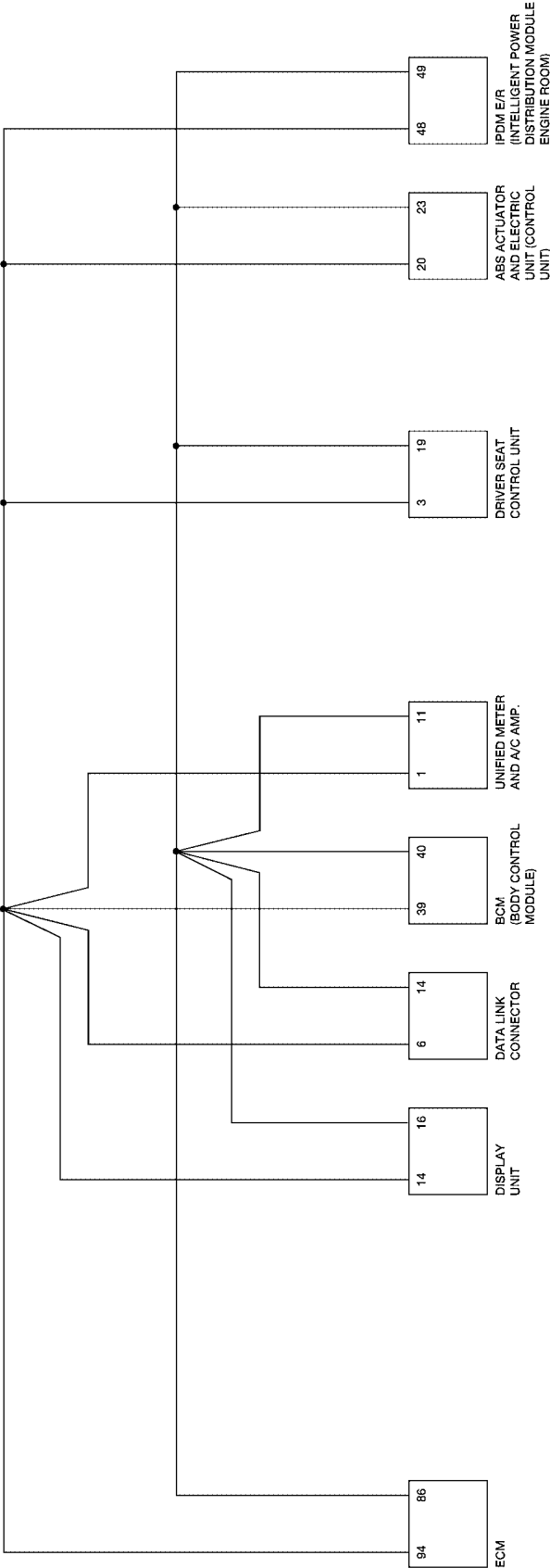
EKS004ZP



LAN

Schematic

EKS004ZQ

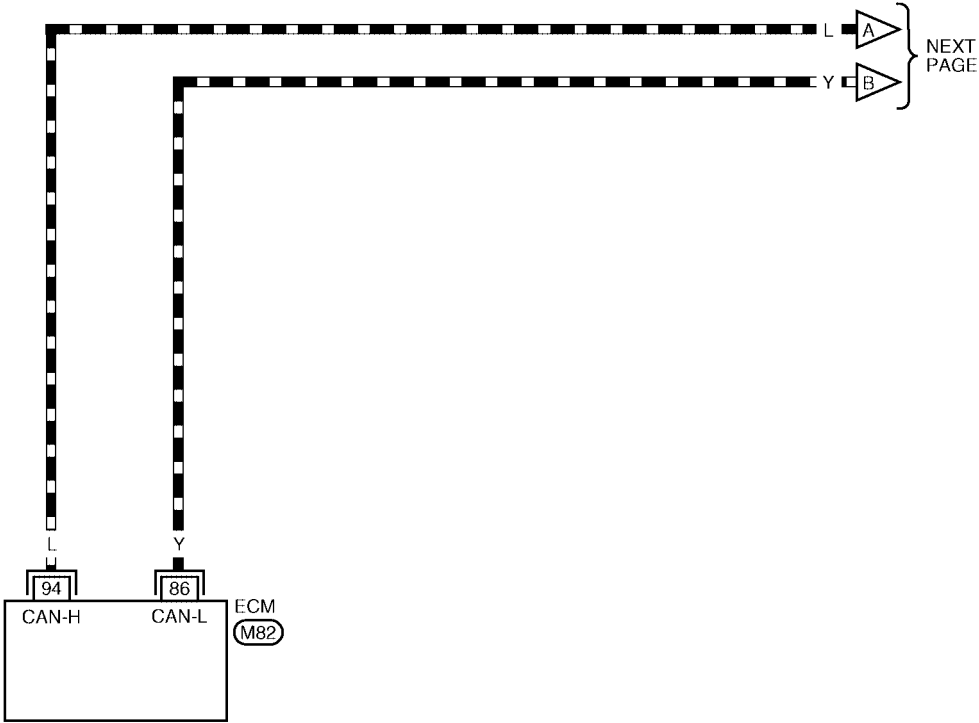


Wiring Diagram - CAN -

EKS004ZR

LAN-CAN-4

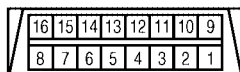
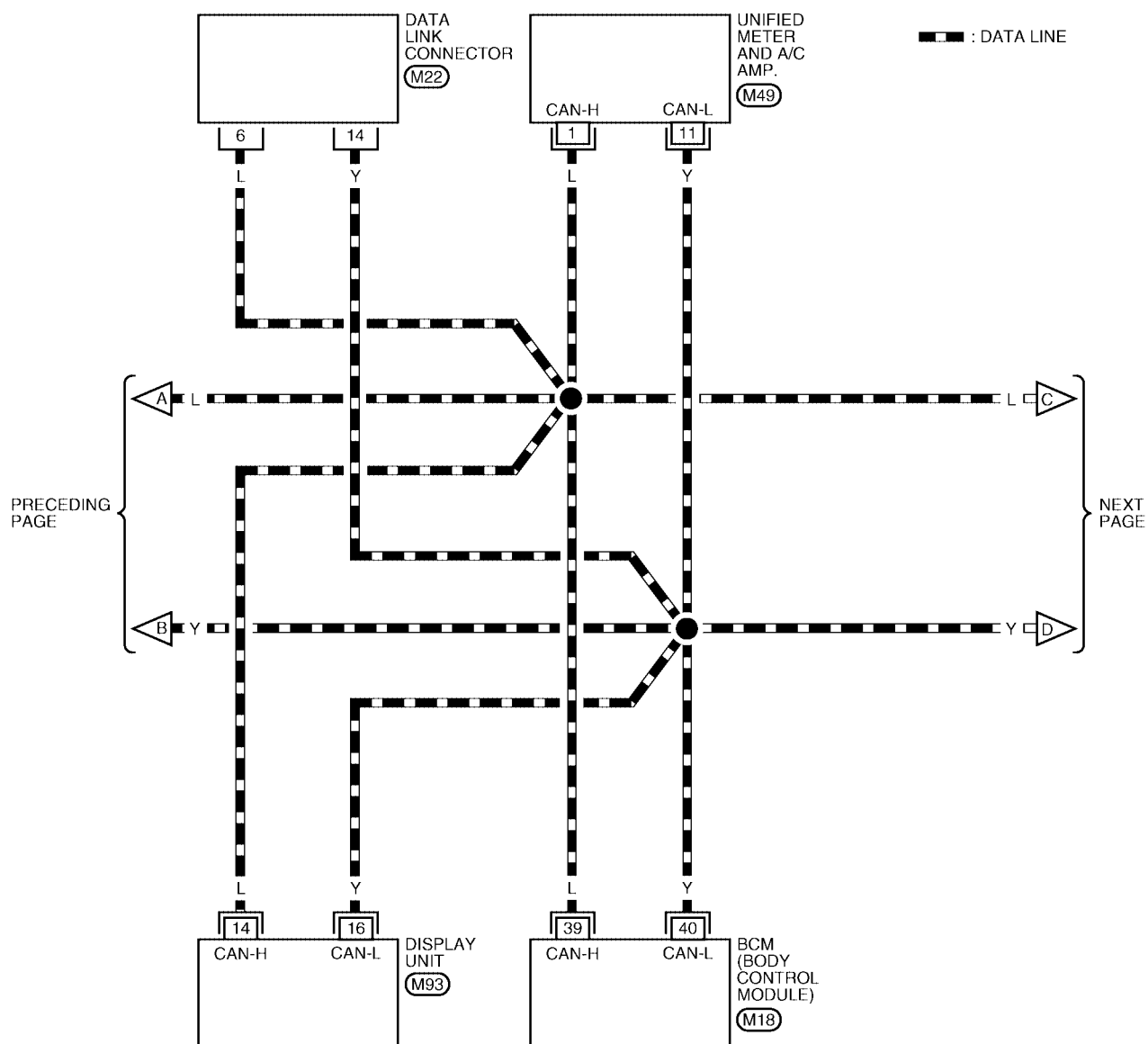
DATA LINE



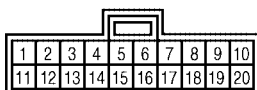
LAN

REFER TO THE FOLLOWING.  
M82 - ELECTRICAL  
UNITS

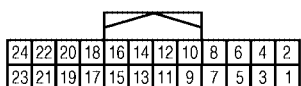
## LAN-CAN-5



(M22)  
W



(M49)  
GR

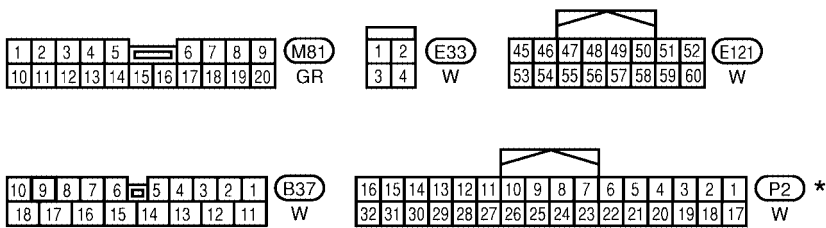
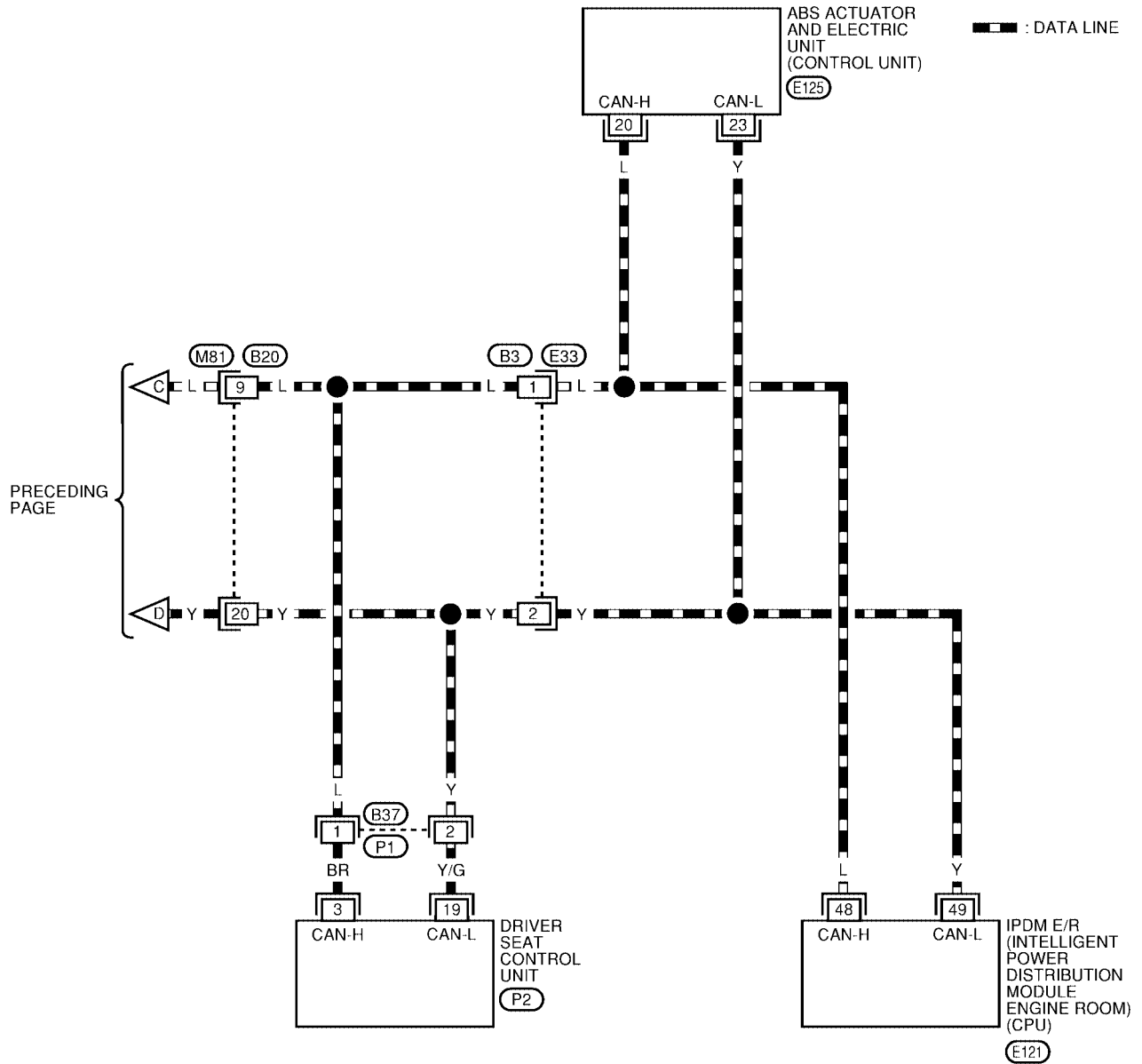


(M93)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-6



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

REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

WKWA0452E

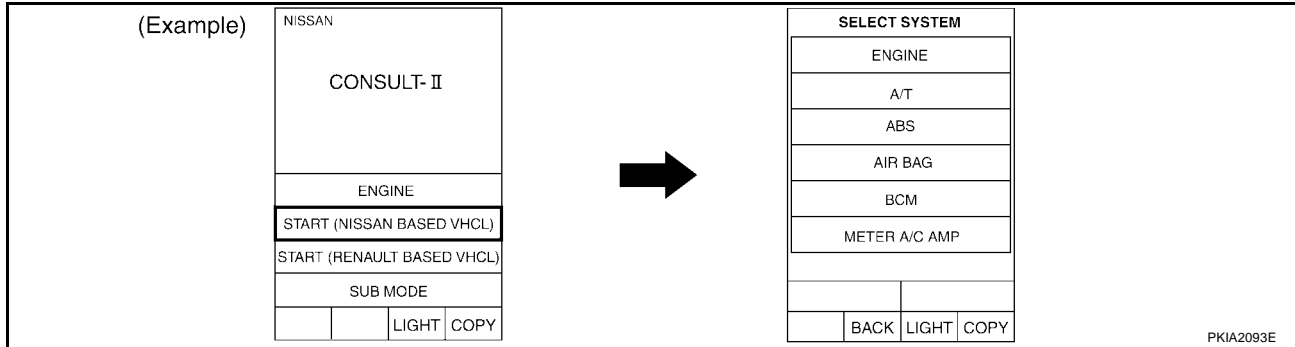
# CAN SYSTEM (TYPE 2)

[CAN]

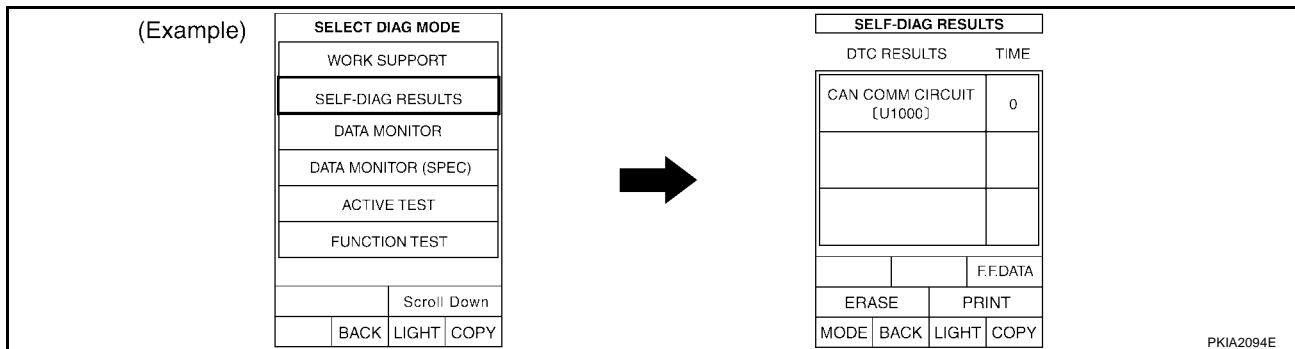
EKS004ZS

## Work Flow

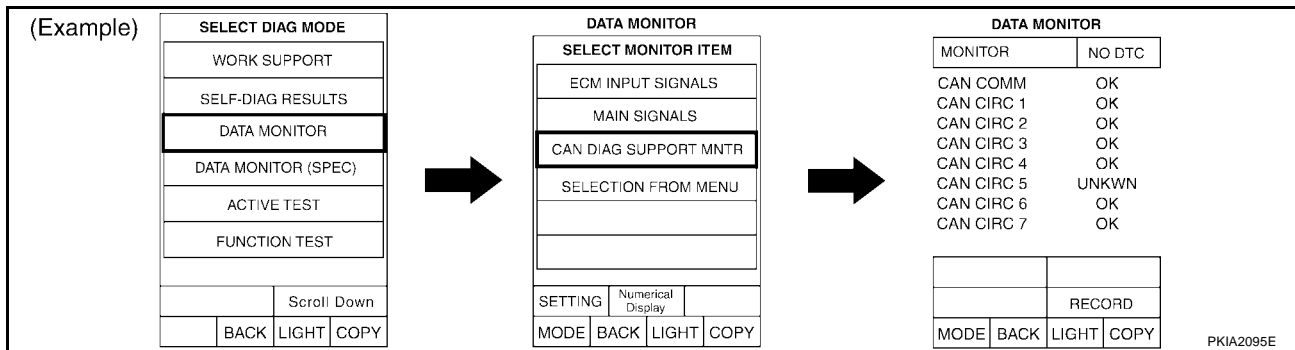
- When there are no indications of "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0438E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.



# CAN SYSTEM (TYPE 2)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0651E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0652E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 2

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	<del>CAN COMM</del>	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0653E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	<del>CIRC 3</del>	-	<del>CIRC 5</del>	<del>CIRC 2</del>	-	-	<del>CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0654E

## Case 3

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	<del>CAN CIRC 4</del>	-	-	-	<del>CAN CIRC 3</del>
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0655E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0656E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 4

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0657E

## Case 5

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0658E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0659E

## Case 6

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0660E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 7

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0661E

## Case 8

Check harness between data link connector and driver seat control unit. Refer to [LAN-51](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0662E

## Case 9

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-52](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0663E

## Case 10

Check ECM circuit. Refer to [LAN-52](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0664E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 11

Check display unit circuit. Refer to [LAN-53](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0665E

## Case 12

Check data link connector circuit. Refer to [LAN-53](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0666E

## Case 13

Check BCM circuit. Refer to [LAN-54](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0667E

## Case 14

Check unified meter and A/C amp. circuit. Refer to [LAN-54](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0668E

# CAN SYSTEM (TYPE 2)

[CAN]

## Case 15

Check driver seat control unit circuit. Refer to [LAN-55](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0669E

## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-55](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0670E

## Case 17

Check IPDM E/R circuit. Refer to [LAN-56](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0671E

## Case 18

Check CAN communication circuit. Refer to [LAN-56](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0672E

**Case 19**

Check IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0673E

**Case 20**Check IPDM E/R Ignition relay circuit. Refer to [LAN-57](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0674E

**Circuit Check Between Driver Seat Control Unit and Data Link Connector**

EKS004ZU

**1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

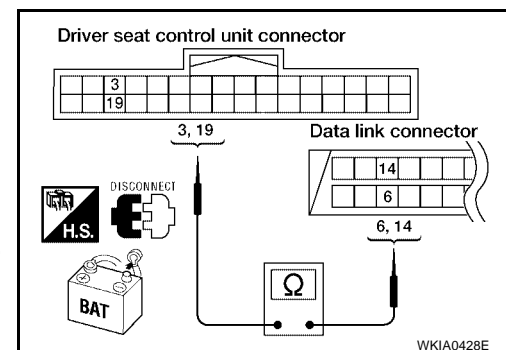
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-44](#).  
 NG >> Repair harness.



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

EKS004ZV

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

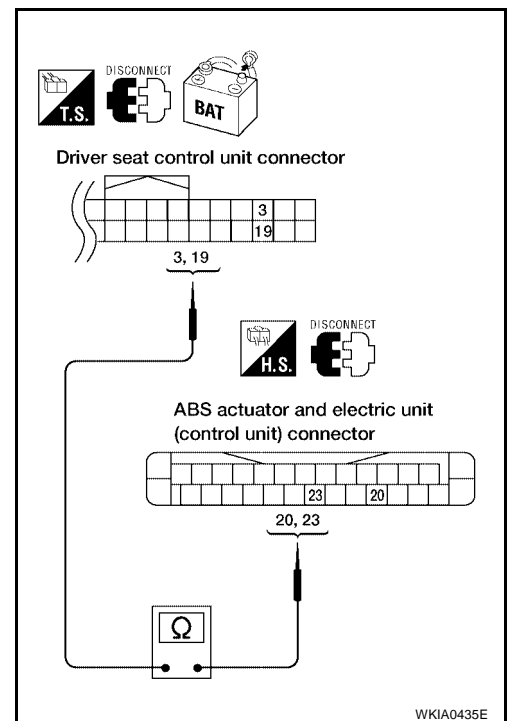
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

- 3 (BR) - 20 (L) : Continuity should exist.**  
**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-44](#).  
 NG >> Repair harness.



## ECM Circuit Check

EKS004ZW

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

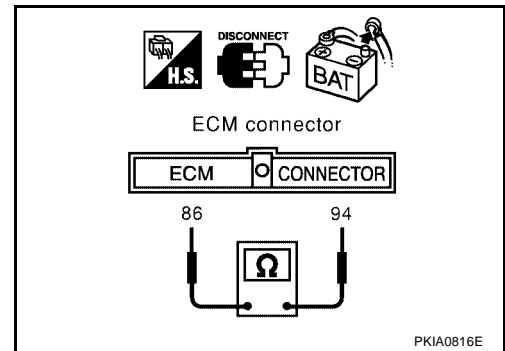
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and data link connector M22.



EKS004ZY

## 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

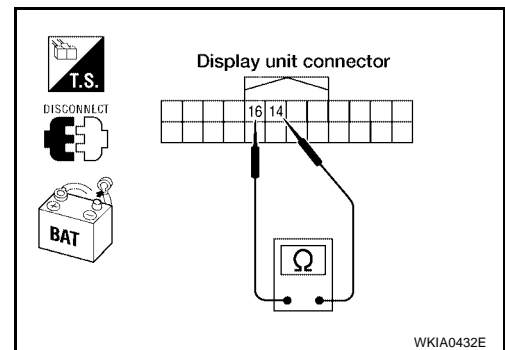
Check resistance between display unit connector M93 terminal 25 (L) and terminal 26 (Y).

**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.



EKS004ZZ

## 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.

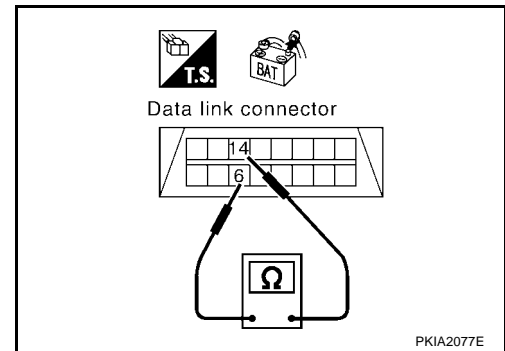
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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-44](#).
- NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS00500

## 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.

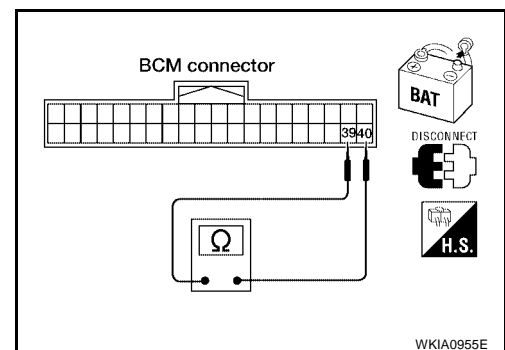
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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.



EKS00501

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

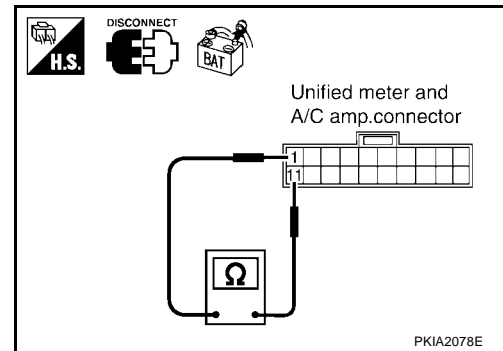
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS00502

## 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

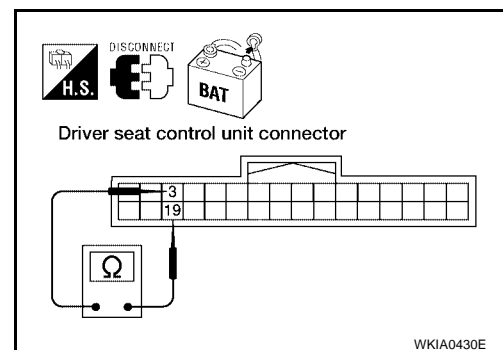
Check resistance between driver seat control unit connector P2 terminal 3 (BR) and terminal 19 (Y/G).

**3 (BR) - 19 (Y/G)**

**: 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.



EKS00503

## 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.

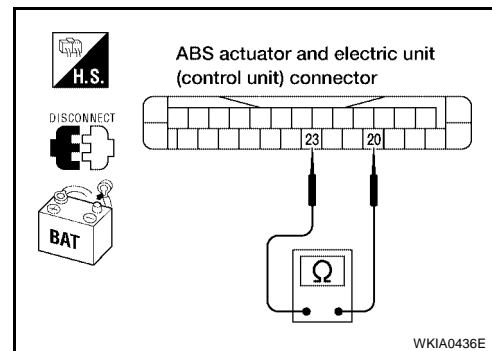
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



EKS00504

## 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.

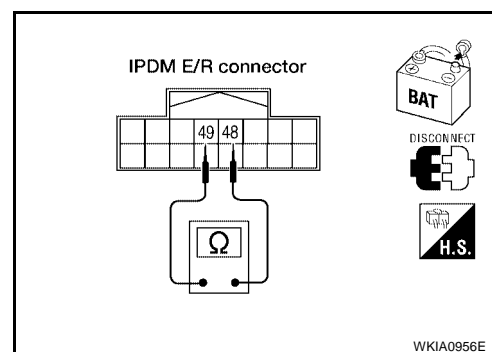
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 ABS actuator and electric unit (control unit) connector E125.



EKS00505

## 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
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

OK or NG

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

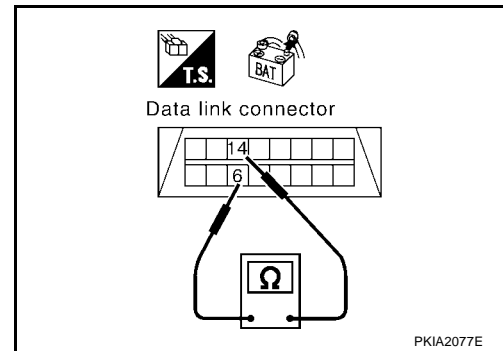
## 2. CHECK HARNESS FOR SHORTED CIRCUITS

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

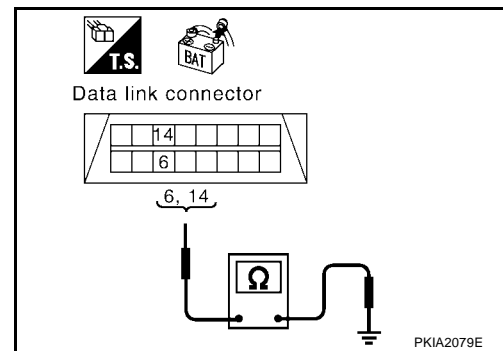
Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

**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-57, "Component Inspection"](#).  
NG >> Repair the harness.



## IPDM E/R Ignition Relay Circuit Check

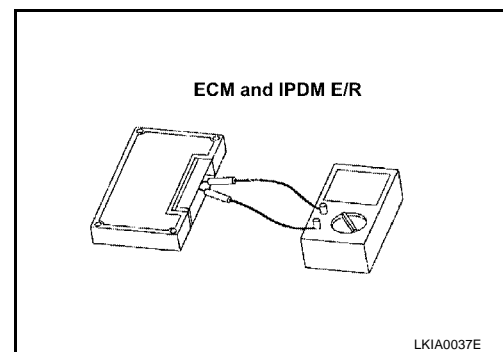
Check the following. If no problem is found, replace the IPDM E/R.

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

## Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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

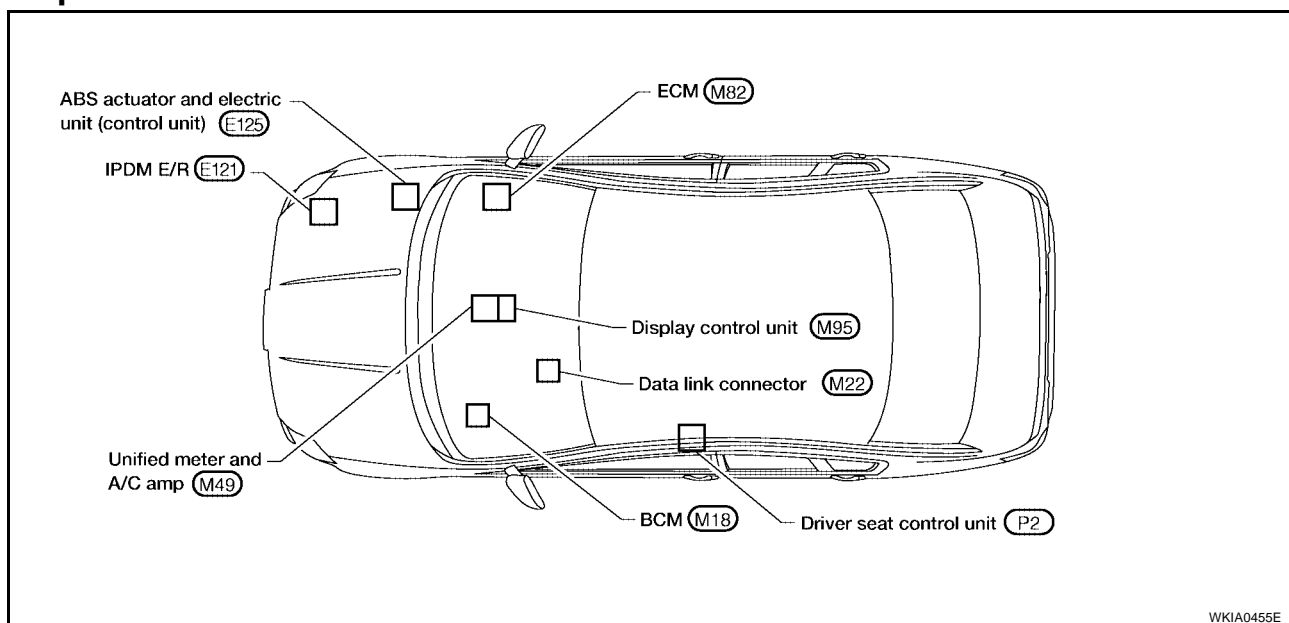
## System Description

EKS004Z4

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

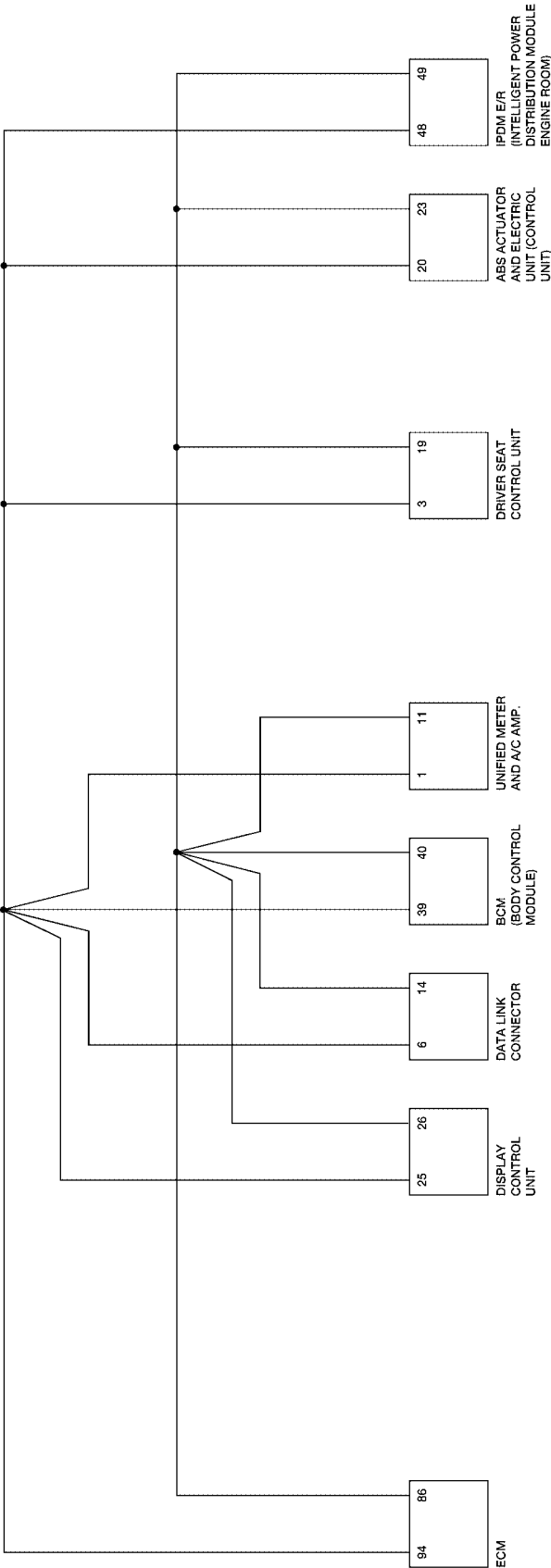
EKS004Z5



WKIA0455E

Schematic

EKS004Z6



A

B

C

D

E

F

G

H

I

J

LAN

L

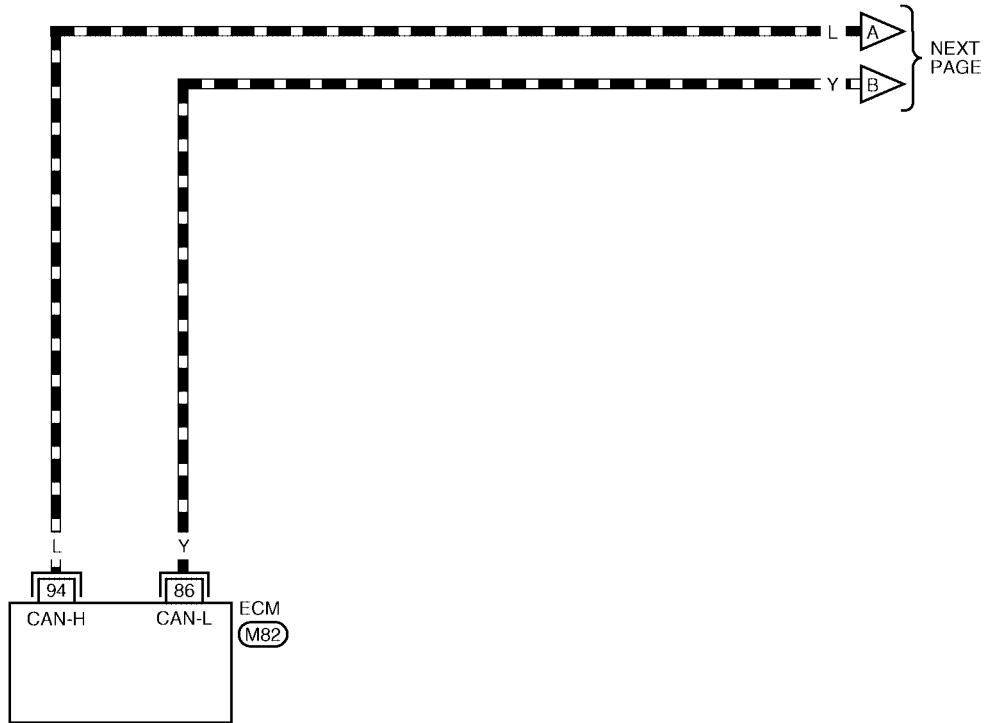
M

WKWA0445E

## Wiring Diagram - CAN -

EKS004Z7

## LAN-CAN-7

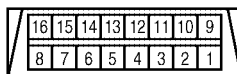
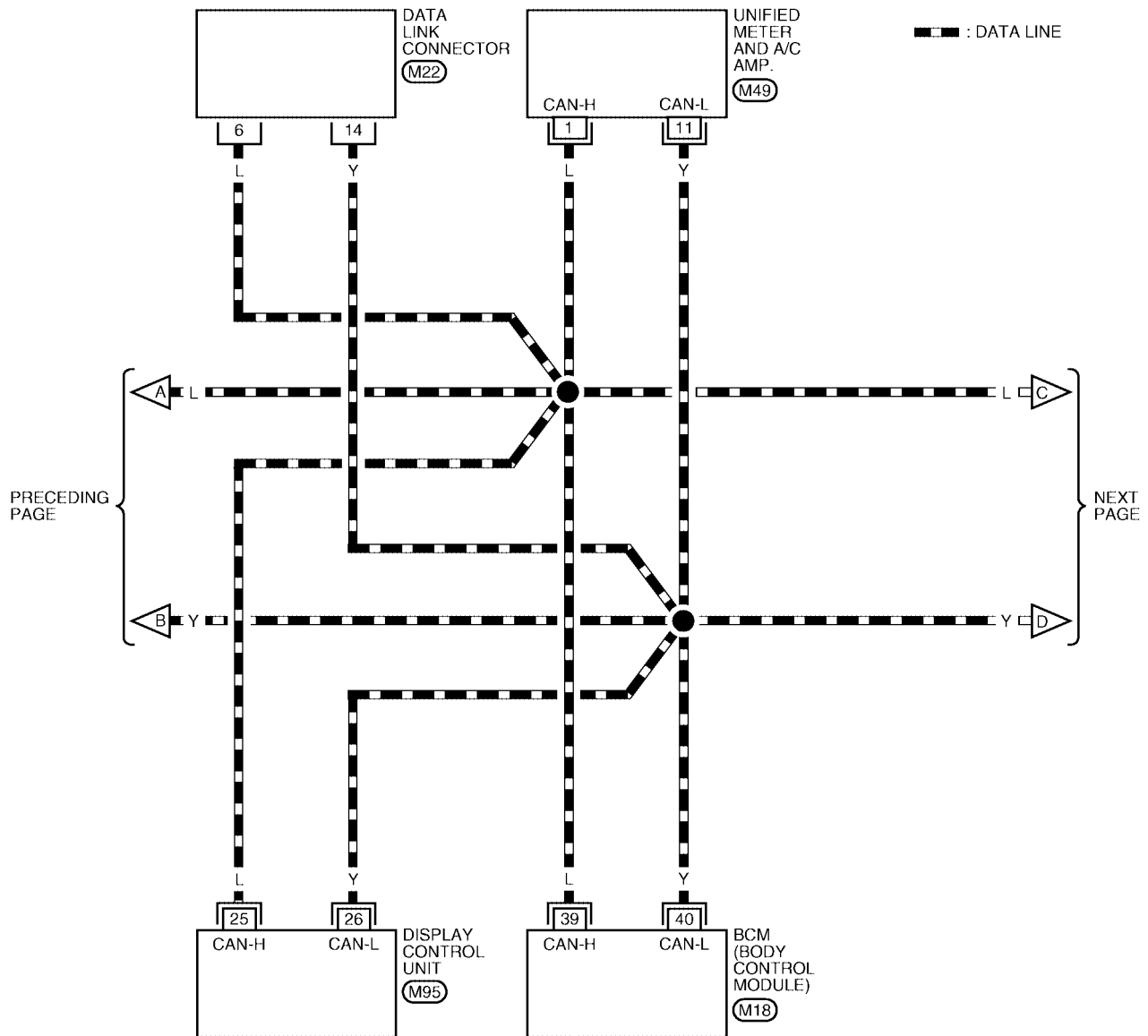
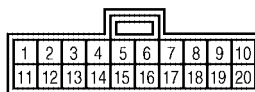
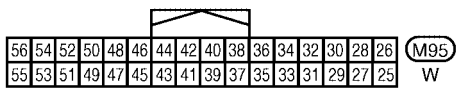
 : DATA LINE

REFER TO THE FOLLOWING.  
(M82) - ELECTRICAL  
UNITS

WKWA0446E



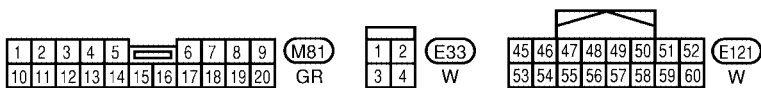
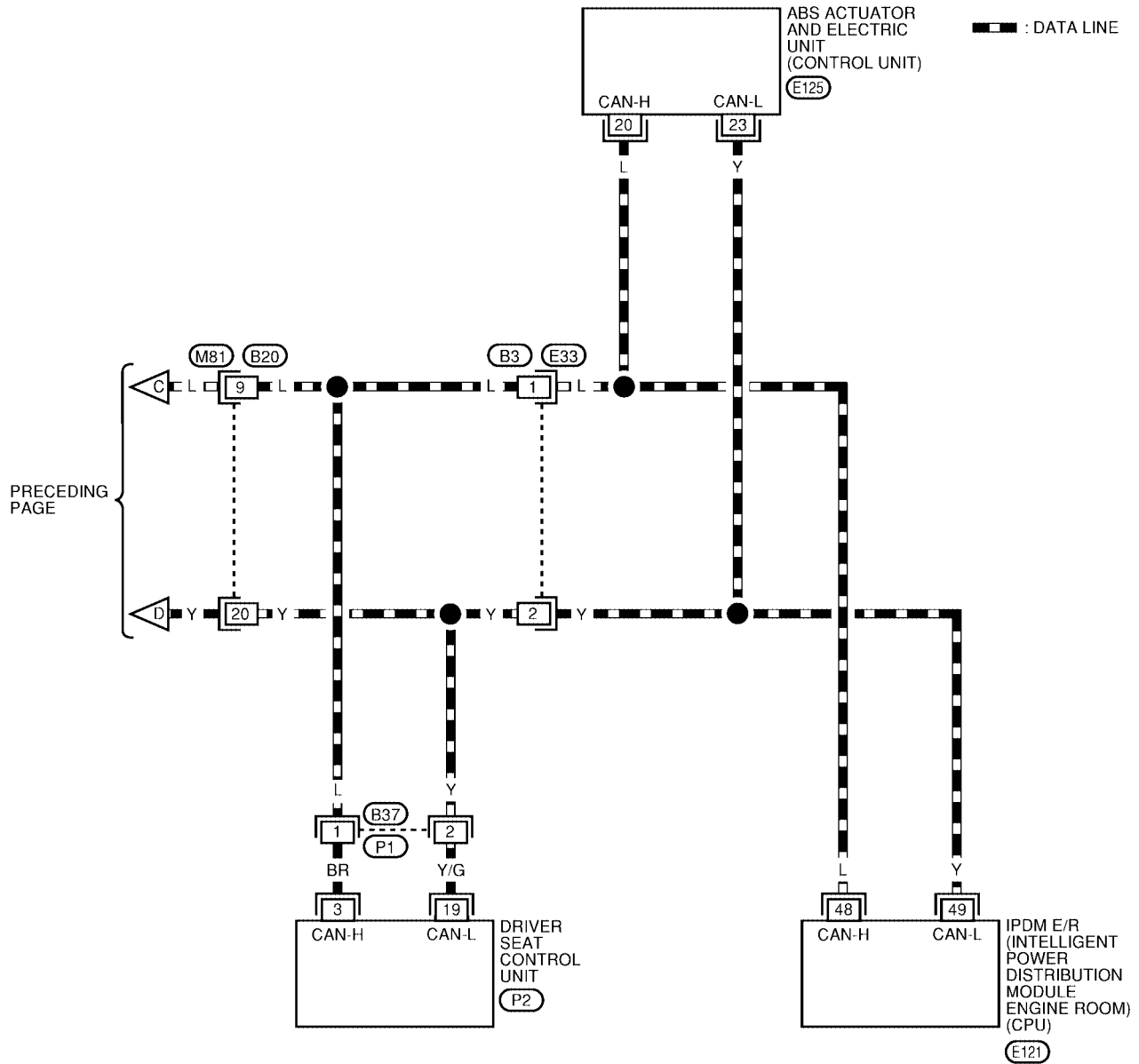
## LAN-CAN-8

(M22)  
W(M49)  
GR(M95)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-9



REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

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

WKWA0448E

## Work Flow

- When there are no indications of "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." 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", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.

(Example)

SELECT DIAG MODE	
WORK SUPPORT	
SELF-DIAG RESULTS	
DATA MONITOR	
DATA MONITOR (SPEC)	
ACTIVE TEST	
FUNCTION 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

PKIA2094E

- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.

(Example)

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

DATA MONITOR		
SELECT MONITOR ITEM		
ECM INPUT SIGNALS		
MAIN SIGNALS		
CAN DIAG SUPPORT MNTR		
SELECTION FROM MENU		
SETTING	Numerical Display	
MODE	BACK	LIGHT COPY

DATA MONITOR	
MONITOR	NO DTC
CAN COMM	OK
CAN CIRC 1	OK
CAN CIRC 2	OK
CAN CIRC 3	OK
CAN CIRC 4	OK
CAN CIRC 5	UNKWN
CAN CIRC 6	OK
CAN CIRC 7	OK
RECORD	
MODE	BACK
LIGHT	COPY

PKIA2095E

- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx					
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CIRC 4	-	CAN CIRC 5
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-

WKIA0439E

## NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

## CAN SYSTEM (TYPE 3)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

5. Check CAN communication line of the navigation system.
6. 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.

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

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	<del>CAN COMM</del>	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0675E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	<del>CAN CIRC 4</del>	<del>CAN CIRC 6</del>	-	-	<del>CAN CIRC 7</del>
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0676E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 2

Replace display control unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0677E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 3</del>	-	<del>CAN CIRC 5</del>	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0678E

## Case 3

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	<del>CAN CIRC 4</del>	-	-	-	<del>CAN CIRC 3</del>
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0679E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0680E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 4

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0681E

## Case 5

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0682E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0683E

## Case 6

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0684E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 7

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0685E

## Case 8

Check harness between data link connector and driver seat control unit. Refer to [LAN-70](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0686E

## Case 9

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-71](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0687E

## Case 10

Check ECM circuit. Refer to [LAN-71](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0688E

# CAN SYSTEM (TYPE 3)

[CAN]

## Case 11

Check display control unit circuit. Refer to [LAN-72](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	<del>CAN CIRC 1</del>	<del>CAN CIRC 3</del>	-	<del>CAN CIRC 5</del>	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 7</del>	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 2	-	-	-

WKIA0689E

## Case 12






Check data link connector circuit. Refer to [LAN-72](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0690E

## Case 13

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

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4		-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5		-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-		-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3		-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-		-	-	-

WKIA0691E

## Case 14

Check unified meter and A/C amp. circuit. Refer to [LAN-73](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	<del>CAN CIRC 4</del>	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	<del>CAN CIRC 5</del>	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	<del>CAN CIRC 4</del>	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	<del>CAN CIRC 3</del>	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0692E



# CAN SYSTEM (TYPE 3)

[CAN]

## Case 15

Check driver seat control unit circuit. Refer to [LAN-74](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0693E

## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-74](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0694E

## Case 17

Check IPDM E/R circuit. Refer to [LAN-75](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0695E

## Case 18

Check CAN communication circuit. Refer to [LAN-75](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0696E

**Case 19**

Check IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0697E

**Case 20**Check IPDM E/R Ignition relay circuit. Refer to [LAN-76](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 2	-	-	-

WKIA0698E

**Circuit Check Between Driver Seat Control Unit and Data Link Connector**

EKS004ZA

**1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

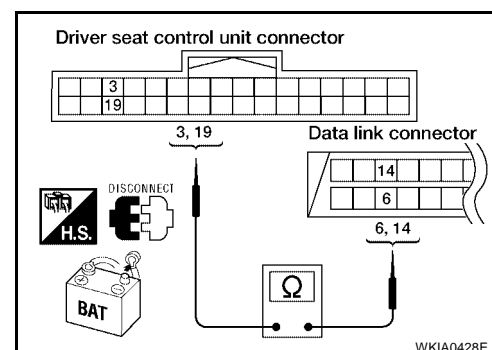
**3 (BR) - 6 (L) : Continuity should exist.**

**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-63](#).

NG >> Repair harness.



WKIA0428E

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

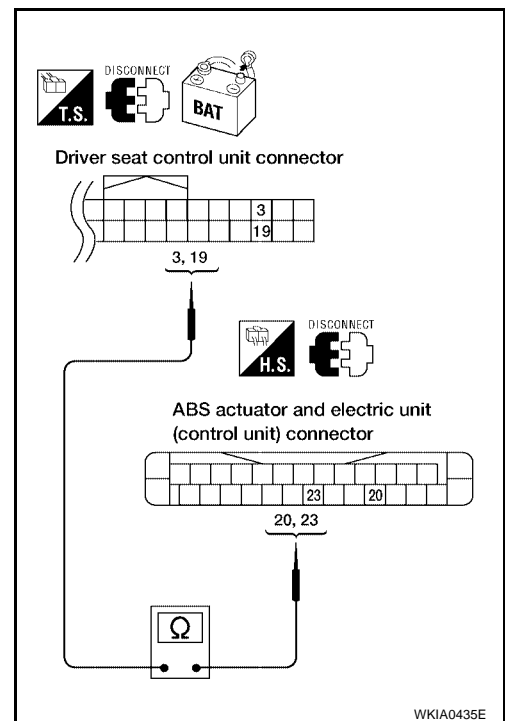
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

- 3 (BR) - 20 (L) : Continuity should exist.**  
**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-63](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

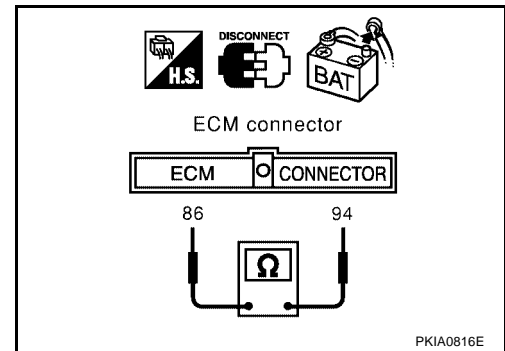
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and data link connector M22.



EKS004ZE

## 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

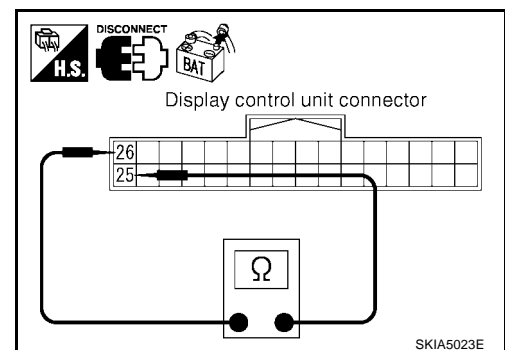
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS004ZF

## 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

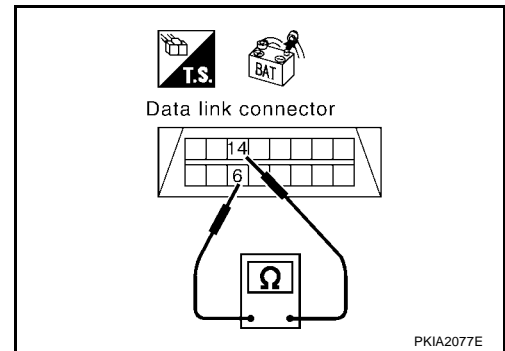
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-63](#).
- NG >> Repair harness between data link connector M22 and BCM connector M18.



PKIA2077E

EKS004ZG

## 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

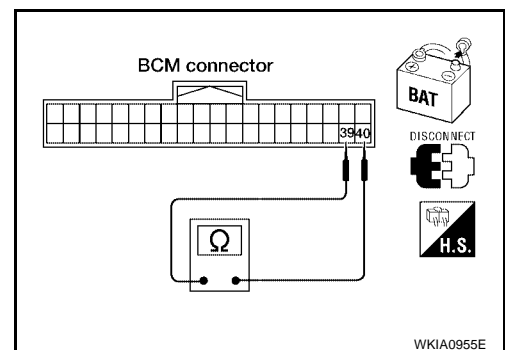
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



WKIA0955E

EKS004ZH

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

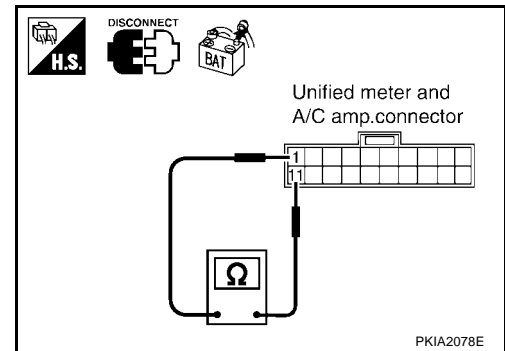
## 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS004ZI

## 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.

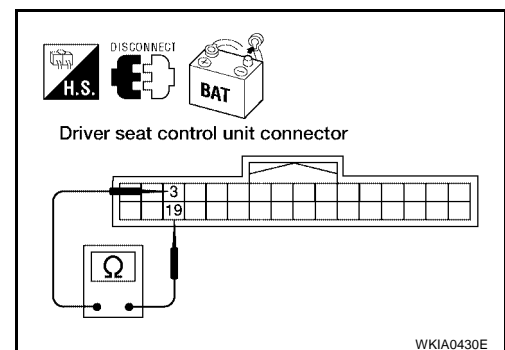
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



WKIA0430E

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

EKS004ZJ

### 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

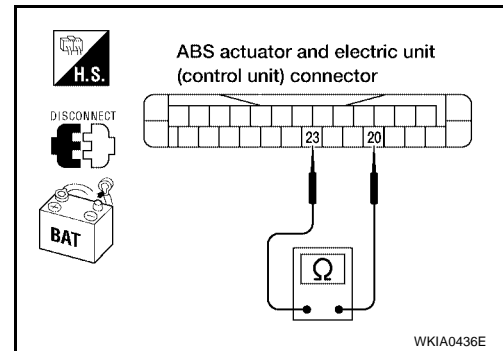
Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 20 (L) and terminal 23 (Y).

**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 IPDM E/R connector E121.



EKS004ZK

## 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

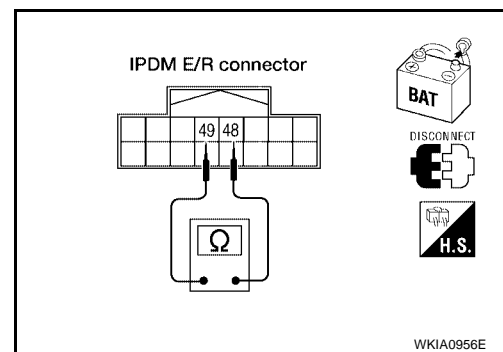
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS004ZL

## 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
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

OK or NG

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

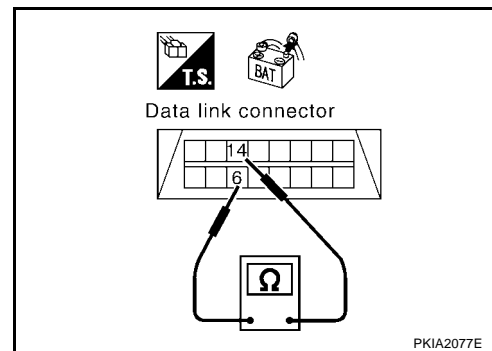
## 2. CHECK HARNESS FOR SHORTED CIRCUITS

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

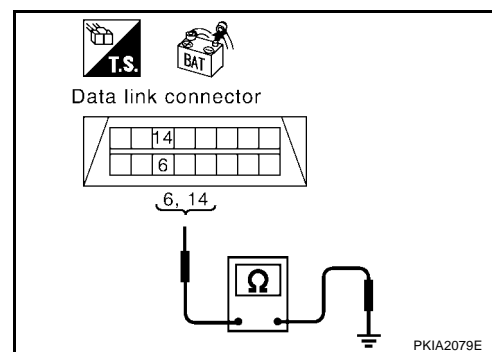
Check continuity between data link connector M22 terminals 6 (L), 14 (Y) and ground.

**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-58, "Component Parts and Harness Connector Location" LAN-58](#).  
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-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

## Component Inspection

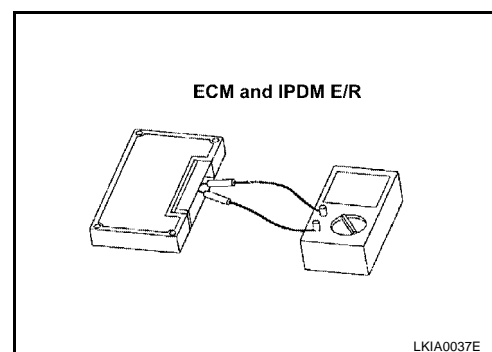
### ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION

- Remove ECM and IPDM E/R from vehicle.
- 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**



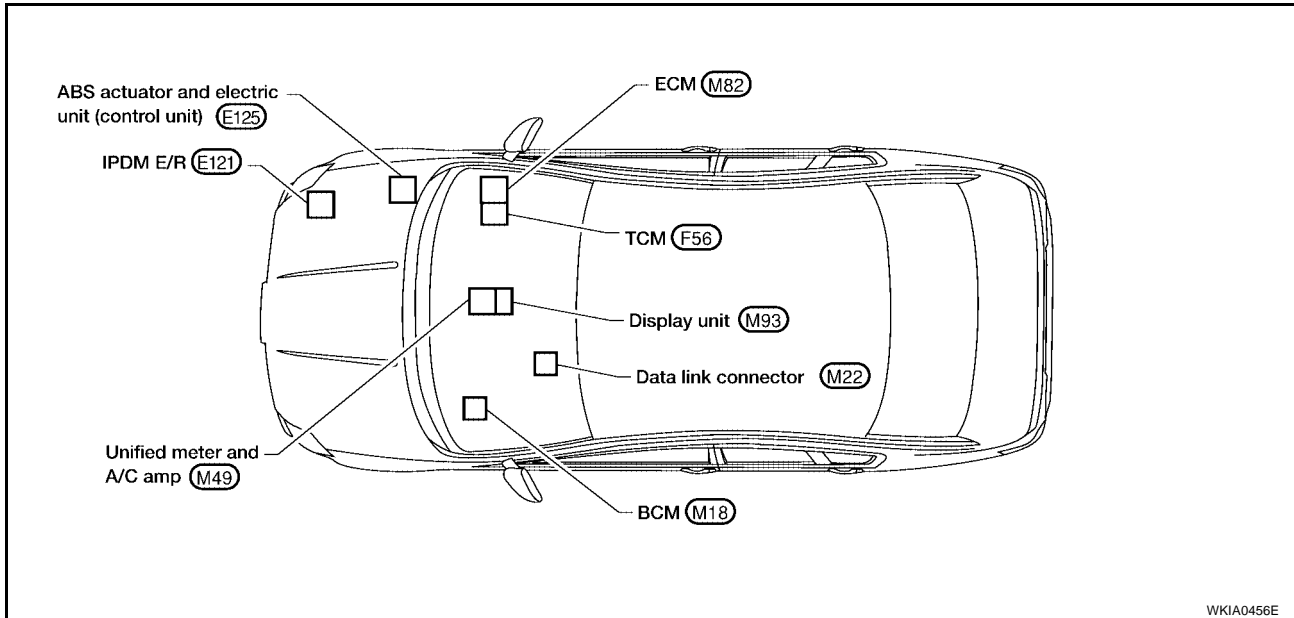


## CAN SYSTEM (TYPE 4)

### System Description

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

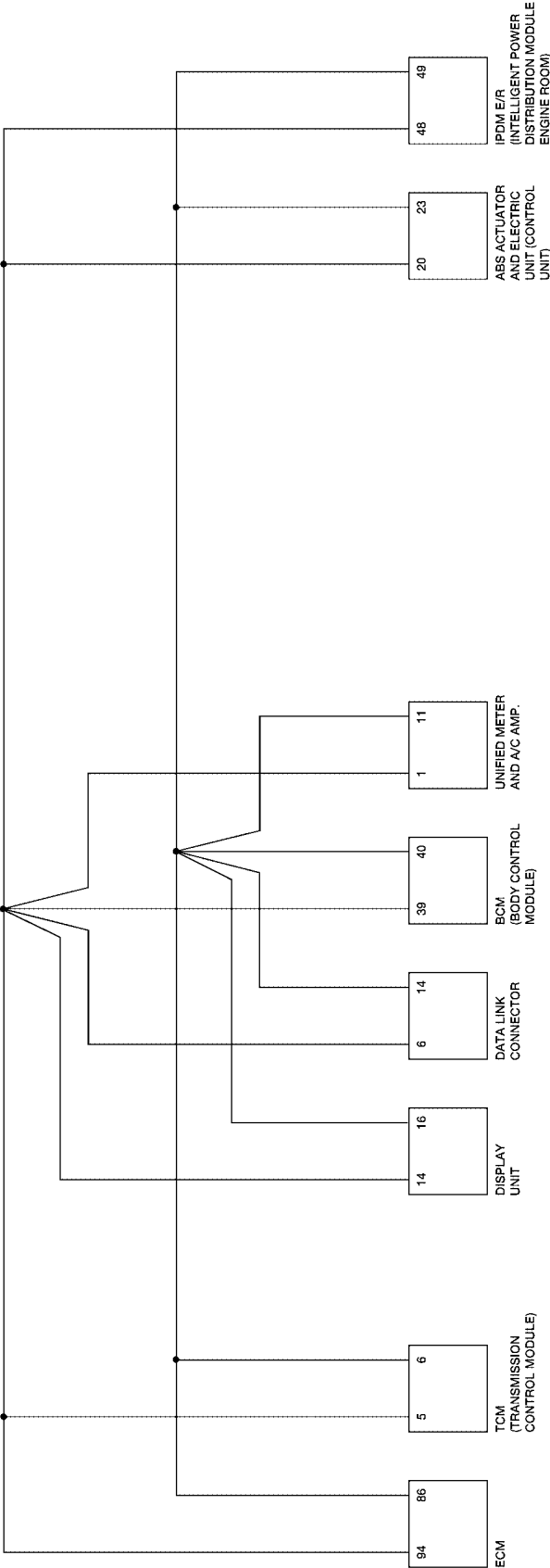
### Component Parts and Harness Connector Location



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

Schematic

EKS004YM



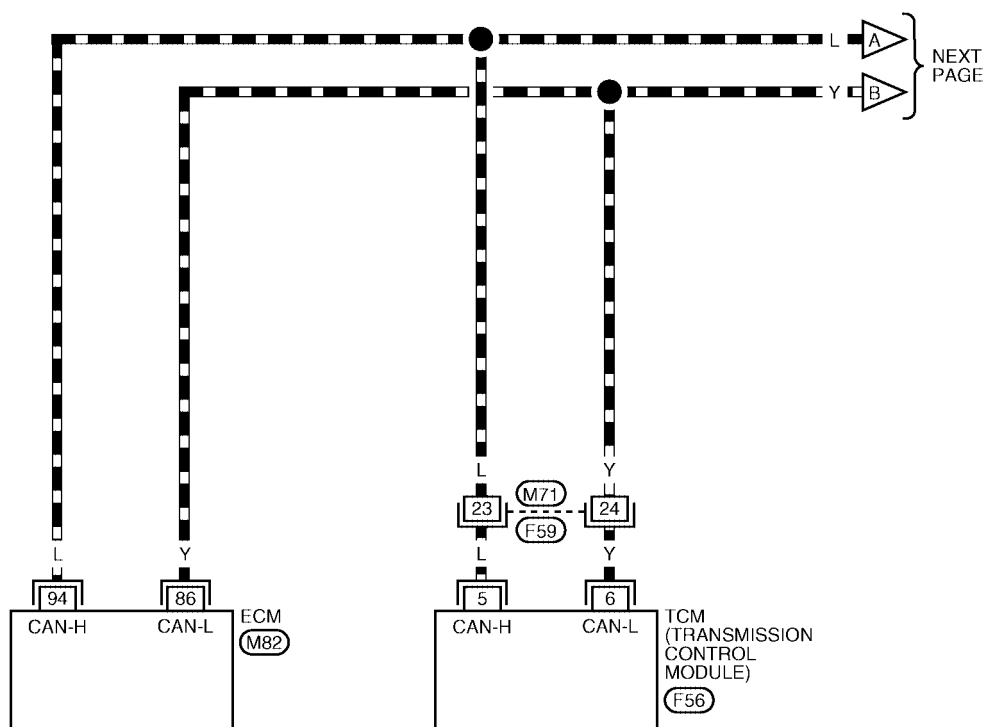
WKWA0441E

## Wiring Diagram - CAN -


EKS004YN

LAN-CAN-10

 : DATA LINE



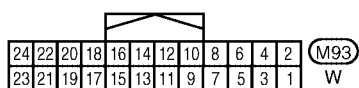
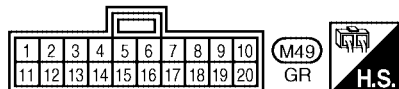
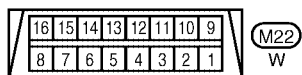
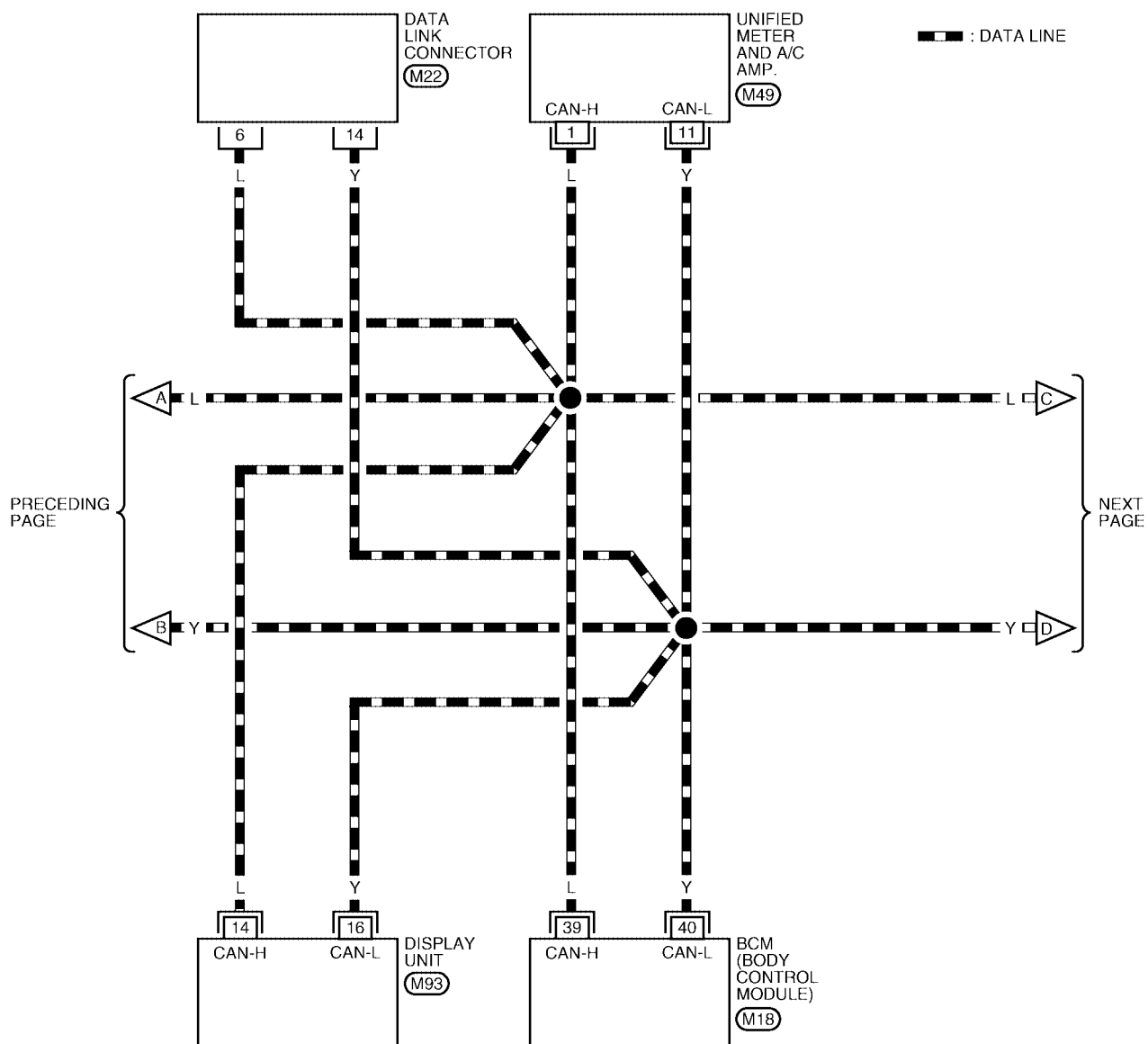
LAN

1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
(M82) , (F56) - ELECTRICAL  
UNITS

WKWA0442E

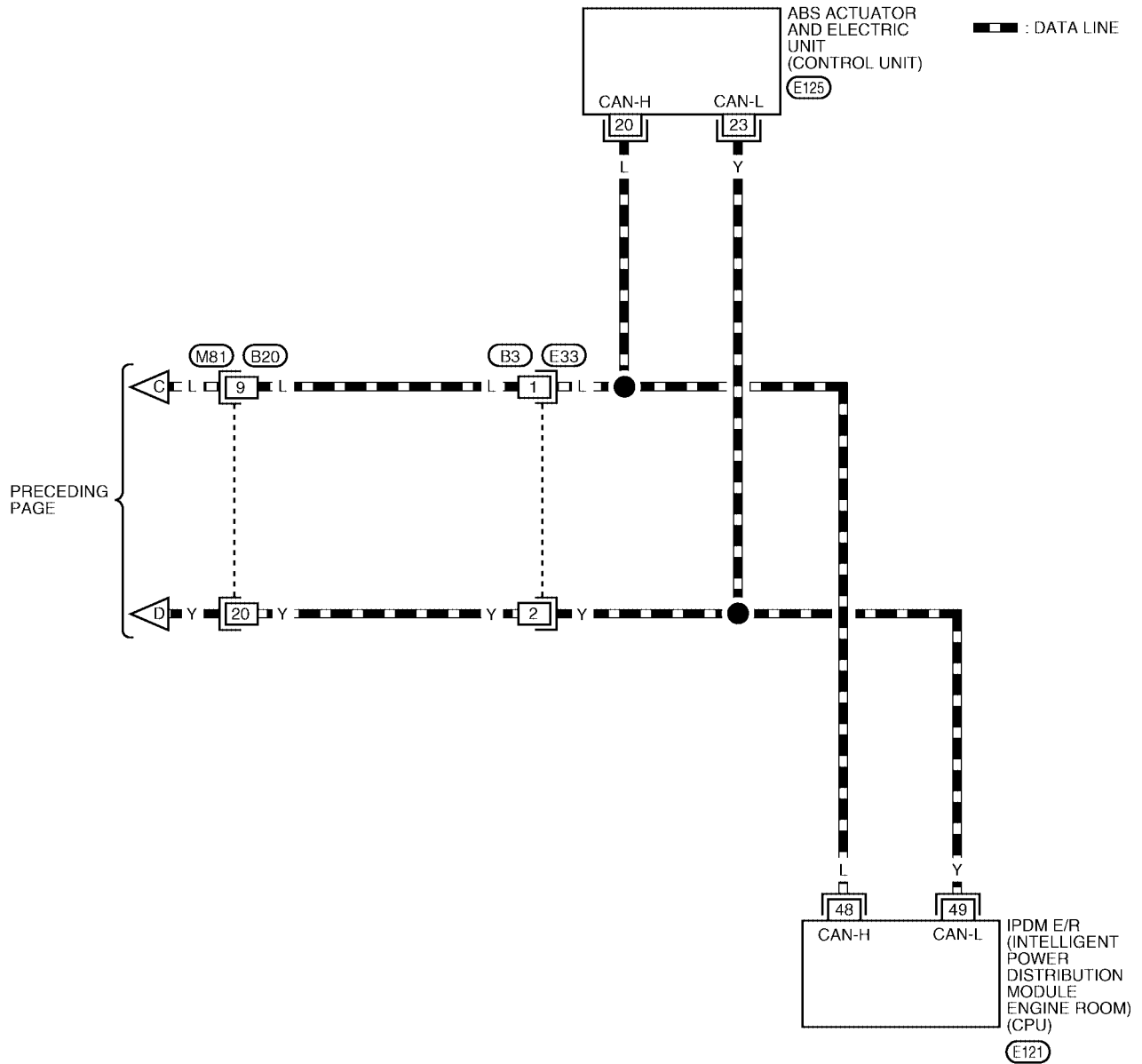
## LAN-CAN-11




REFER TO THE FOLLOWING.

M18 - ELECTRICAL UNITS

## LAN-CAN-12



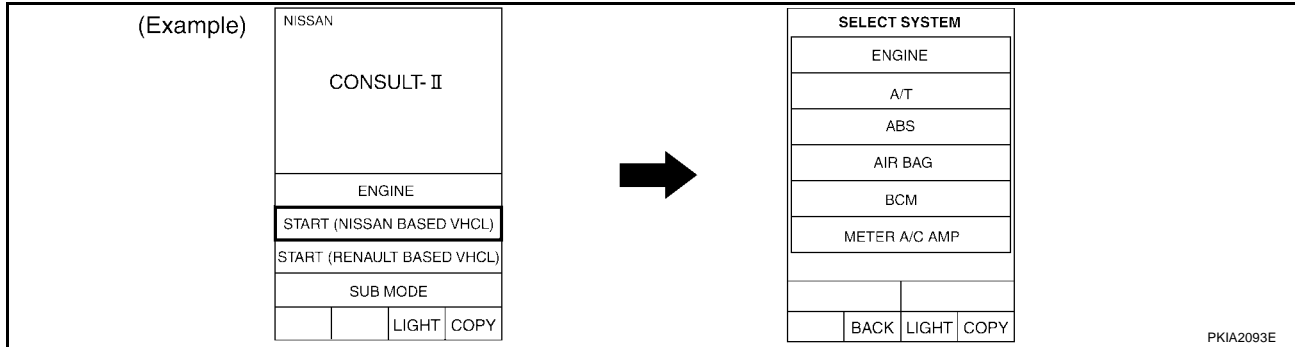
1	2	3	4	5		6	7	8	9	(M81)	<table border="1"><tr><td>1</td><td>2</td></tr><tr><td>3</td><td>4</td></tr></table>	1	2	3	4	(E33)	<table border="1"><tr><td>45</td><td>46</td><td>47</td><td>48</td><td>49</td><td>50</td><td>51</td><td>52</td></tr><tr><td>53</td><td>54</td><td>55</td><td>56</td><td>57</td><td>58</td><td>59</td><td>60</td></tr></table>	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	(E121)
1	2																																	
3	4																																	
45	46	47	48	49	50	51	52																											
53	54	55	56	57	58	59	60																											
10	11	12	13	14	15	16	17	18	19	20	GR	W	W	W																				

REFER TO THE FOLLOWING.

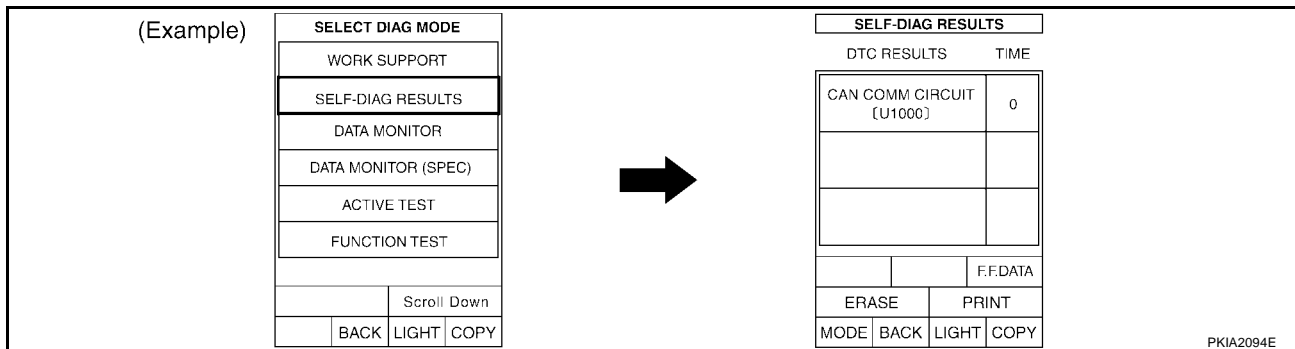
(E125) - ELECTRICAL UNITS

## Work Flow

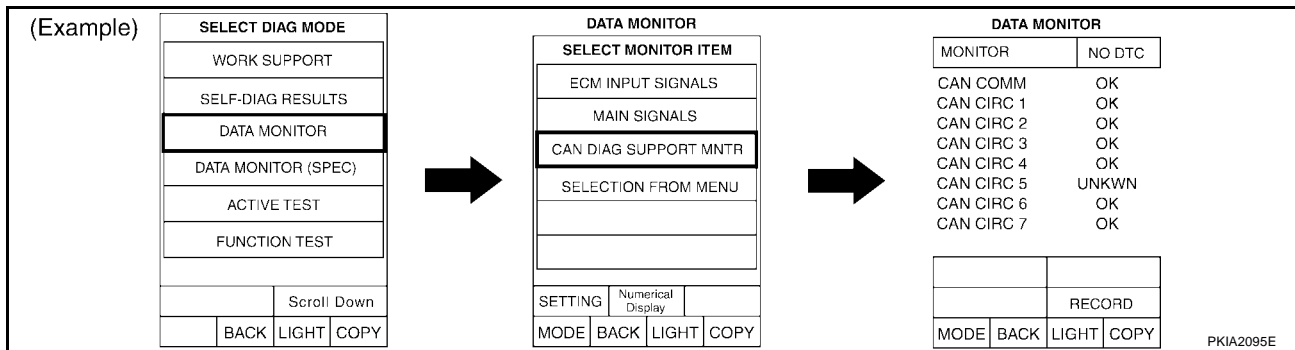
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM" or "IPDM E/R" on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



- Print all the data of "SELF-DIAG RESULTS" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP" and "ABS" displayed on CONSULT-II.



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 4)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0699E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0700E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0701E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0702E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0703E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0704E



# CAN SYSTEM (TYPE 4)

[CAN]

## Case 4

Replace BCM. Refer to.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0705E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0706E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0707E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 6

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0708E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0709E

## Case 7

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	<del>CAN CIRC 3</del>	-	-	-	<del>CAN CIRC 2</del>	-	-

WKIA0710E

## Case 8

Check harness between TCM and data link connector. Refer to [LAN-90](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	<del>CAN CIRC 4</del>	<del>CAN CIRC 6</del>	-	<del>CAN CIRC 7</del>
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	<del>CAN CIRC 4</del>	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	<del>CAN CIRC 2</del>	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	<del>CAN CIRC 3</del>	-	-	-	CAN CIRC 2	-	-

WKIA0711E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 9

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to [LAN-90](#)

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0712E

## Case 10

Check ECM circuit. Refer to [LAN-91](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0713E

## Case 11

Check TCM circuit. Refer to [LAN-92](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0714E

## Case 12

Check display unit circuit. Refer to [LAN-92](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0715E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 13

Check data link connector circuit. Refer to [LAN-93](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0716E

## Case 14

Check BCM circuit. Refer to [LAN-93](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0717E

## Case 15

Check unified meter and A/C amp. circuit. Refer to [LAN-94](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0718E

## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-94](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0719E

# CAN SYSTEM (TYPE 4)

[CAN]

## Case 17

Check IPDM E/R circuit. Refer to [LAN-95](#).

	CONSUL I Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0720E

## Case 18

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

	CONSUL I Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0721E

## Case 19

Check IPDM E/R Ignition relay circuit. Refer to [LAN-96](#).

	CONSUL I Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0722E

	CONSUL I Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0723E

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

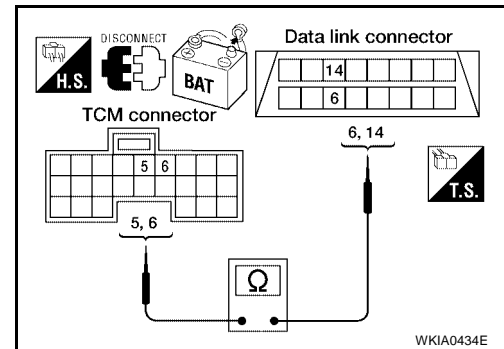
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-82, "Work Flow"](#).  
 NG >> Repair harness.



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

### 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 and ECM connector M82.
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 data link connector M22 terminals 6 (L), 14 (Y) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

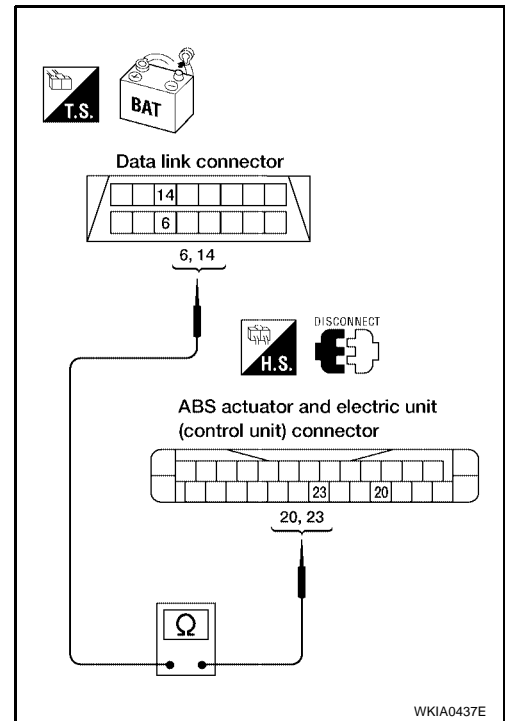
**6 (L) - 20 (L) : Continuity should exist.**

**14 (Y) - 23 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-82](#).

NG >> Repair harness.



EKS004YS

## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

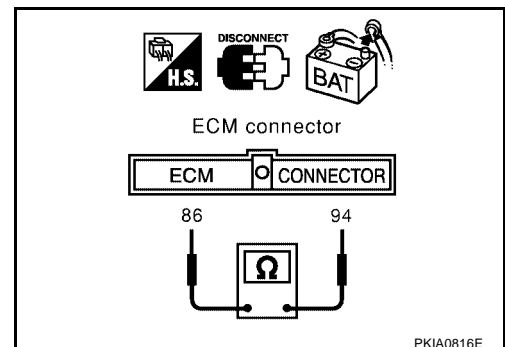
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM connector M82 and TCM connector F56.



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

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

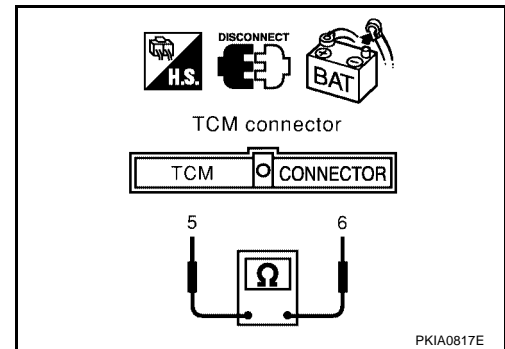
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector F56 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 F56 and ECM connector M82.

**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.

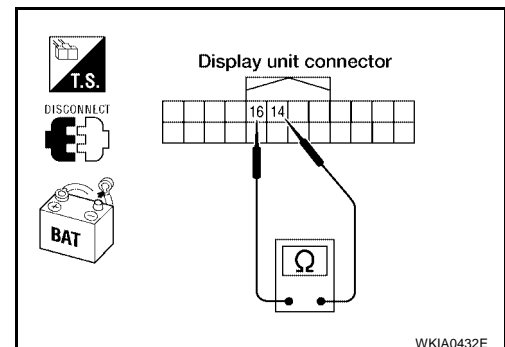
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between display unit connector M93 terminal 25 (L) and terminal 26 (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.

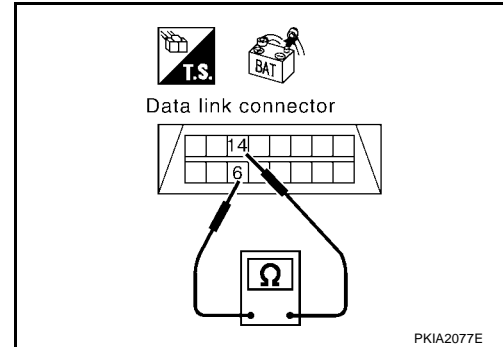
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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-82](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



PKIA2077E

EKS004YV

**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.

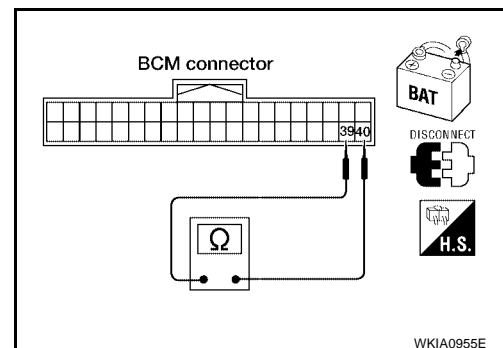
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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.



WKIA0955E

LAN

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

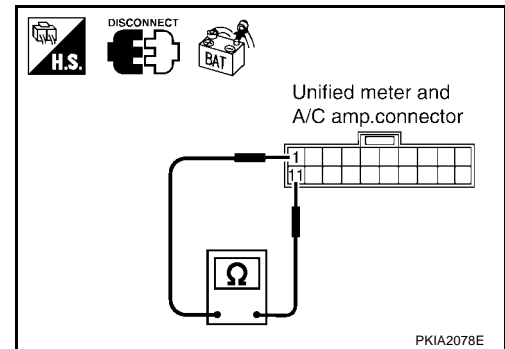
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



## 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.

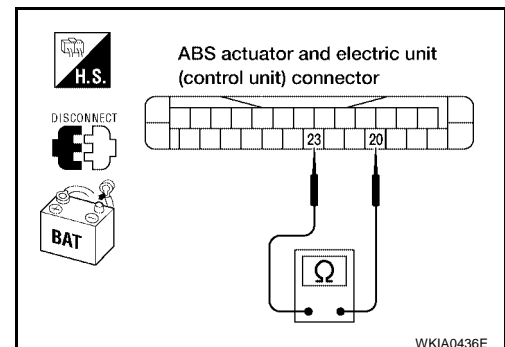
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



**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.

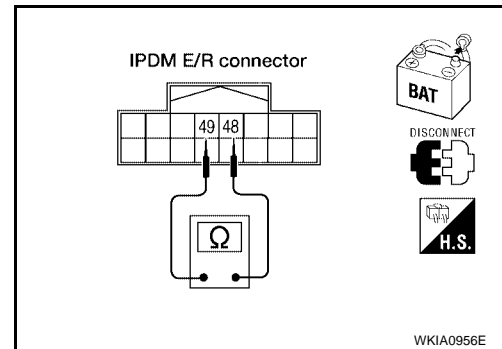
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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 ABS actuator and electric unit (control unit) connector E125.

**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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

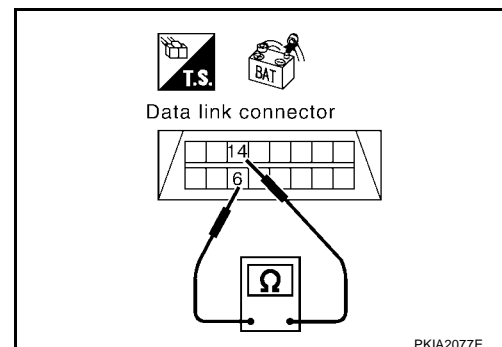
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

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.

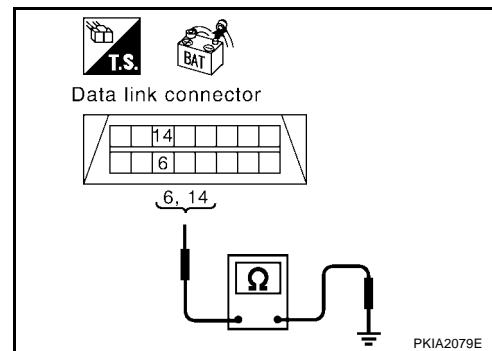
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-96, "Component Inspection"](#).

NG >> Repair the harness.



EKS004Z2

### IPDM E/R Ignition Relay Circuit Check

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

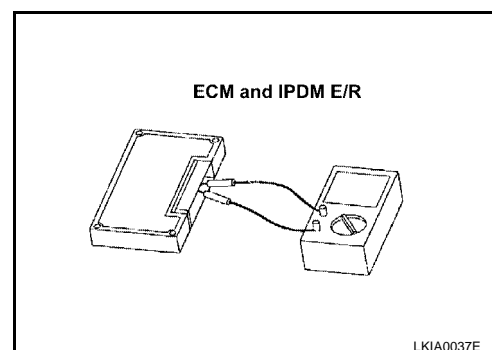
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS004Z3

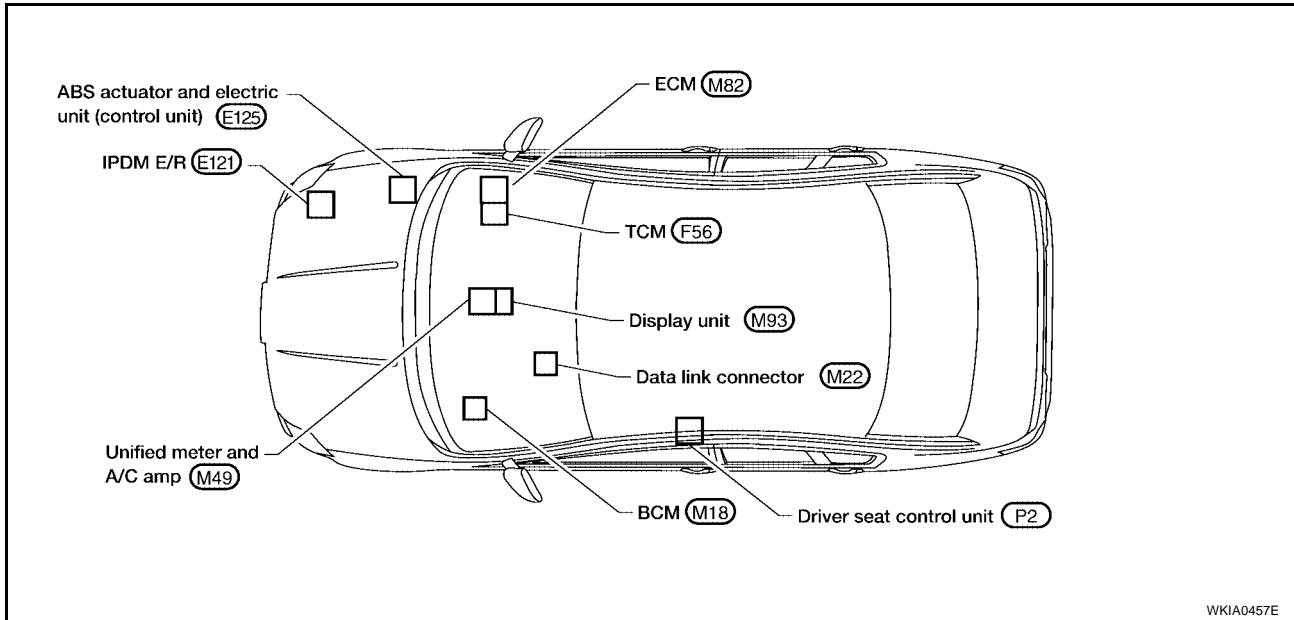


## CAN SYSTEM (TYPE 5)

## System Description

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

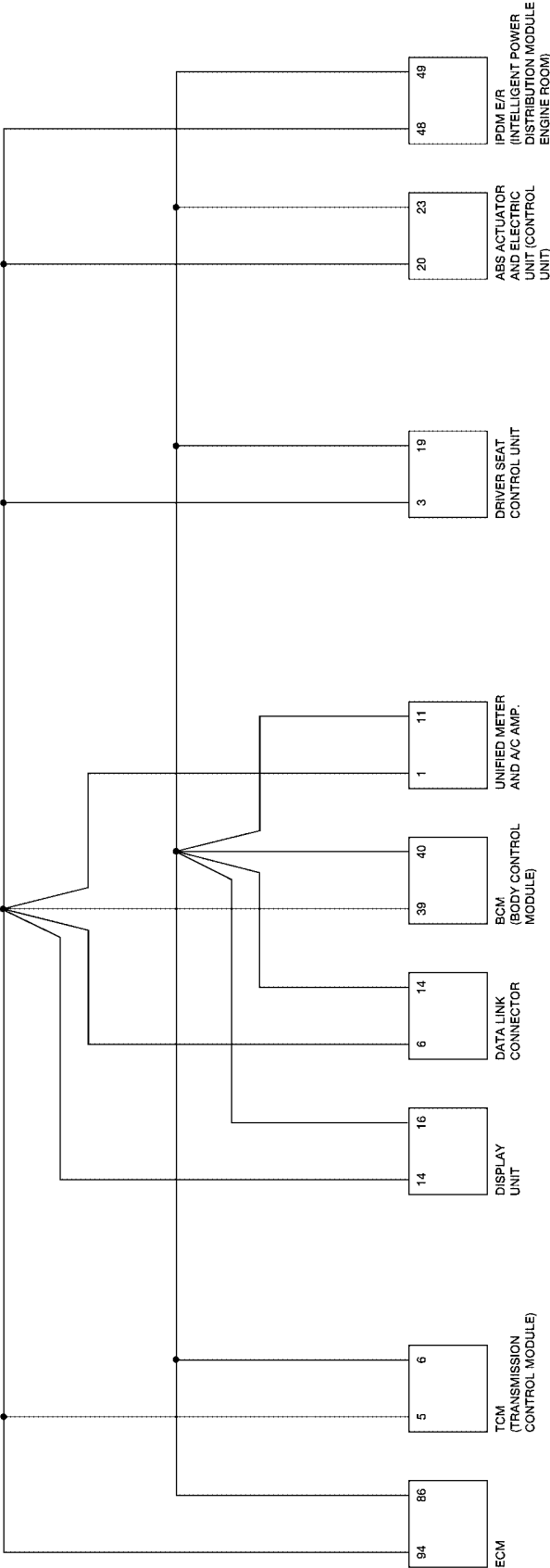
## Component Parts and Harness Connector Location



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

Schematic

EKS004Y2



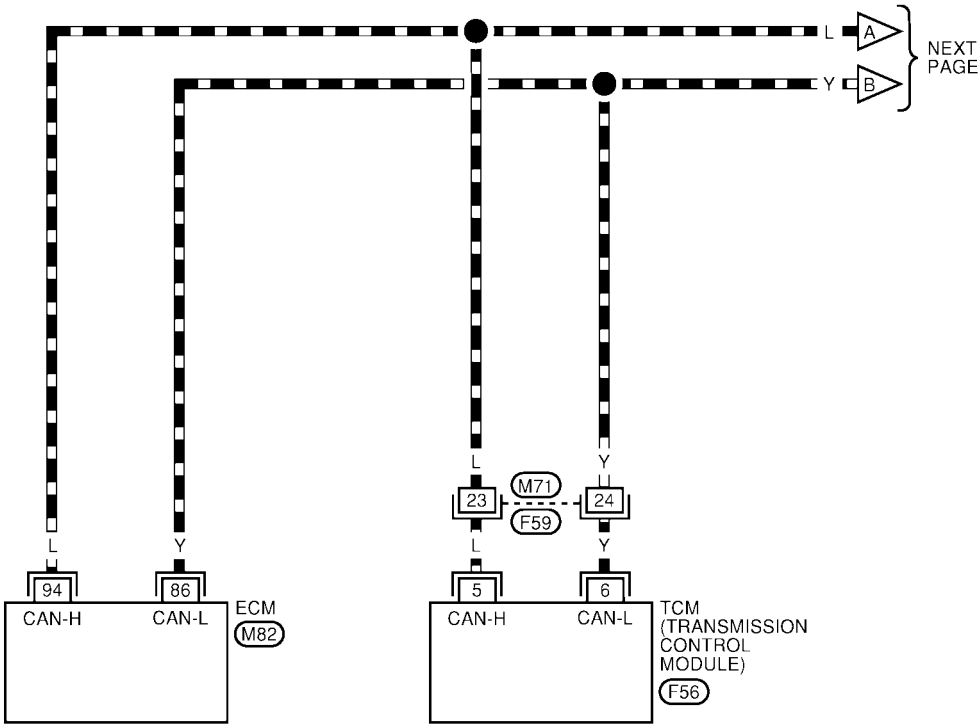
WKWA0437E

Wiring Diagram - CAN -

EKS004Y3

LAN-CAN-13

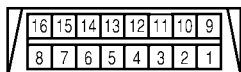
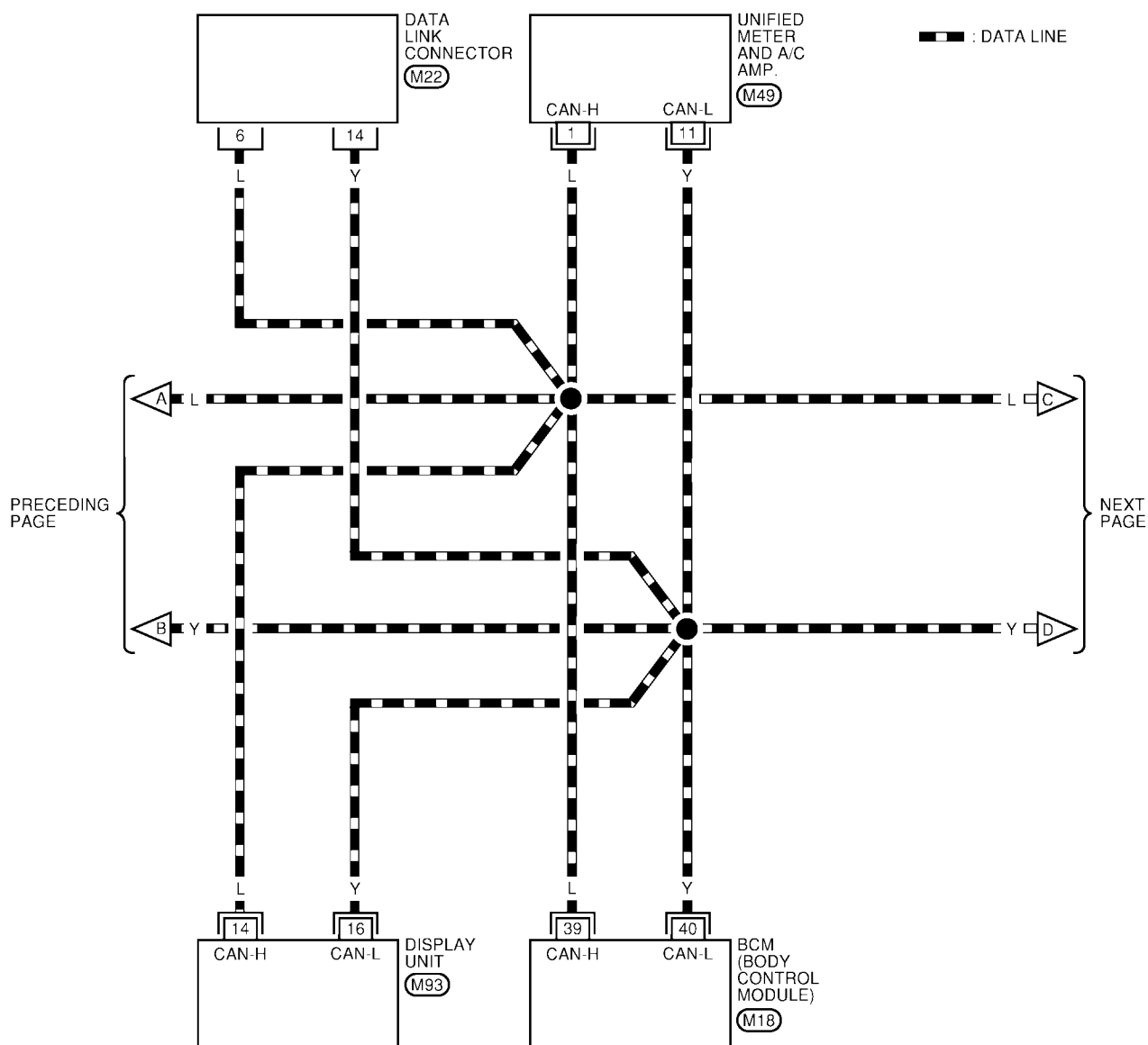
: DATA LINE



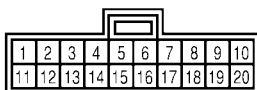
1	2	3	4	5	6			7	8	9	10	11	<div>F59</div> <div>W</div>
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
M82, F56 - ELECTRICAL  
UNITS

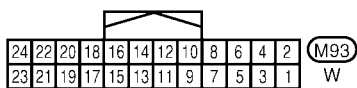
## LAN-CAN-14



(M22)  
W



(M49)  
GR



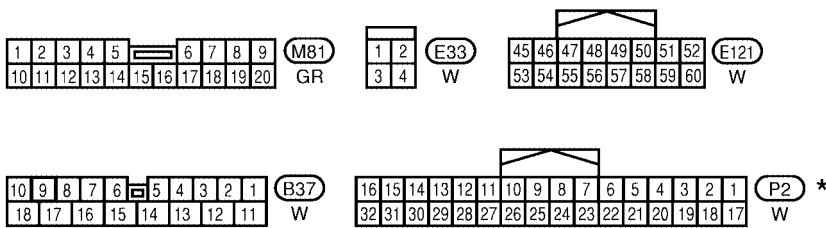
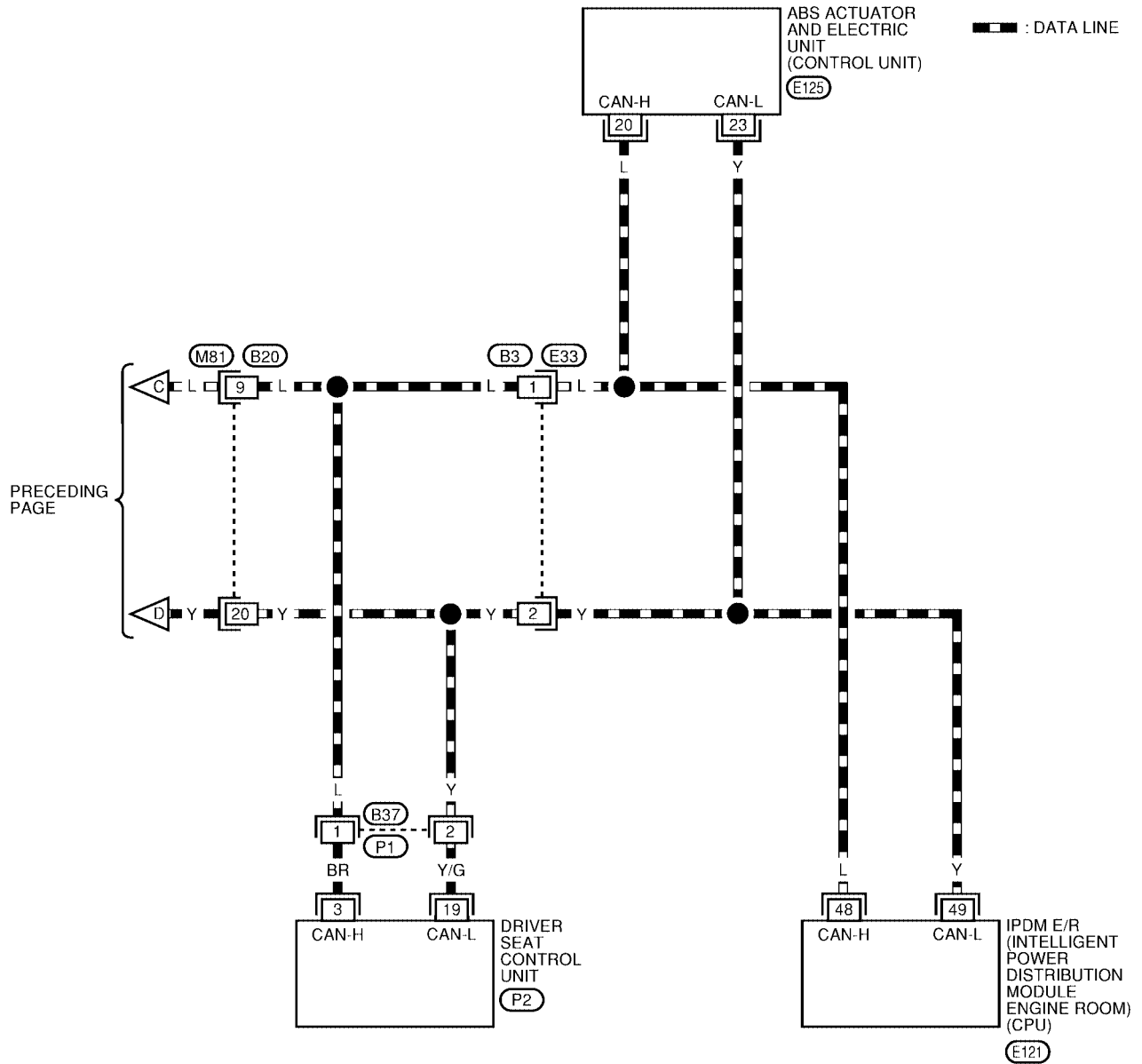
(M93)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS



## LAN-CAN-15



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

REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

WKWA0440E

## Work Flow

- When there are no indications of “TRANSMISSION”, “METER A/C AMP”, “BCM”, “IPDM E/R” or “AUTO DRIVE POS.” on “SELECT SYSTEM” display of CONSULT-II, print the “SELECT SYSTEM”.

(Example)

NISSAN				SELECT SYSTEM	
CONSULT-II				ENGINE	
ENGINE				A/T	
START (NISSAN BASED VHCL)				ABS	
START (RENAULT BASED VHCL)				AIR BAG	
SUB MODE				BCM	
				METER A/C AMP	
LIGHT COPY				BACK LIGHT COPY	

PKIA2093E

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

(Example)

SELECT DIAG MODE		SELF-DIAG RESULTS	
WORK SUPPORT		DTC RESULTS TIME	
SELF-DIAG RESULTS		CAN COMM CIRCUIT [U1000] 0	
DATA MONITOR			
DATA MONITOR (SPEC)			
ACTIVE TEST			
FUNCTION TEST			
Scroll Down		F.F.DATA	
BACK LIGHT COPY		ERASE PRINT	
		MODE BACK LIGHT COPY	

PKIA2094E

- Print all the data of “DATA MONITOR (CAN DIAG SUPPORT MNTR)” for “ENGINE”, “TRANSMISSION”, “BCM”, “METER A/C AMP”, “AUTO DRIVE POS.”, “IPDM E/R” and “ABS” displayed on CONSULT-II.

(Example)

SELECT DIAG MODE		DATA MONITOR		DATA MONITOR	
WORK SUPPORT		SELECT MONITOR ITEM		MONITOR NO DTC	
SELF-DIAG RESULTS		ECM INPUT SIGNALS		CAN COMM OK	
DATA MONITOR		MAIN SIGNALS		CAN CIRC 1 OK	
DATA MONITOR (SPEC)		CAN DIAG SUPPORT MNTR		CAN CIRC 2 OK	
ACTIVE TEST		SELECTION FROM MENU		CAN CIRC 3 OK	
FUNCTION TEST				CAN CIRC 4 OK	
Scroll Down				CAN CIRC 5 UNKWN	
BACK LIGHT COPY		SETTING Numerical Display		CAN CIRC 6 OK	
		MODE BACK LIGHT COPY		CAN CIRC 7 OK	
				RECORD	
				MODE BACK LIGHT COPY	

PKIA2095E

- Based on the indications of “SELECT SYSTEM” and the results of “DATA MONITOR (CAN DIAG SUPPORT MNTR)”, put marks onto the items with “No indication”, “NG”, or “UNKWN” in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 3	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0441E

## NOTE:

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

# CAN SYSTEM (TYPE 5)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

5. 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.

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

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	<del>CAN COMM</del>	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0724E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 2</del>	-	<del>CAN CIRC 4</del>	<del>CAN CIRC 6</del>	-	-	<del>CAN CIRC 7</del>
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0725E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx							IPDM F/R
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0726E

	CONSULT Indication	CAN System	Tx	Rx							IPDM F/R
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0727E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx							IPDM F/R
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0728E

	CONSULT Indication	CAN System	Tx	Rx							IPDM F/R
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0729E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx							
				E-CM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓ CAN CIRC 2	-	-	✓ CAN CIRC 4	-	-	-	✓ CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0730E

	CONSULT Indication	CAN System	Tx	Rx							
				E-CM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0731E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx							
				E-CM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓ CAN CIRC 2	✓ CAN CIRC 3	✓ CAN CIRC 7	-	✓ CAN CIRC 4	-	✓ CAN CIRC 5	✓ CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0732E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0733E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0734E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0735E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0736E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0737E

## Case 9

Check harness between TCM and data link connector. Refer to LAN-111.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0738E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to LAN-111.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0739E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to LAN-112.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0740E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-112](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1 ✓	-	CAN CIRC 2 ✓	-	CAN CIRC 4 ✓	CAN CIRC 6 ✓	-	-	CAN CIRC 7 ✓
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2 ✓	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2 ✓	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3 ✓	-	-	-	CAN CIRC 2	-	-	-

WKIA0741E

## Case 13

Check TCM circuit. Refer to [LAN-113](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2 ✓	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1 ✓	CAN CIRC 2 ✓	-	-	CAN CIRC 4 ✓	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3 ✓	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4 ✓	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0742E

## Case 14

Check display unit circuit. Refer to [LAN-113](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1 ✓	CAN CIRC 3 ✓	-	-	CAN CIRC 5 ✓	CAN CIRC 2 ✓	-	-	CAN CIRC 7 ✓
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7 ✓	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0743E

## Case 15

Check data link connector circuit. Refer to [LAN-114](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp ✓	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp ✓	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp ✓	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp ✓	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0744E



**Case 16**Check BCM circuit. Refer to [LAN-114](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0745E

**Case 17**Check unified meter and A/C amp. circuit. Refer to [LAN-115](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0746E

**Case 18**Check driver seat control unit circuit. Refer to [LAN-115](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp ✓	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0747E

**Case 19**Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-116](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	<del>CAN CIRC 1</del>	<del>CAN CIRC 2</del>	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0748E

# CAN SYSTEM (TYPE 5)

[CAN]

## Case 20

Check IPDM E/R circuit. Refer to [LAN-116](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0749E

## Case 21

Check CAN communication circuit. Refer to [LAN-117](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 6	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0750E

## Case 22

Check IPDM E/R Ignition relay circuit. Refer to [LAN-118](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0751E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0752E

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

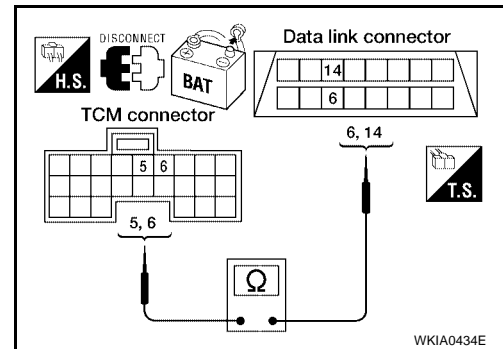
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-102, "Work Flow"](#).  
NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

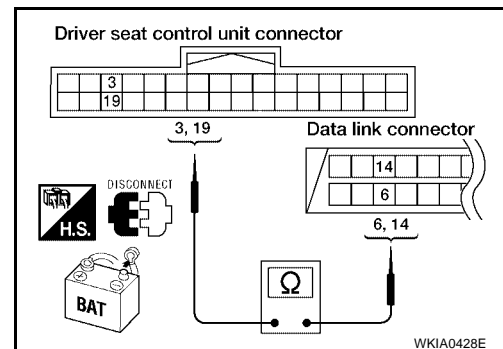
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-102](#).  
NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

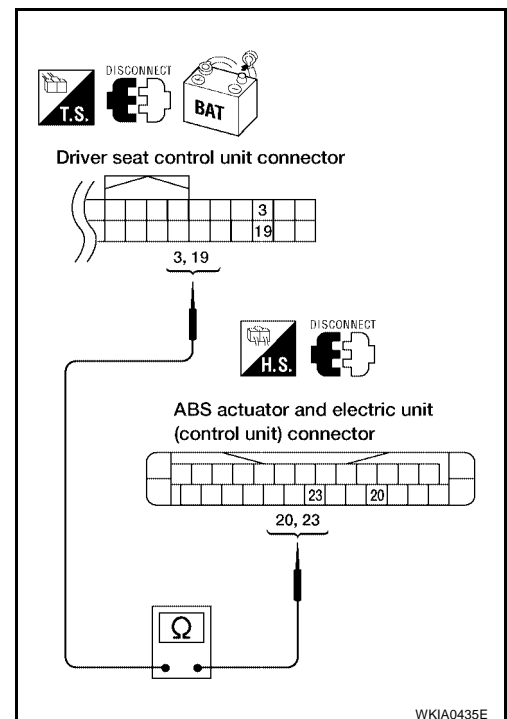
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

- 3 (BR) - 20 (L) : Continuity should exist.**  
**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-102](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

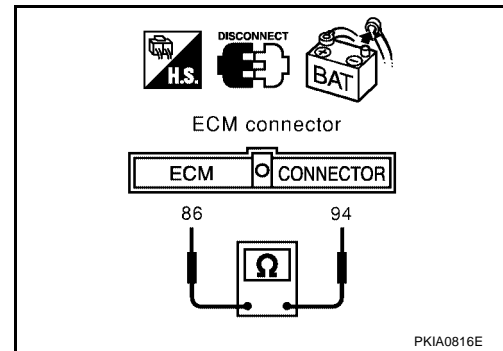
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS004Y9

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

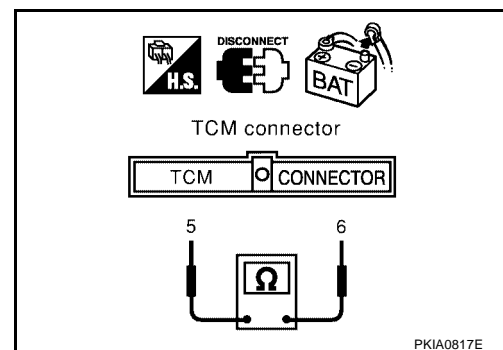
Check resistance between TCM connector F56 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS004YA

## 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 25 (L) and terminal 26 (Y).

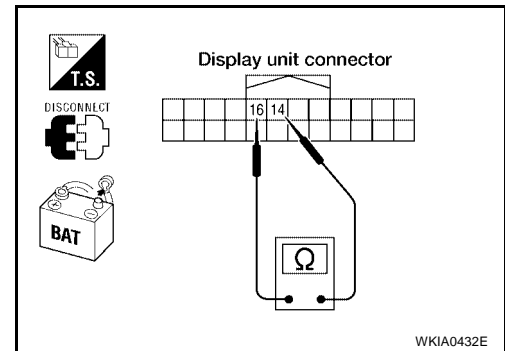
14 (L) - 16 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Replace display unit.

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



EKS004YB

## 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).

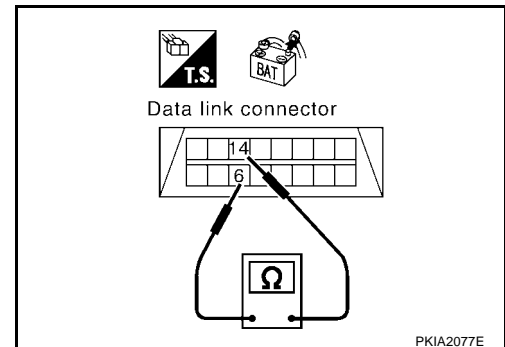
6 (L) - 14 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-102](#).

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



EKS004YC

## 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

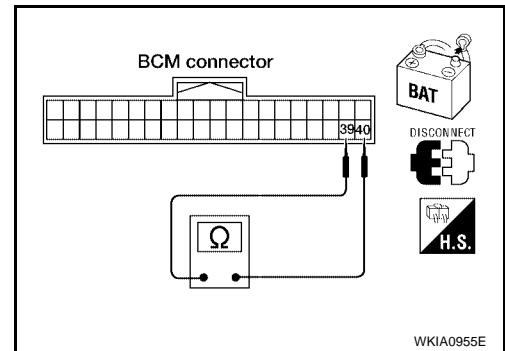
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS004YD

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

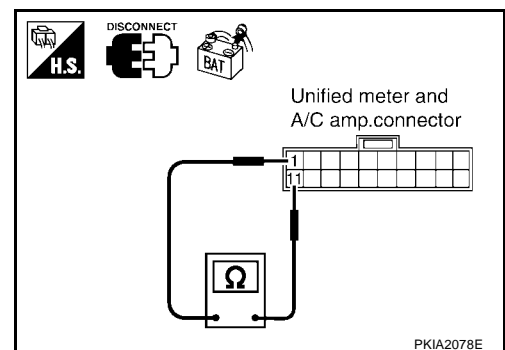
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS004YE

## 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.

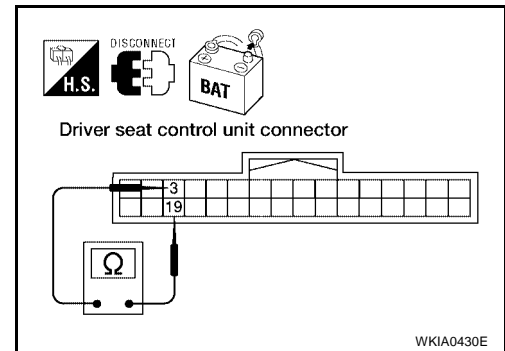
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS004YF

### 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.

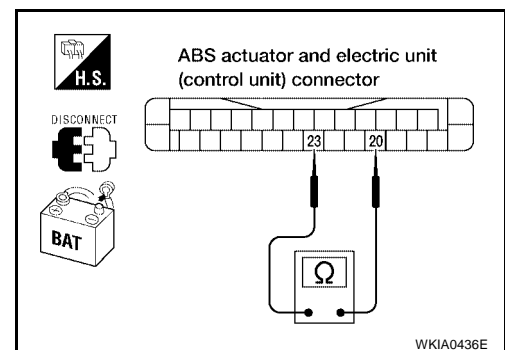
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



## IPDM E/R Circuit Check

EKS004YG

### 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

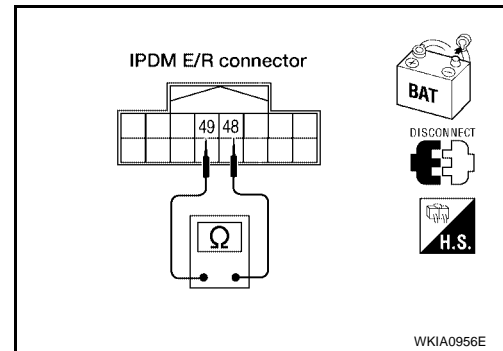
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS004YH

## 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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

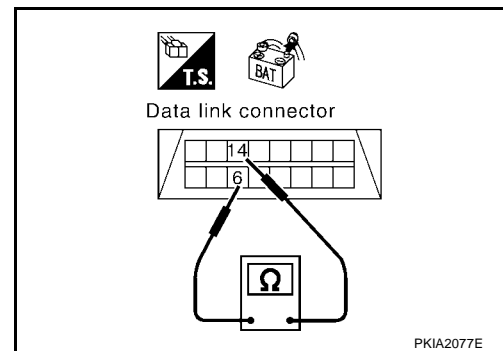
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

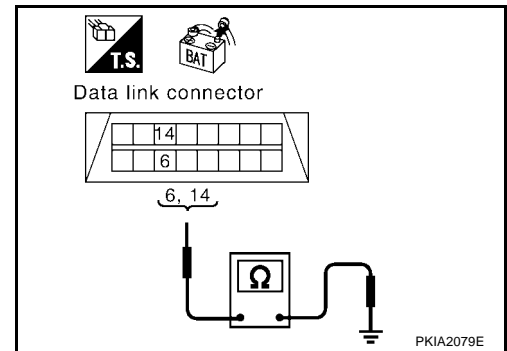
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-118, "Component Inspection"](#).

NG >> Repair the harness.



EKS004YI

### IPDM E/R Ignition Relay Circuit Check

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

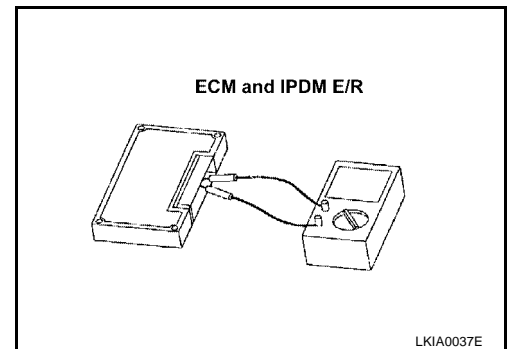
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS004YJ

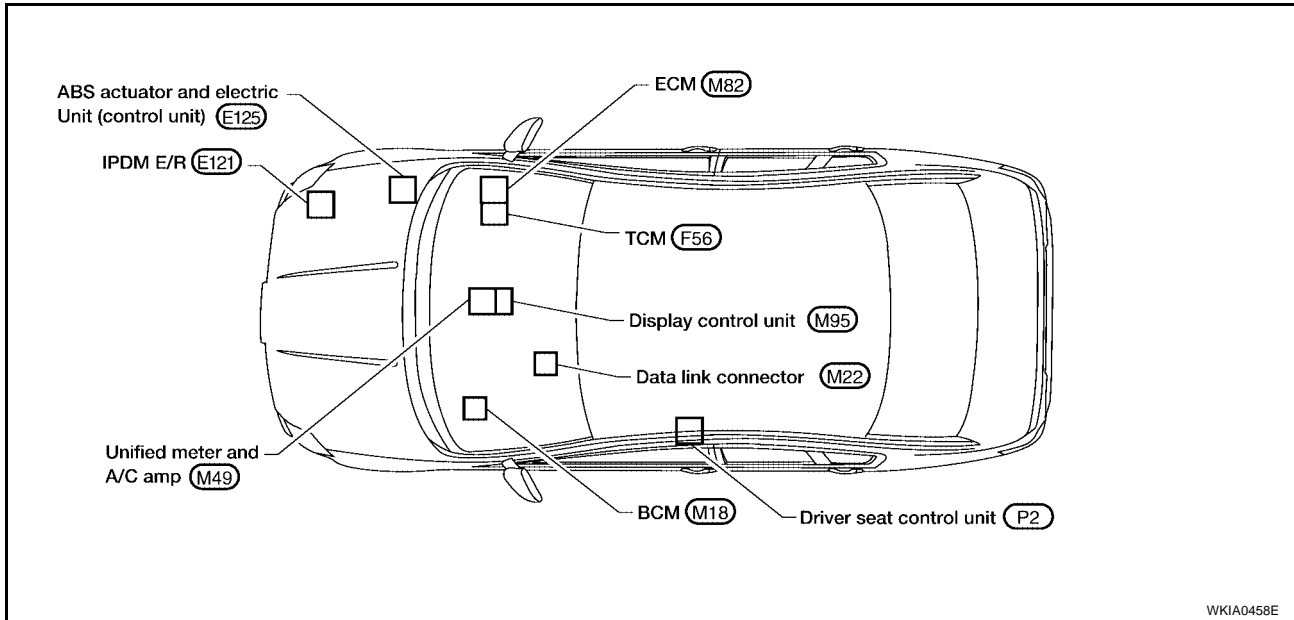


## CAN SYSTEM (TYPE 6)

## System Description

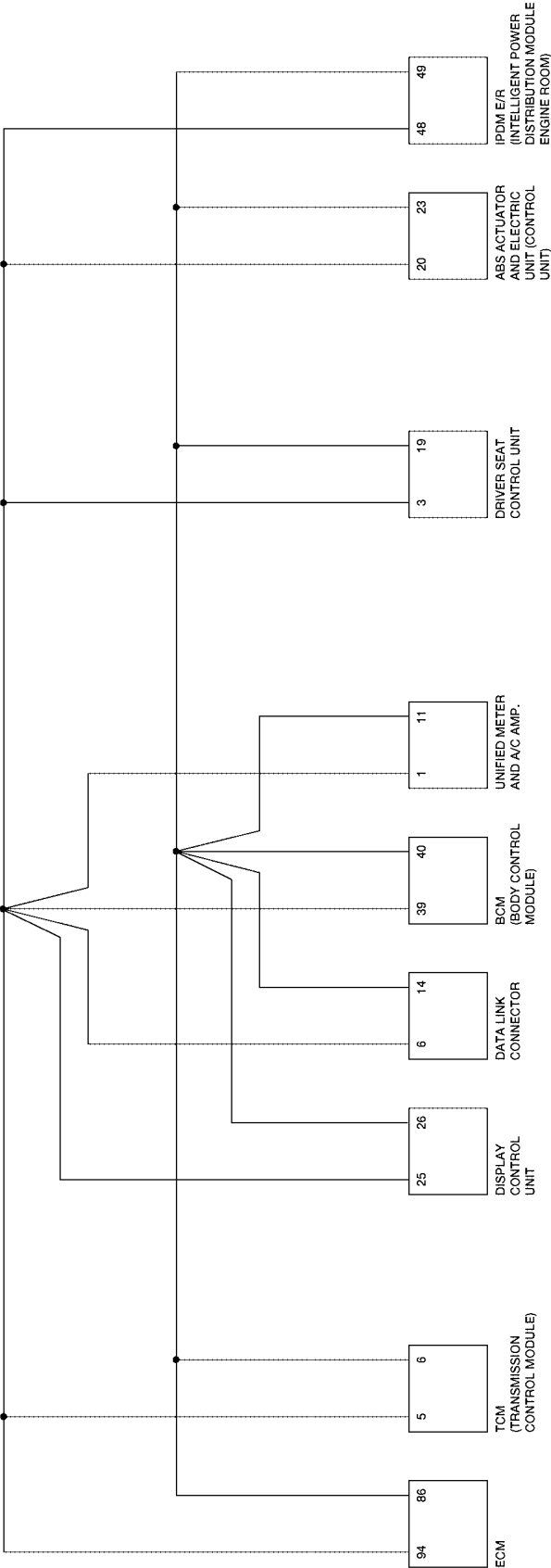
CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information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

## Component Parts and Harness Connector Location



Schematic

EKS004XH



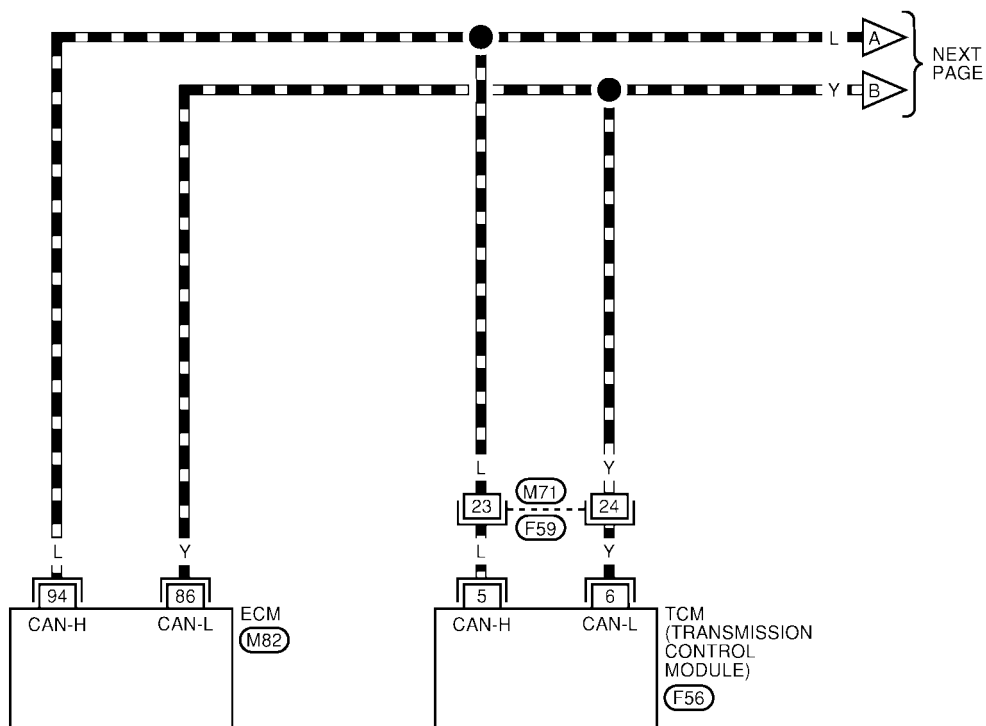
WKWA0433E

## Wiring Diagram - CAN -

EKS004XI

LAN-CAN-16

 : DATA LINE

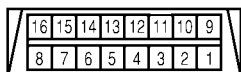
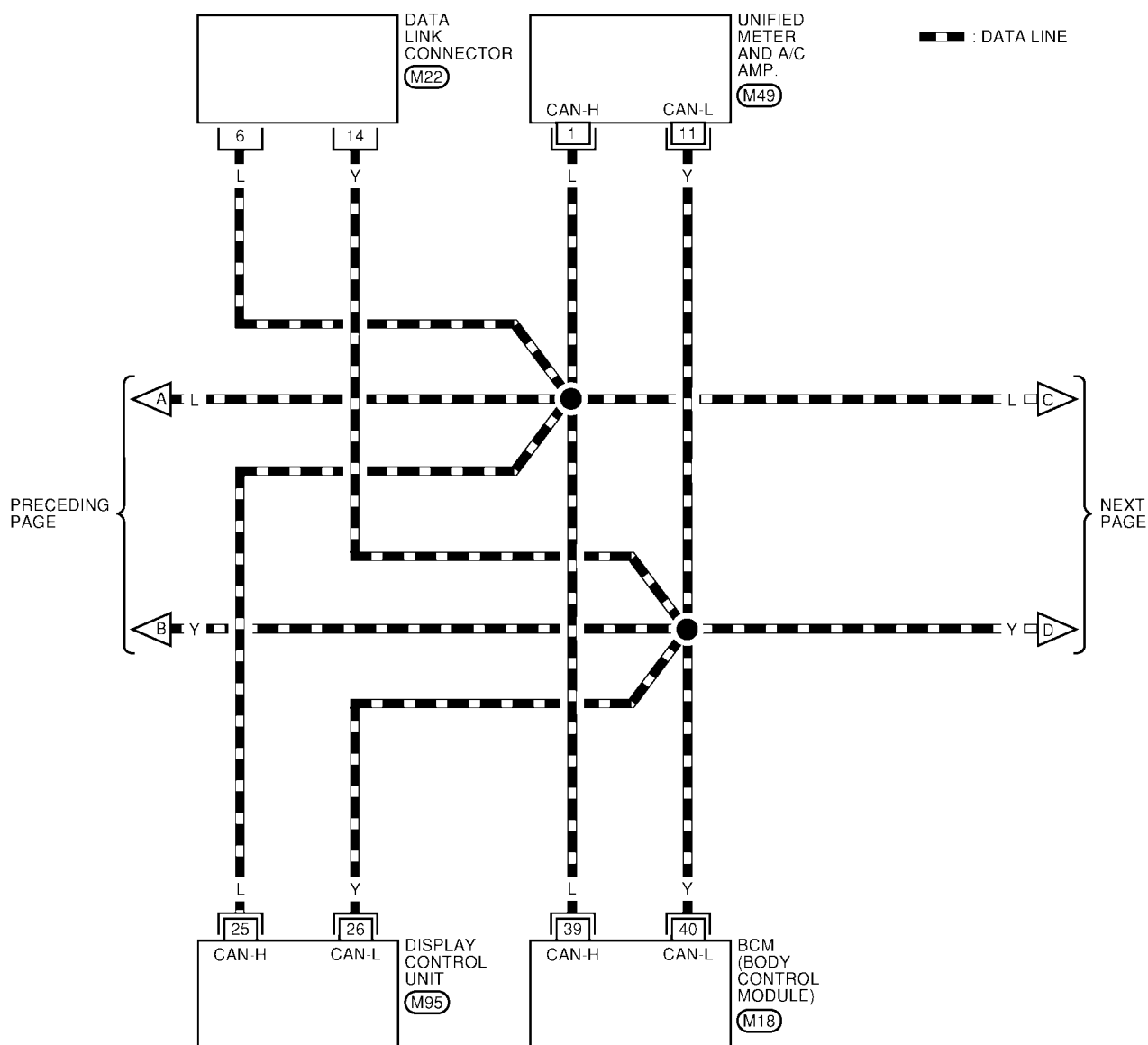
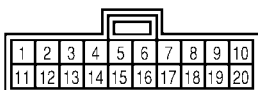
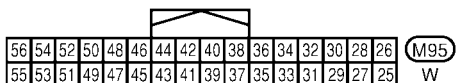


LAN

1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS

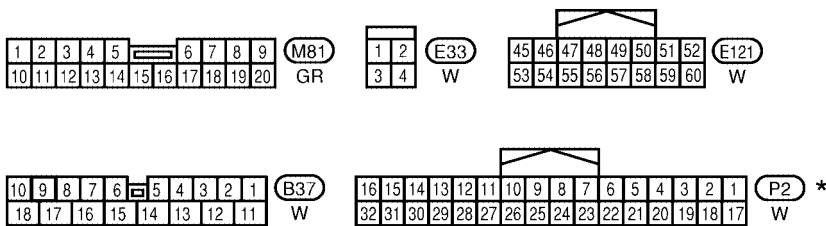
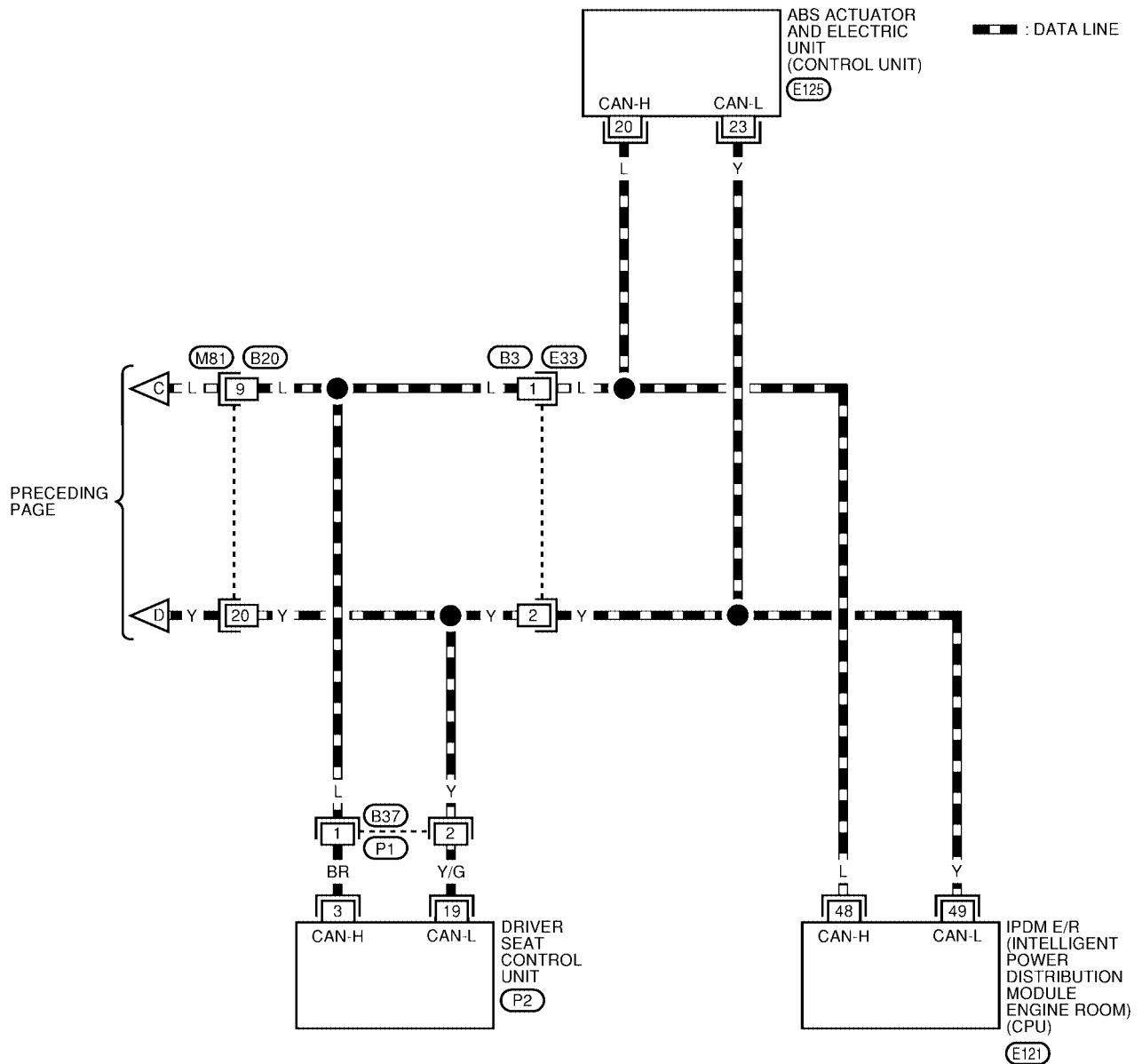
## LAN-CAN-17

M22  
WM49  
GRM95  
W

REFER TO THE FOLLOWING.

M18 - ELECTRICAL UNITS

## LAN-CAN-18



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

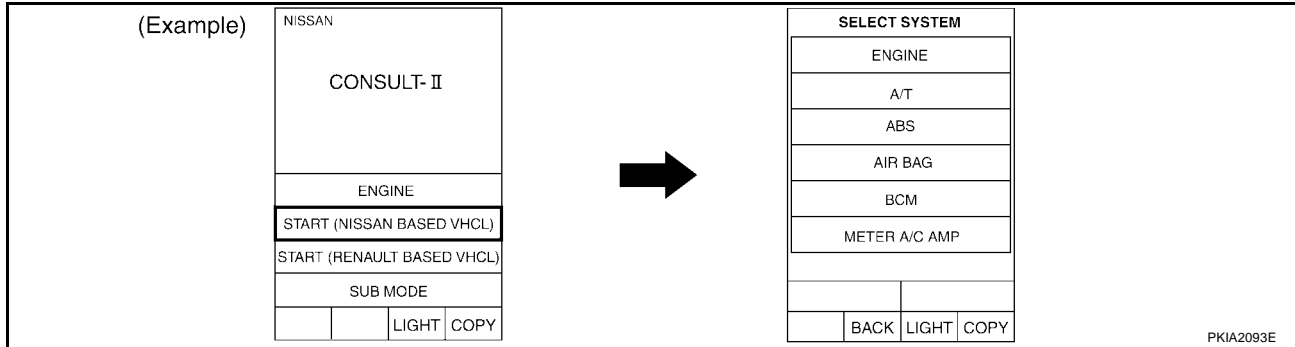
REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

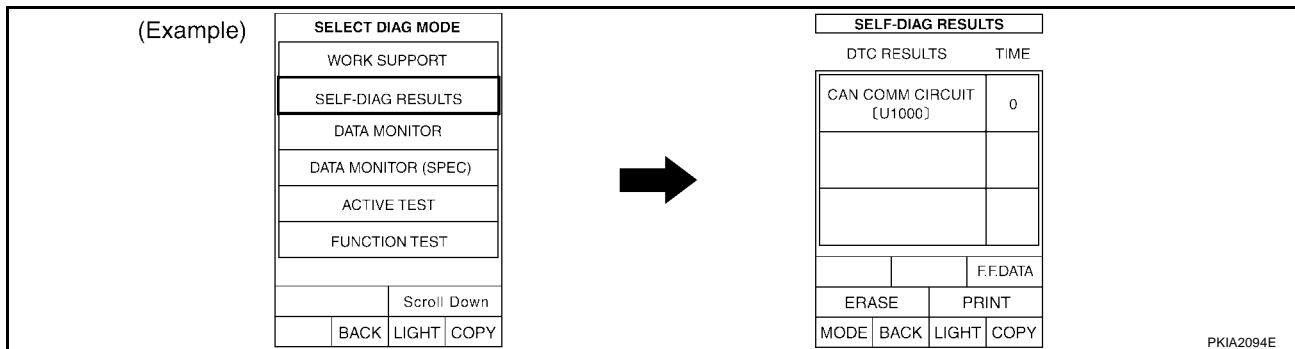
WKWA0436E

## Work Flow

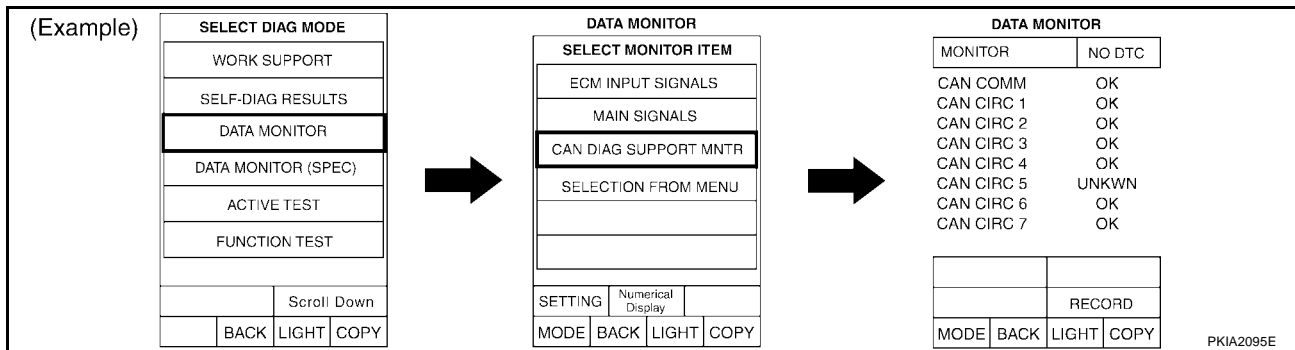
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0442E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.



# CAN SYSTEM (TYPE 6)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- Check CAN communication line of the navigation system.
- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0753E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0754E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0755E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R.
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6	-		CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-		
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2	-		CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2					-		
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2	-		

WKIA0756E

## Case 3

Replace display control unit.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0757E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0758E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0759E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0760E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0761E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0762E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0763E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0764E

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0765E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6	-		CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2		-	CAN CIRC 4	-	-		
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3		-	CAN CIRC 5	CAN CIRC 2	-		CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3
AUTO DRIVE- POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2	-	-	
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2					-	-	
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2	-	-	

WKIA0766E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-133](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE- POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0767E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-133](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE- POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0768E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-134](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE- POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0769E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-134](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0770E

## Case 13

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

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0771E

## Case 14

Check display control unit circuit. Refer to [LAN-135](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0772E

## Case 15

Check data link connector circuit. Refer to [LAN-136](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0773E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-136](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0774E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-137](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0775E

## Case 18

Check driver seat control unit circuit. Refer to [LAN-137](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE- POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0776E

## Case 19

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-138](#).

	CONSULT Indication	CAN System	Ix	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2		-	CAN CIRC 4		-	-	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4			-	CAN CIRC 3
AUTO DRIVE-POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0777E

# CAN SYSTEM (TYPE 6)

[CAN]

## Case 20

Check IPDM E/R circuit. Refer to [LAN-138](#).

	CONSULT Indication	CAN System	Ix	Rx							IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	NA Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0778E

## Case 21

Check CAN communication circuit. Refer to [LAN-139](#).

	CONSULT Indication	CAN System	Ix	Rx							IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	NA Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	NA Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	NA Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	NA Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0779E

## Case 22

Check IPDM E/R Ignition relay circuit. Refer to [LAN-140](#).

	CONSULT Indication	CAN System	Ix	Rx							IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0780E

	CONSULT Indication	CAN System	Ix	Rx							IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4	CAN CIRC 6			CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7		CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2							
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3				CAN CIRC 2			

WKIA0781E



**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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector F56 terminals 5 (L), 6 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

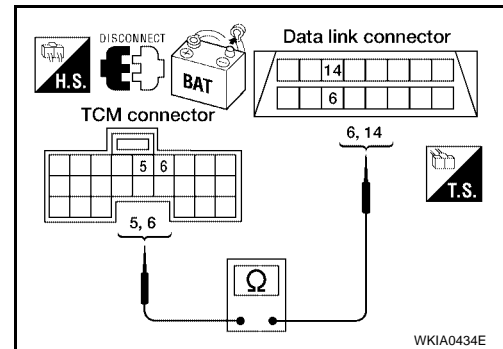
**5 (L) - 6 (L) : Continuity should exist.**

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

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-124, "Work Flow"](#).

NG >> Repair harness.

**Circuit Check Between Driver Seat Control Unit and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

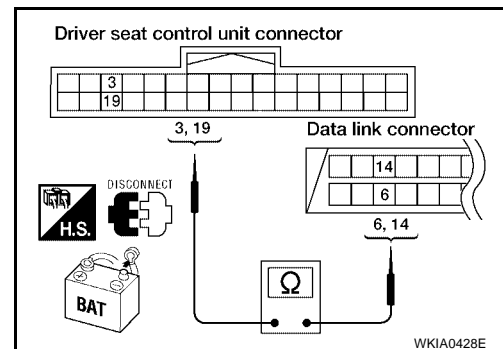
**3 (BR) - 6 (L) : Continuity should exist.**

**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-124](#).

NG >> Repair harness.



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

EKS004XM

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
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

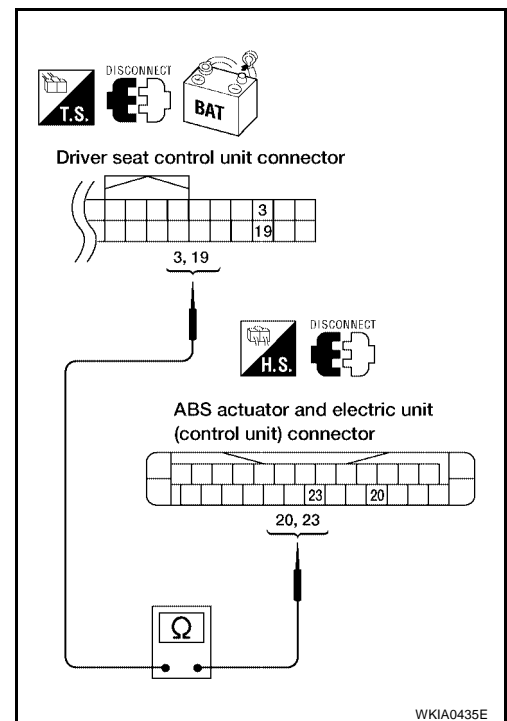
Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**3 (BR) - 20 (L) : Continuity should exist.**

**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-124](#).  
 NG >> Repair harness.



## ECM Circuit Check

EKS004XN

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

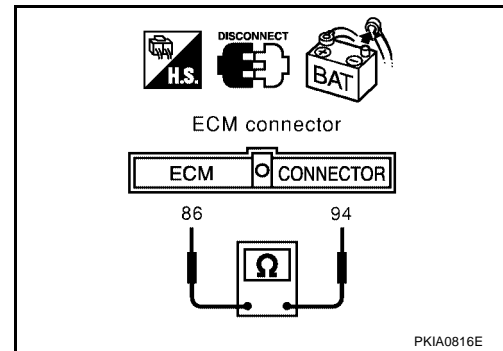
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS004XO

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

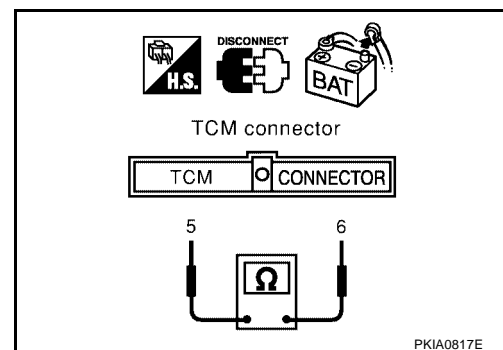
Check resistance between TCM connector F56 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS004XP

## 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

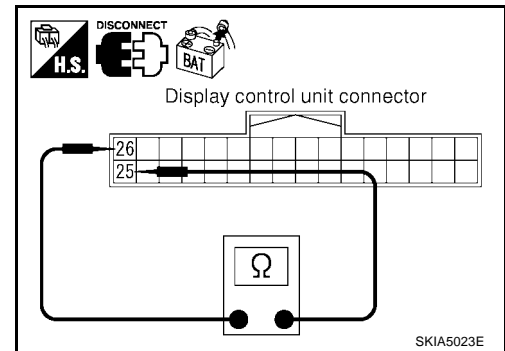
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS004XQ

## 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

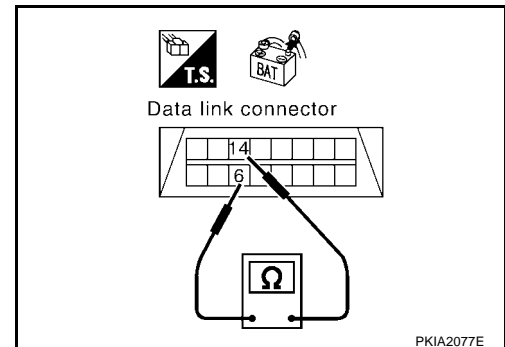
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-124](#).
- NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS004XR

## 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

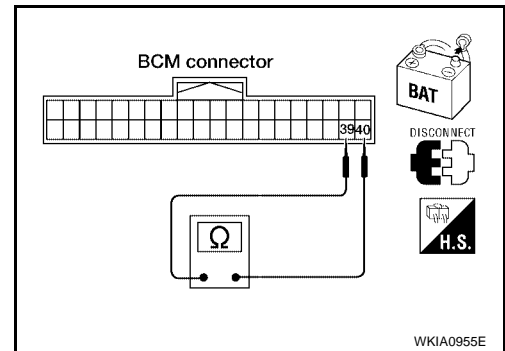
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS004XS

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

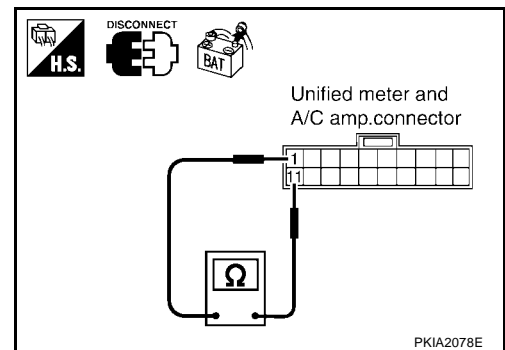
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS004XU

## 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.

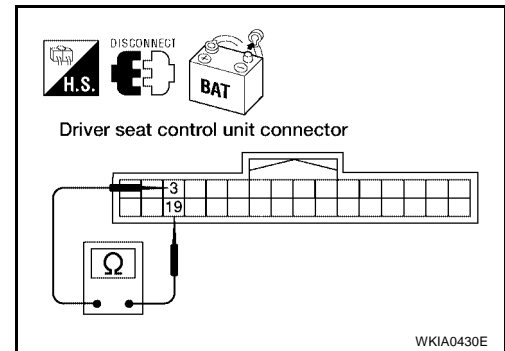
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS004XV

### 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.

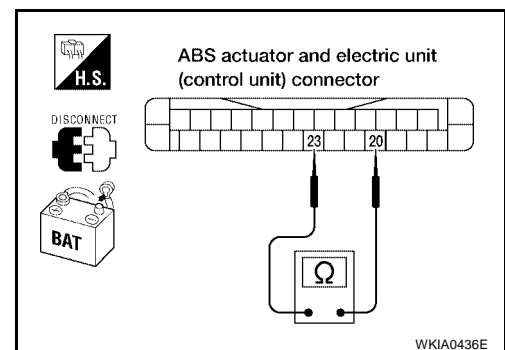
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



## IPDM E/R Circuit Check

EKS004XW

### 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

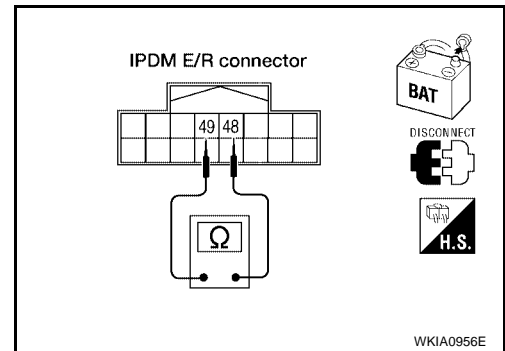
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS004XX

## 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)
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

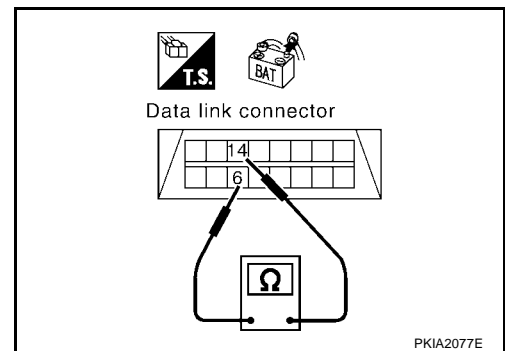
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

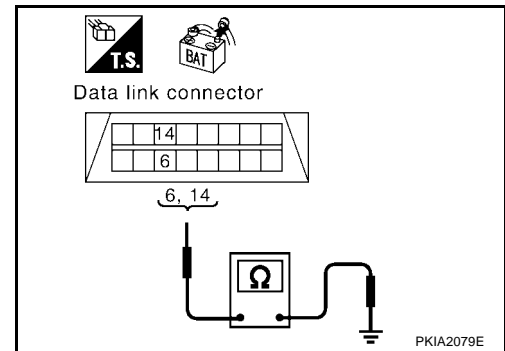
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-140, "Component Inspection"](#).

NG >> Repair the harness.



EKS004XY

### IPDM E/R Ignition Relay Circuit Check

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

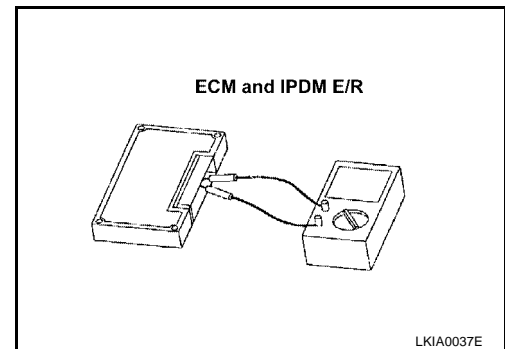
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS004XZ



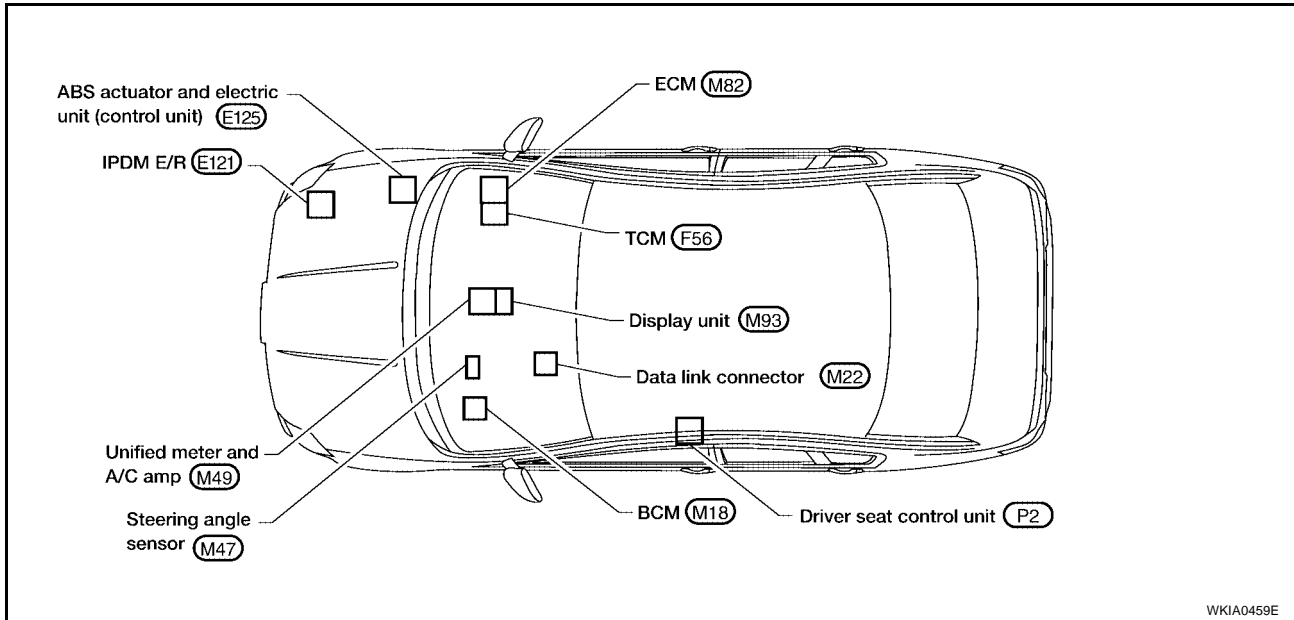


## CAN SYSTEM (TYPE 7)

## System Description

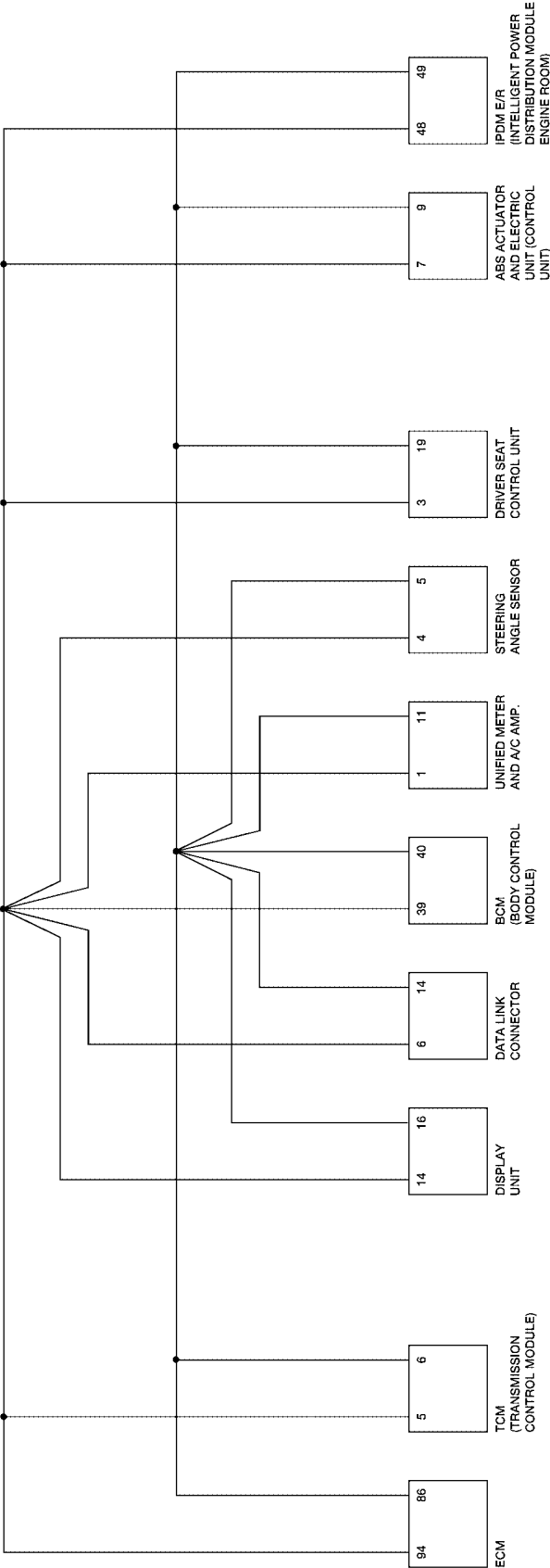
CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information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

## Component Parts and Harness Connector Location



Schematic

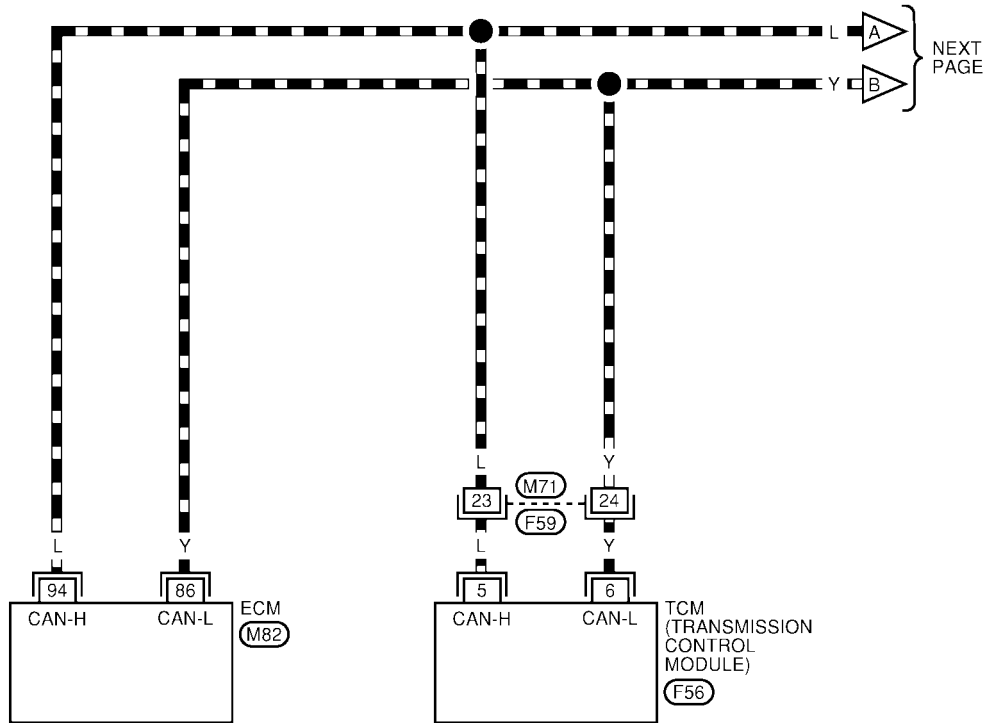
EKS004WW



## Wiring Diagram - CAN -

## LAN-CAN-19

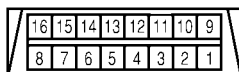
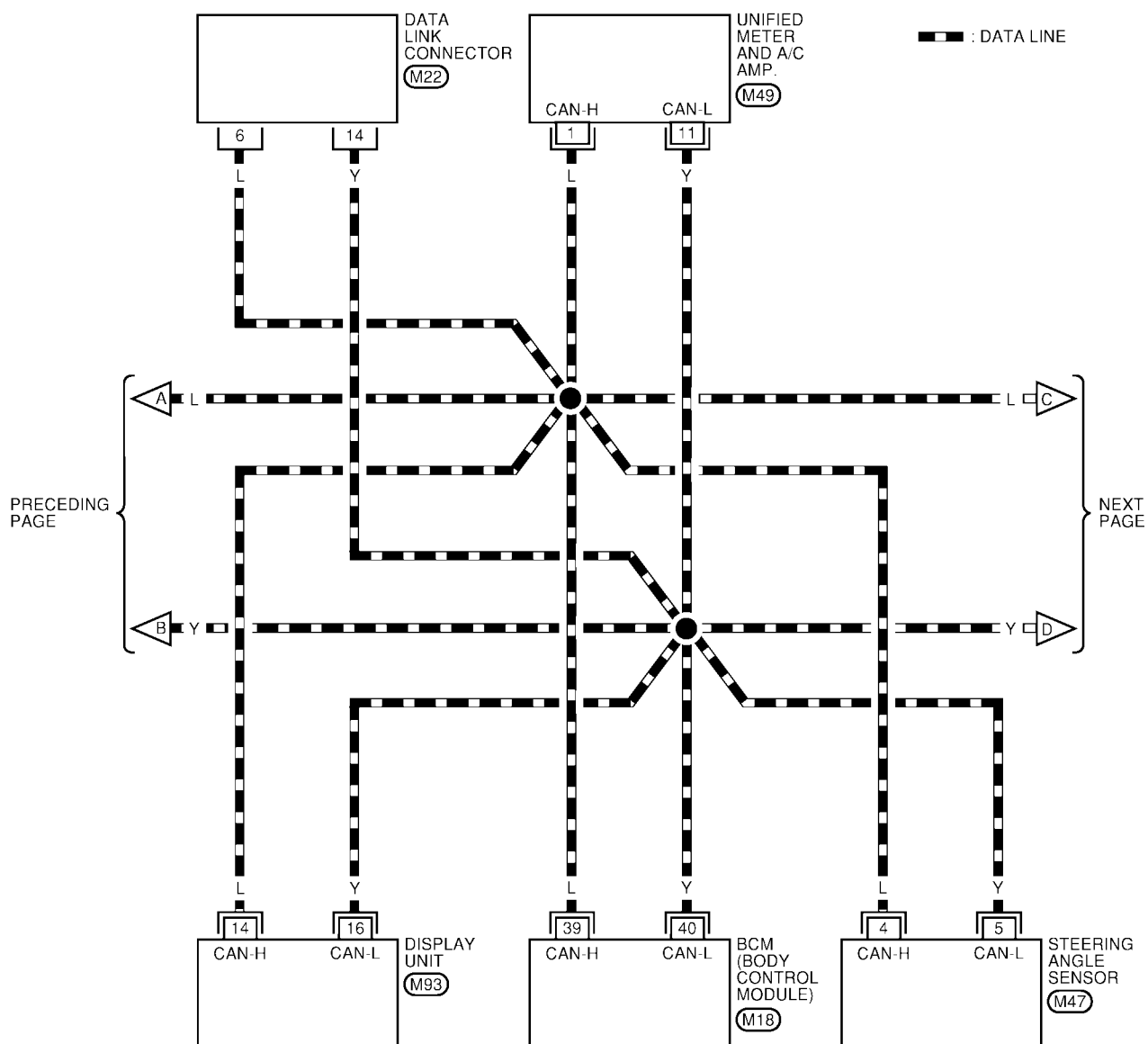
— : DATA LINE



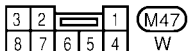
1	2	3	4	5	6			7	8	9	10	11	F59
12	13	14	15	16	17	18	19	20	21	22	23	24	W

REFER TO THE FOLLOWING.  
M82, F56 - ELECTRICAL  
UNITS

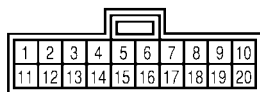
## LAN-CAN-20



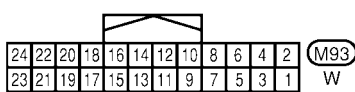
(M22)  
W



(M47)  
W



(M49)  
GR

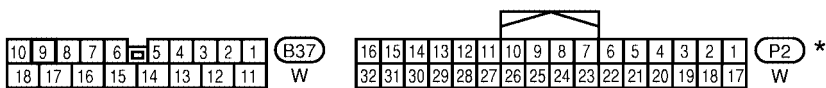
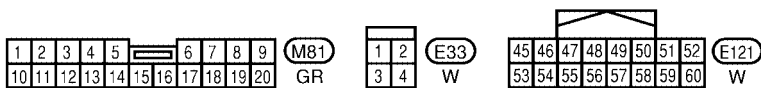
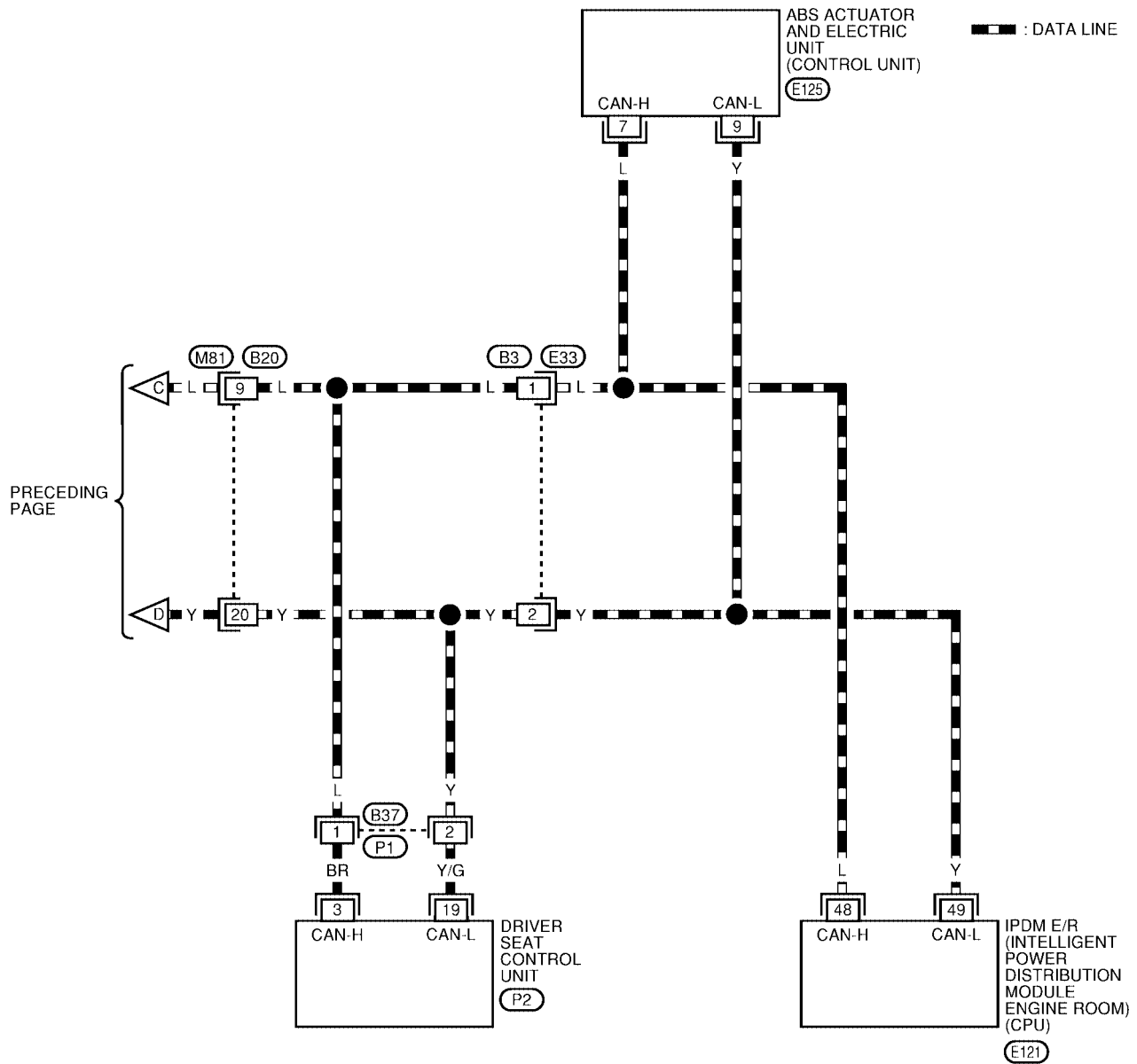


(M93)  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-21



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

REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

WKWA0432E

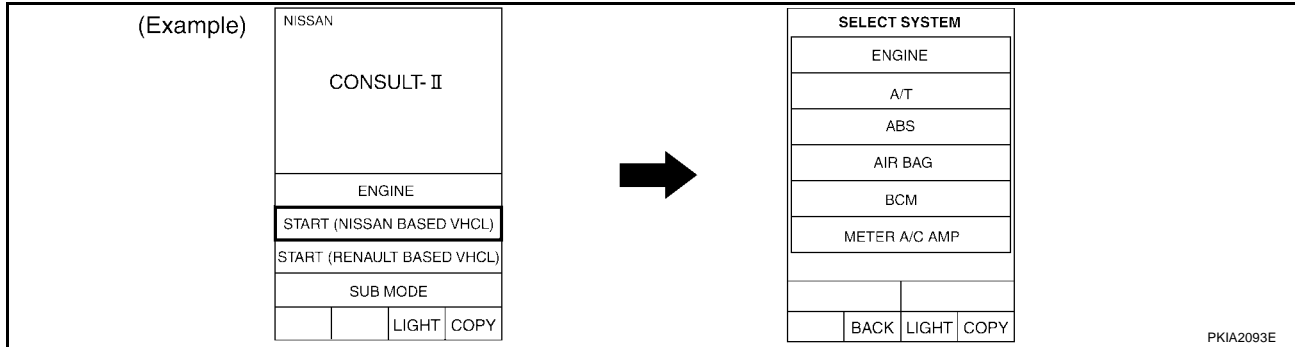
# CAN SYSTEM (TYPE 7)

[CAN]

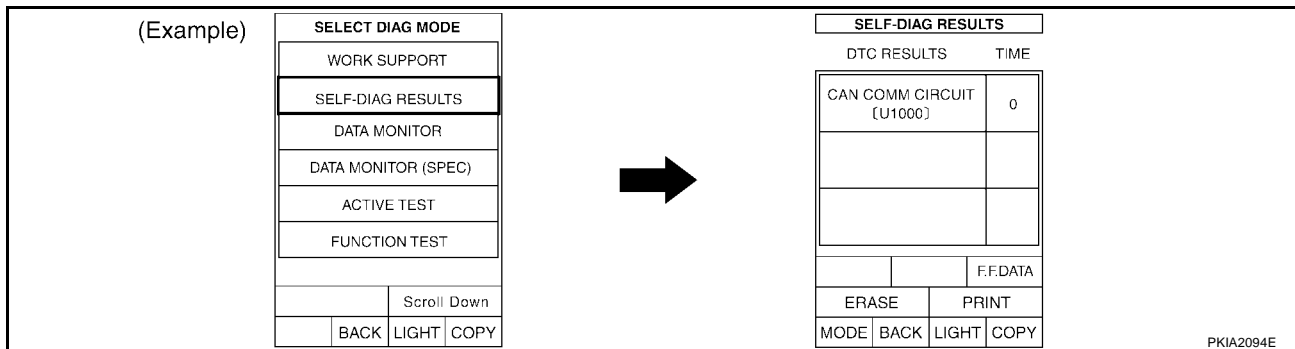
EKS004WY

## Work Flow

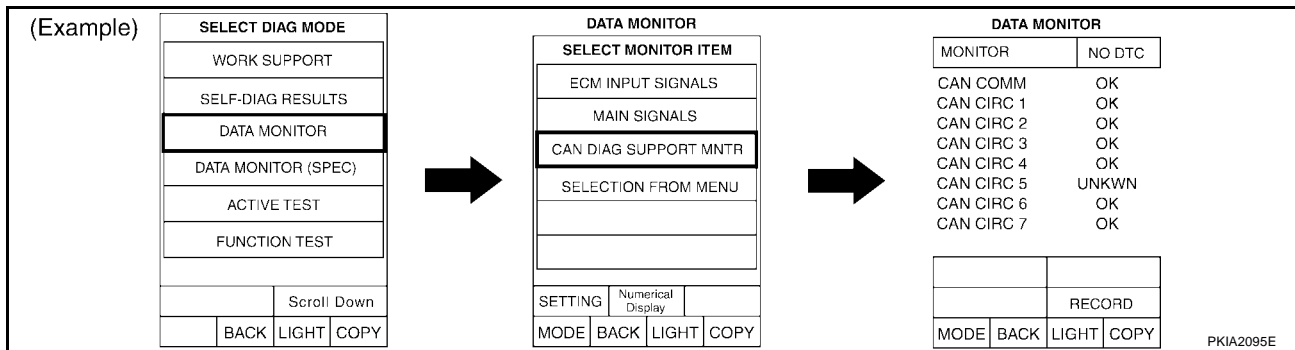
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified motor and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-

WKIA0443E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 7)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0782E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	<del>CAN COMM</del>	CAN CIRC 1	-	CAN CIRC 2	-	<del>CAN CIRC 4</del>	-	<del>CAN CIRC 6</del>	-	<del>CAN CIRC 3</del>	<del>CAN CIRC 7</del>
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 7	-	-	-

WKIA0783E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		<del>CAN CIRC 2</del>		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		<del>CAN CIRC 2</del>		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0784E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>			<del>CAN CIRC 4</del>		-	-	<del>CAN CIRC 3</del>	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0785E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	<del>CAN COMM</del>	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0786E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	<del>CAN CIRC 3</del>			<del>CAN CIRC 5</del>		<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0787E



# CAN SYSTEM (TYPE 7)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0788E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0789E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0790E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	<del>CAN COMM</del>	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0791E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		<del>CAN CIRC 4</del>		<del>CAN CIRC 3</del>		<del>CAN CIRC 2</del>	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0792E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	<del>CAN CIRC 3</del>	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	<del>CAN CIRC 3</del>	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0793E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	<del>CAN CIRC 3</del>			<del>CAN CIRC 5</del>	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0794E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	✓ CIRC 3					✓ CIRC 2			

WKIA0795E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-156](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP <sup>1</sup>	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0796E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-156](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CAN CIRC 7
METER A/C AMP <sup>1</sup>	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0797E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-157](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0798E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-157](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0799E

## Case 13

Check TCM circuit. Refer to [LAN-158](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0800E

## Case 14

Check display unit circuit. Refer to [LAN-158](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4			-	CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5		CAN CIRC 2	-		CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4			-		CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-		
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-		

WKIA0801E

## Case 15

Check data link connector circuit. Refer to [LAN-159](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0802E

**Case 16**Check BCM circuit. Refer to [LAN-159](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-


WKIA0803E

**Case 17**Check unified meter and A/C amp. circuit. Refer to [LAN-160](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2			CIRC 7
METER A/C AMP <sup>1</sup>	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0804E

**Case 18**Check steering angle sensor circuit. Refer to [LAN-160](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP <sup>1</sup>	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
PCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-		-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0805E

**Case 19**Check driver seat control unit circuit. Refer to [LAN-161](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP <sup>1</sup>	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0806E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 20

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-161](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0807E

## Case 21

Check IPDM E/R circuit. Refer to [LAN-162](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0808E

## Case 22

Check CAN communication circuit. Refer to [LAN-163](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5		CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0809E

# CAN SYSTEM (TYPE 7)

[CAN]

## Case 23

Check IPDM E/R Ignition relay circuit. Refer to [LAN-163](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0810E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified motor and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3			CIRC 5		CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4		-	-	-	CAN CIRC 3
AUTO DRIVE POS	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3					CAN CIRC 2	-	-	-

WKIA0811E

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

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

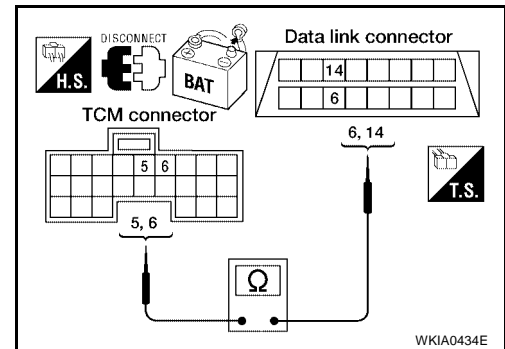
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-146, "Work Flow"](#).  
 NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

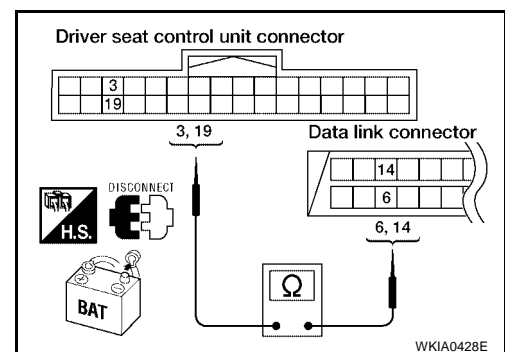
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-146](#).  
 NG >> Repair harness.





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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

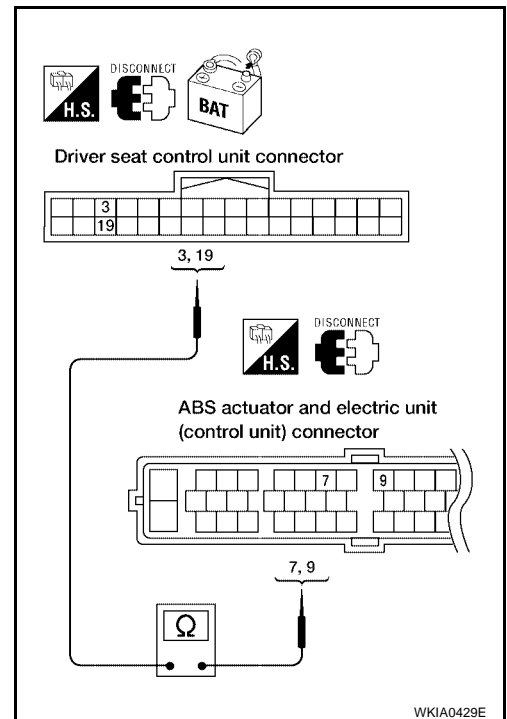
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 7 (L), 9 (Y).

- 3 (BR) - 7 (L) : Continuity should exist.**  
**19 (Y/G) - 9 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-146](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

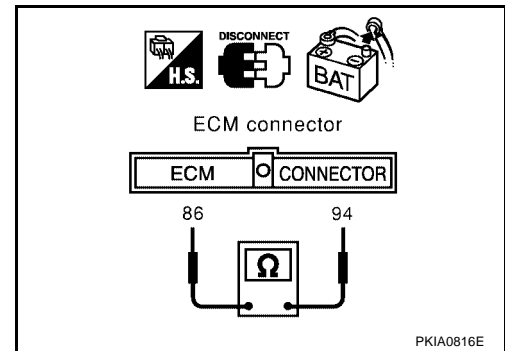
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS004X3

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

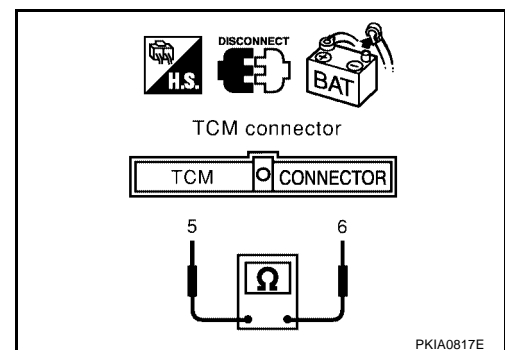
Check resistance between TCM connector F56 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS004X4

## 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

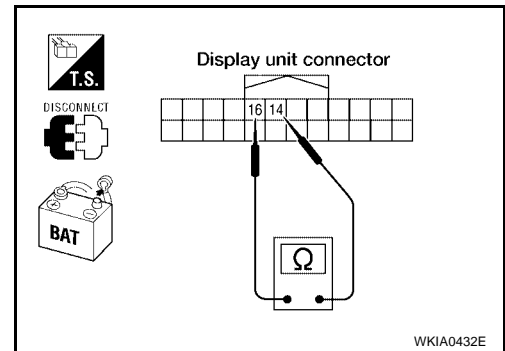
Check resistance between display unit connector M93 terminal 14 (L) and terminal 16 (Y).

**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

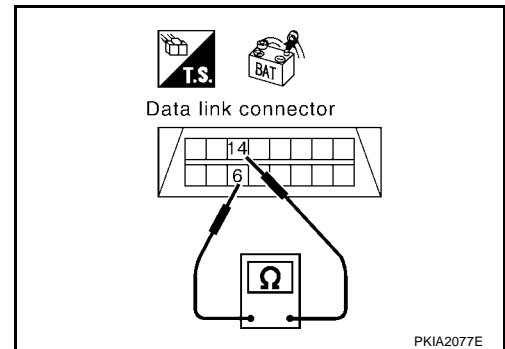
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-146](#).  
 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

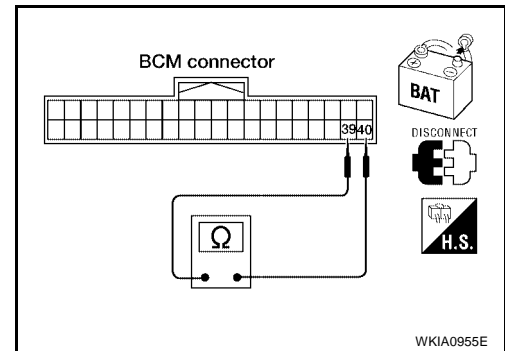
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS004X7

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

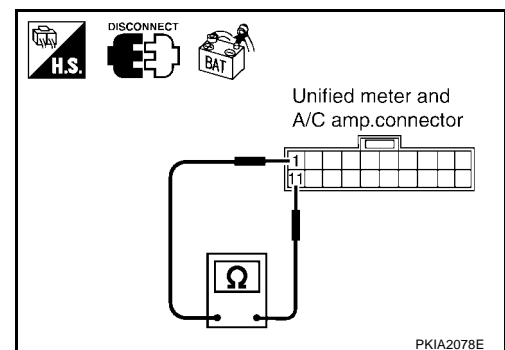
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS004X8

## 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

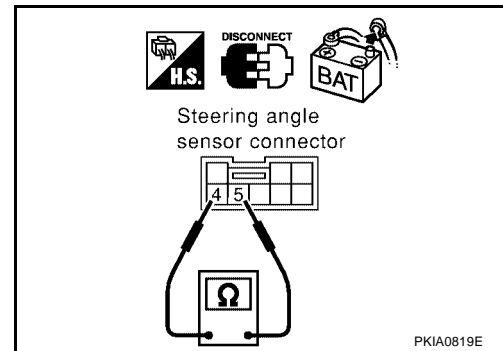
Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**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.



EKS004X9

## 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

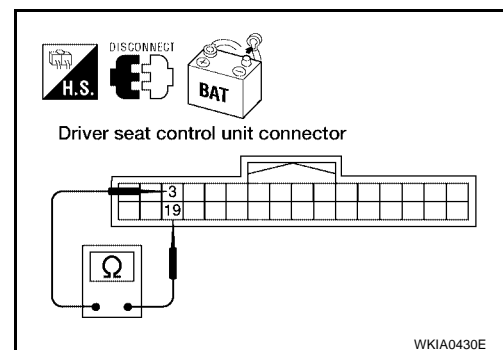
Check resistance between driver seat control unit connector P2 terminal 3 (BR) and terminal 19 (Y/G).

**3 (BR) - 19 (Y/G)**

**: 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.



EKS004XA

## 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

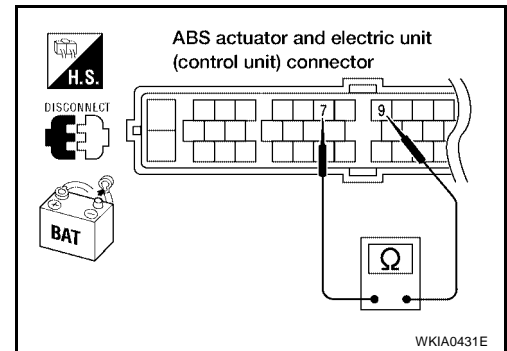
Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**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 IPDM E/R connector E121.



EKS004XB

## 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

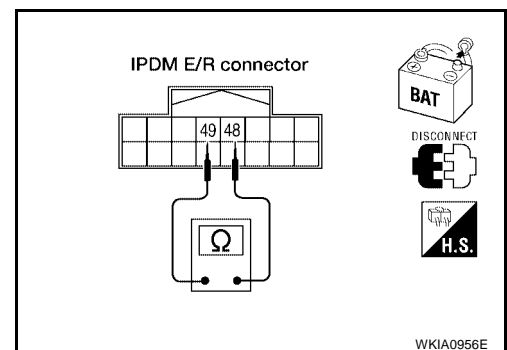
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



**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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Steering angle sensor
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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**

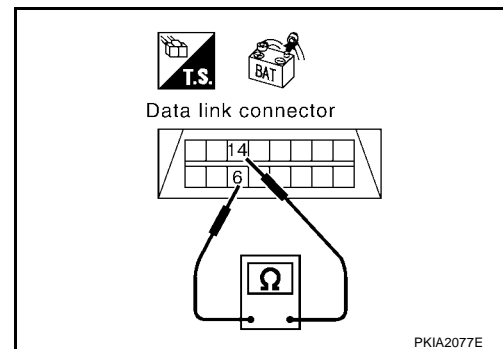
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

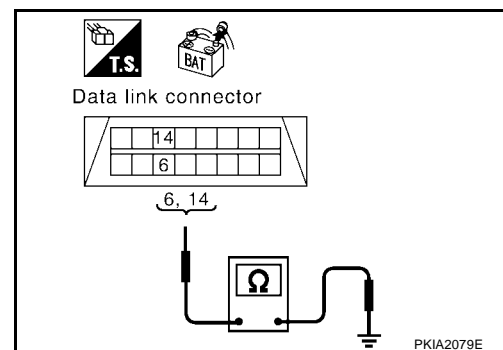
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-164, "Component Inspection"](#).

NG >> Repair the harness.

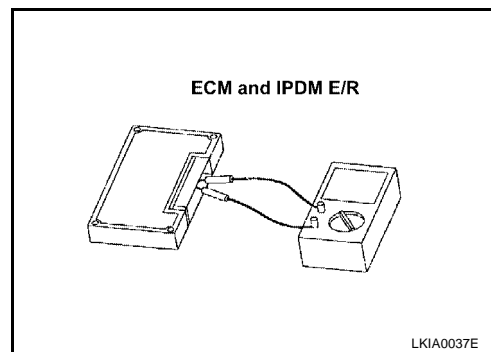
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

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

- Remove ECM and IPDM E/R from vehicle.
- 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**



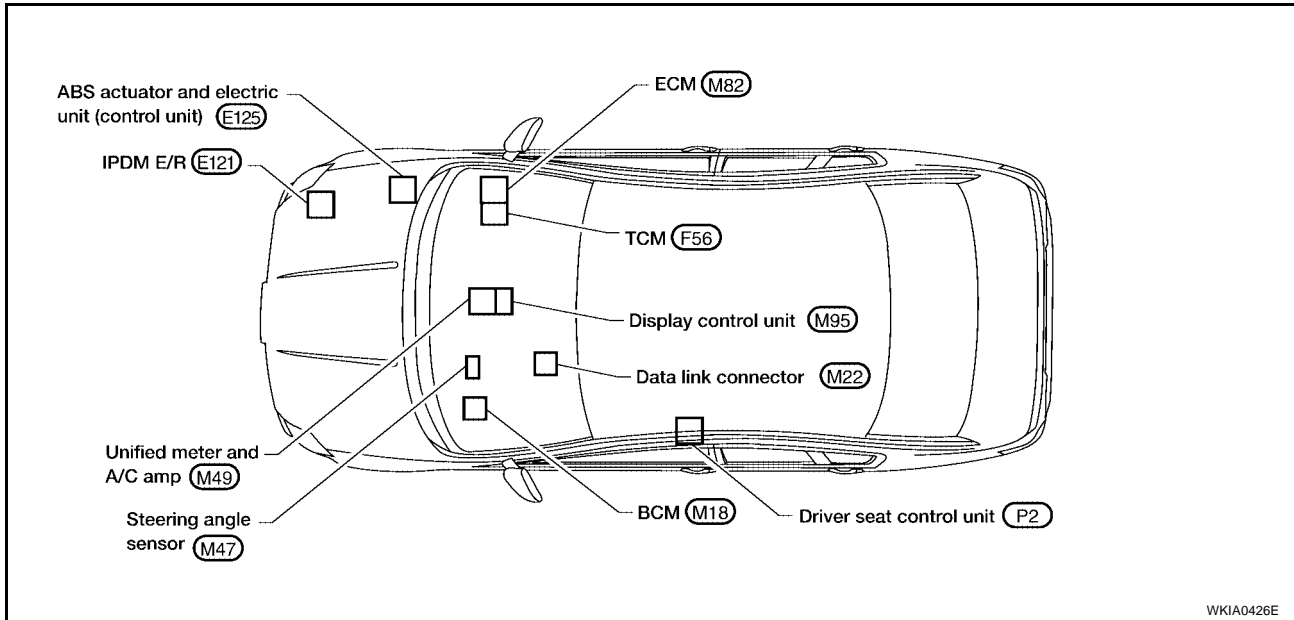


## CAN SYSTEM (TYPE 8)

## System Description

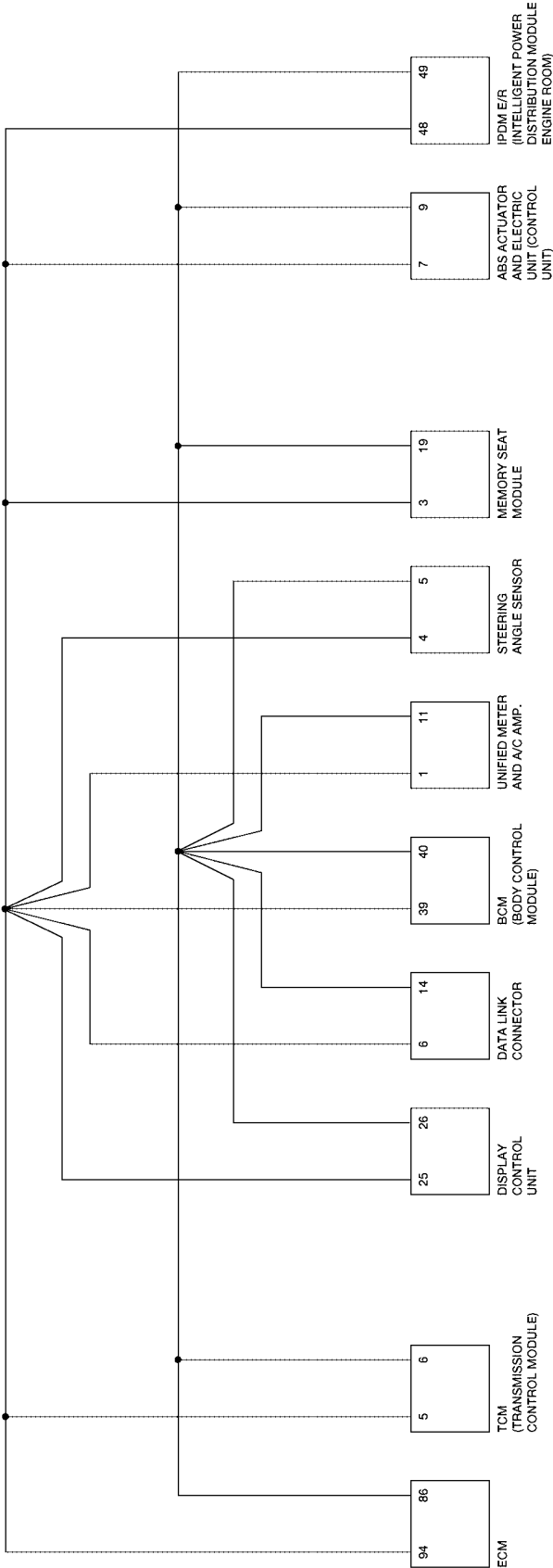
CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information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

## Component Parts and Harness Connector Location



Schematic

EKS004WB

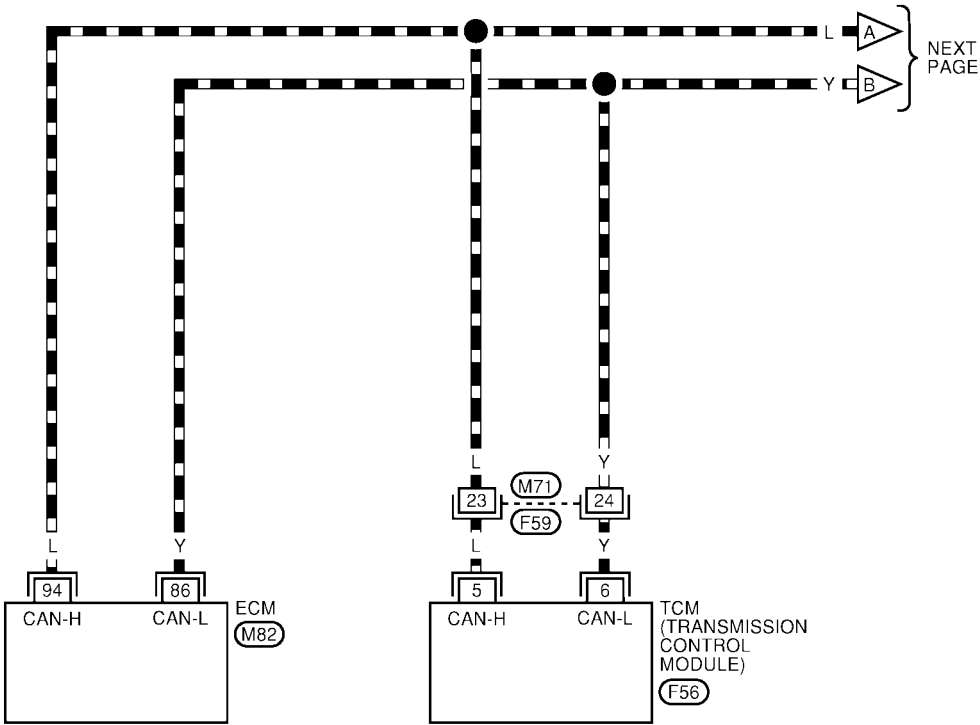


Wiring Diagram - CAN -

EKS004WC

LAN-CAN-22

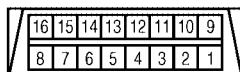
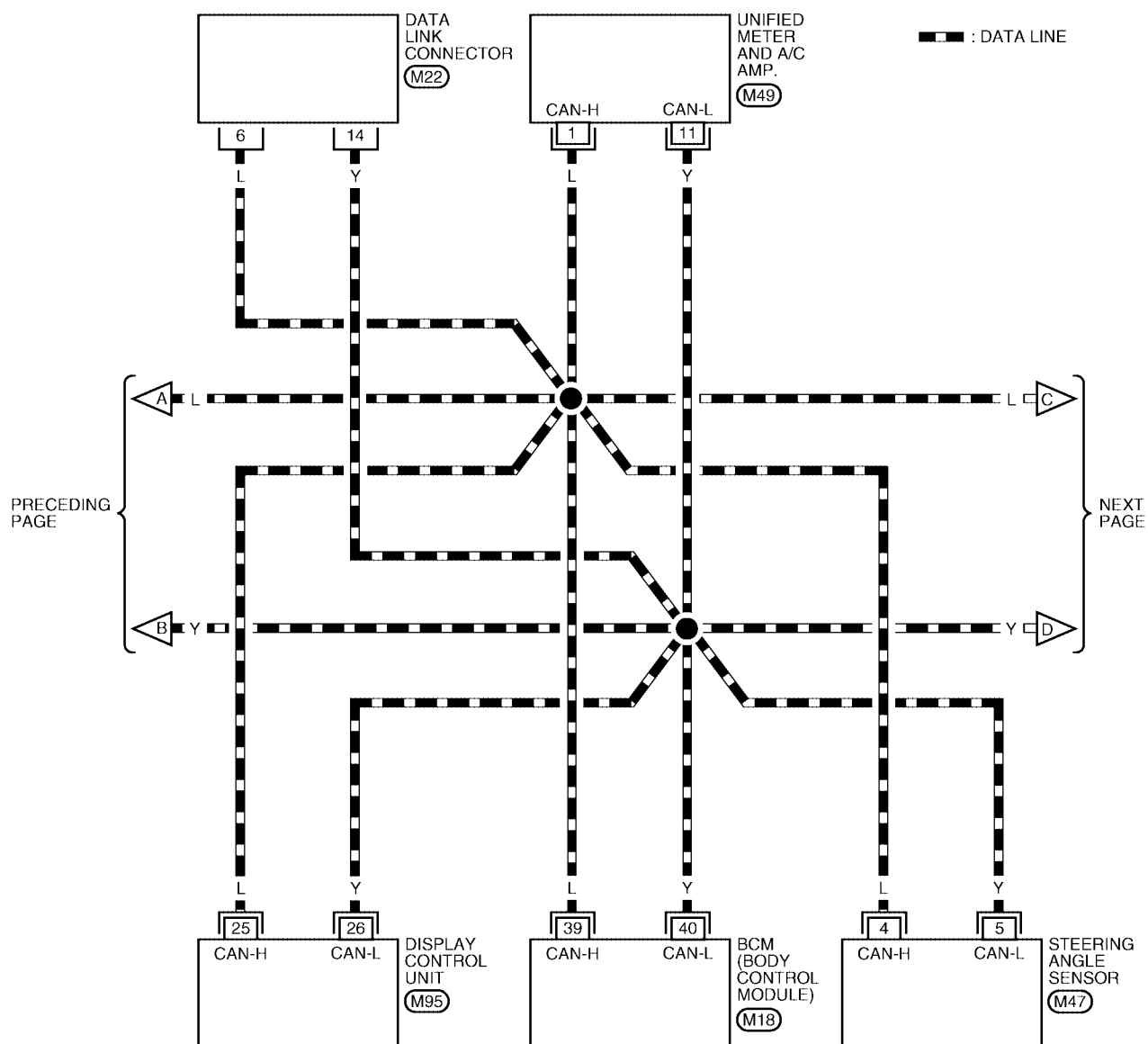
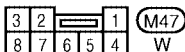
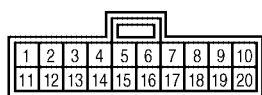
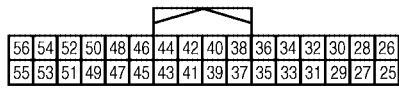
: DATA LINE



1	2	3	4	5	6			7	8	9	10	11	F59
12	13	14	15	16	17	18	19	20	21	22	23	24	W

REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS

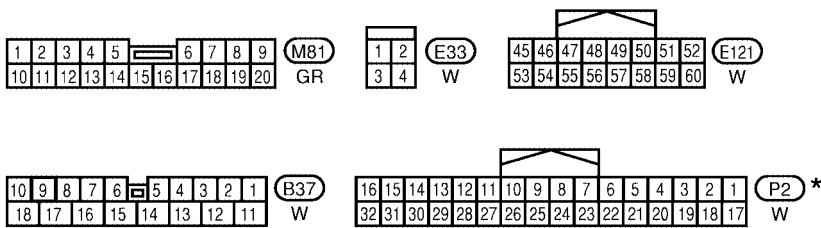
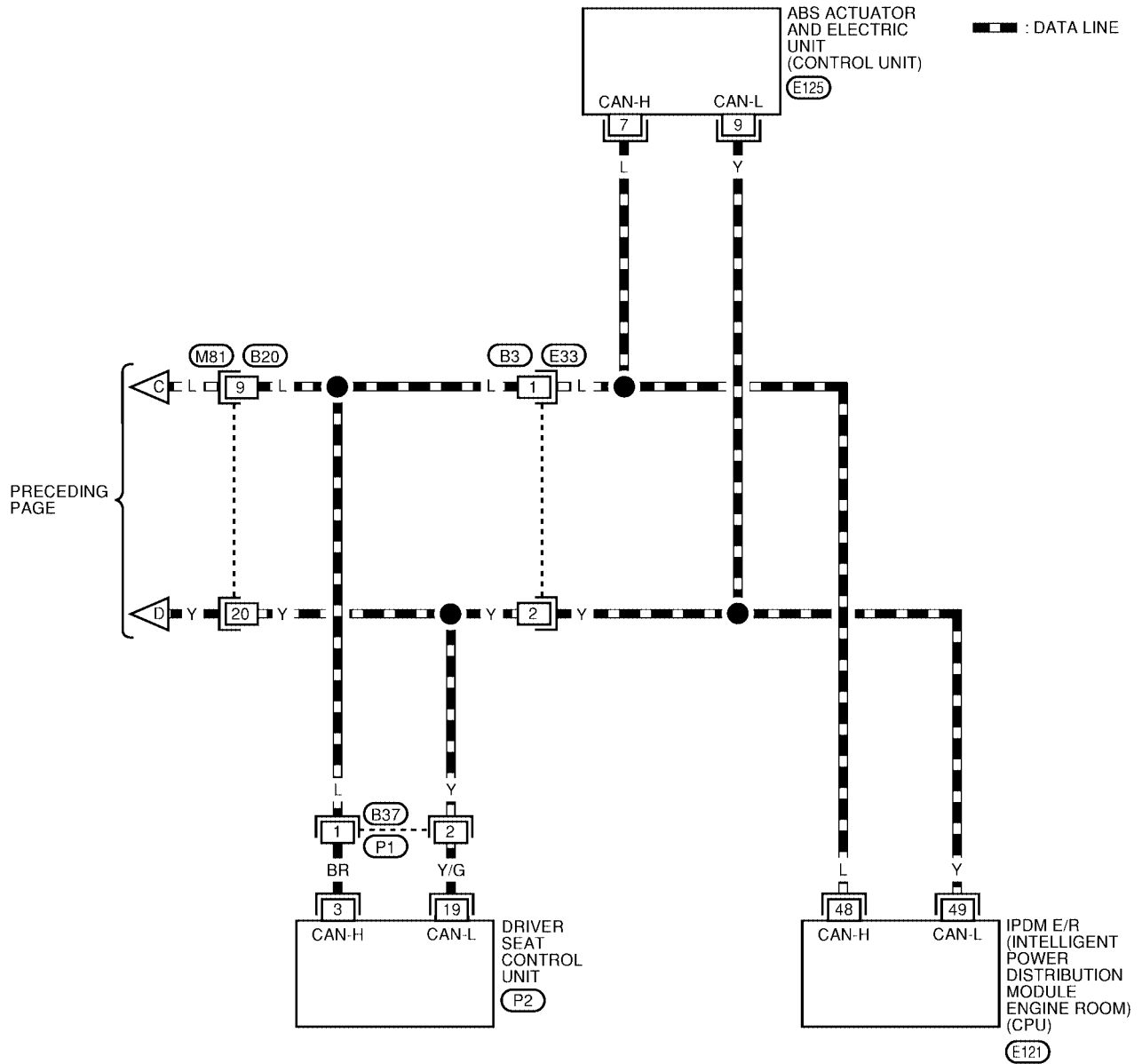
## LAN-CAN-23

M22  
WM47  
WM49  
GRM95  
W

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-24



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

REFER TO THE FOLLOWING.

(E125) - ELECTRICAL UNITS

WKWA0428E

## Work Flow

- When there are no indications of “TRANSMISSION”, “METER A/C AMP”, “BCM”, “IPDM E/R” or “AUTO DRIVE POS.” on “SELECT SYSTEM” display of CONSULT-II, print the “SELECT SYSTEM”.

(Example)

NISSAN				SELECT SYSTEM	
CONSULT-II				ENGINE	
ENGINE				A/T	
START (NISSAN BASED VHCL)				ABS	
START (RENAULT BASED VHCL)				AIR BAG	
SUB MODE				BCM	
				METER A/C AMP	
LIGHT COPY					
				BACK LIGHT COPY	

PKIA2093E

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

(Example)

SELECT DIAG MODE		SELF-DIAG RESULTS	
WORK SUPPORT		DTC RESULTS TIME	
SELF-DIAG RESULTS		CAN COMM CIRCUIT [U1000] 0	
DATA MONITOR			
DATA MONITOR (SPEC)			
ACTIVE TEST			
FUNCTION TEST			
Scroll Down		F.F.DATA	
BACK LIGHT COPY		ERASE PRINT	
		MODE BACK LIGHT COPY	

PKIA2094E

- Print all the data of “DATA MONITOR (CAN DIAG SUPPORT MNTR)” for “ENGINE”, “TRANSMISSION”, “BCM”, “METER A/C AMP”, “AUTO DRIVE POS.”, “IPDM E/R” and “ABS” displayed on CONSULT-II.

(Example)

SELECT DIAG MODE		DATA MONITOR		DATA MONITOR	
WORK SUPPORT		SELECT MONITOR ITEM		MONITOR NO DTC	
SELF-DIAG RESULTS		ECM INPUT SIGNALS		CAN COMM OK	
DATA MONITOR		MAIN SIGNALS		CAN CIRC 1 OK	
DATA MONITOR (SPEC)		CAN DIAG SUPPORT MNTR		CAN CIRC 2 OK	
ACTIVE TEST		SELECTION FROM MENU		CAN CIRC 3 OK	
FUNCTION TEST				CAN CIRC 4 OK	
Scroll Down				CAN CIRC 5 UNKWN	
BACK LIGHT COPY		SETTING Numerical Display		CAN CIRC 6 OK	
		MODE BACK LIGHT COPY		CAN CIRC 7 OK	
				RECORD	
				MODE BACK LIGHT COPY	

PKIA2095E

- Based on the indications of “SELECT SYSTEM” and the results of “DATA MONITOR (CAN DIAG SUPPORT MNTR)”, put marks onto the items with “No indication”, “NG”, or “UNKWN” in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0444E

## NOTE:

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

# CAN SYSTEM (TYPE 8)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- Check CAN communication line of the navigation system.
- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0812E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0813E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0814E

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 4</del>	-	-	-	<del>CAN CIRC 3</del>	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0815E

## Case 3

Replace display control unit.

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0816E

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0817E



# CAN SYSTEM (TYPE 8)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-			CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-			-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 7	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0818E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-			CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0819E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-			CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-				CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0820E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0821E

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0822E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	<del>CAN CIRC 3</del>	CAN CIRC 7	
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	<del>CAN CIRC 3</del>	-	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	CAN CIRC 7	
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	<del>CAN CIRC 5</del>	CAN CIRC 6	
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	

WKIA0823E

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	<del>CAN CIRC 3</del>	-	-	<del>CAN CIRC 5</del>	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0824E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	<del>CAN CIRC 3</del>	-	-	-	-	<del>CAN CIRC 2</del>	-	-	-

WKIA0825E

WKIA0825E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-180](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0826E

WKIA0826E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-180](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3 ✓	CAN CIRC 7 ✓
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3 ✓	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7 ✓
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5 ✓	CAN CIRC 6 ✓
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3 ✓
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	✓	-	CAN CIRC 1	CAN CIRC 2 ✓	CAN CIRC 3 ✓	-	-	CAN CIRC 5 ✓	-	-	-	-
IPDM E/R	No Disp ✓	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0827E

WKIA0827E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-181](#).

	CONSULT Indication	CAN System	1x	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0828E

WKIA0828E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-181](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1 ✓	-	CAN CIRC 2 ✓	-	CAN CIRC 4 ✓	-	CAN CIRC 6 ✓	-	CAN CIRC 3 ✓	CAN CIRC 7 ✓
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2 ✓	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3 ✓	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2 ✓	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2 ✓	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2 ✓	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3 ✓	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0829E

## Case 13

Check TCM circuit. Refer to [LAN-182](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0830E

## Case 14

Check display control unit circuit. Refer to [LAN-182](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0831E

## Case 15

Check data link connector circuit. Refer to [LAN-183](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0832E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-183](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0833E

WKIA0833E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-184](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0834E

WKIA0834E

## Case 18

Check steering angle sensor circuit. Refer to [LAN-184](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0835E

WKIA0835E

## Case 19

Check driver seat control unit circuit. Refer to [LAN-185](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0836E

WKIA0836E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 20

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-185](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	<del>CAN CIRC 3</del>	CAN CIRC 7	
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	<del>CAN CIRC 3</del>		
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	CAN CIRC 7	
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	<del>CAN CIRC 5</del>	CAN CIRC 6	
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	
ABS	-	CAN COMM	<del>CAN CIRC 1</del>	<del>CAN CIRC 2</del>	<del>CAN CIRC 3</del>	-	-	<del>CAN CIRC 5</del>	-	-	-	
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	

WKIA0837E

## Case 21

Check IPDM E/R circuit. Refer to [LAN-186](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0838E

## Case 22

Check CAN communication circuit. Refer to [LAN-187](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0839E

# CAN SYSTEM (TYPE 8)

[CAN]

## Case 23

Check IPDM E/R Ignition relay circuit. Refer to [LAN-187](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 4</del>	-			CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-				CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	CAN CIRC 3	-	-	<del>CAN CIRC 5</del>	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0840E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-			CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-				CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0841E

LAN

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

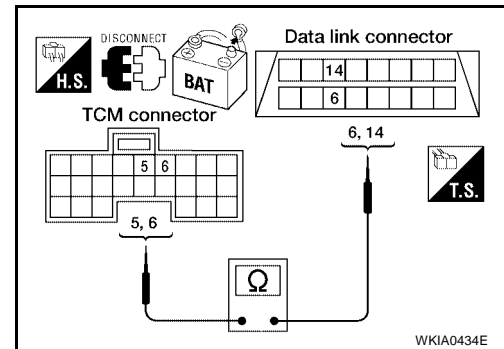
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-170, "Work Flow"](#).  
 NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

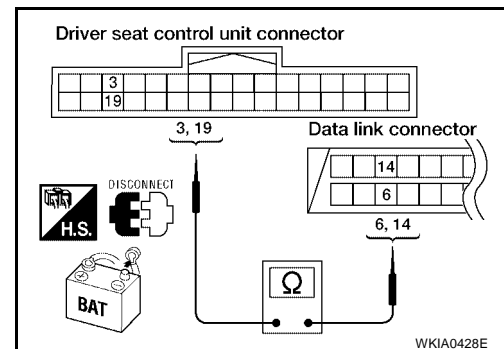
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-170](#).  
 NG >> Repair harness.





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

EKS004WG

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

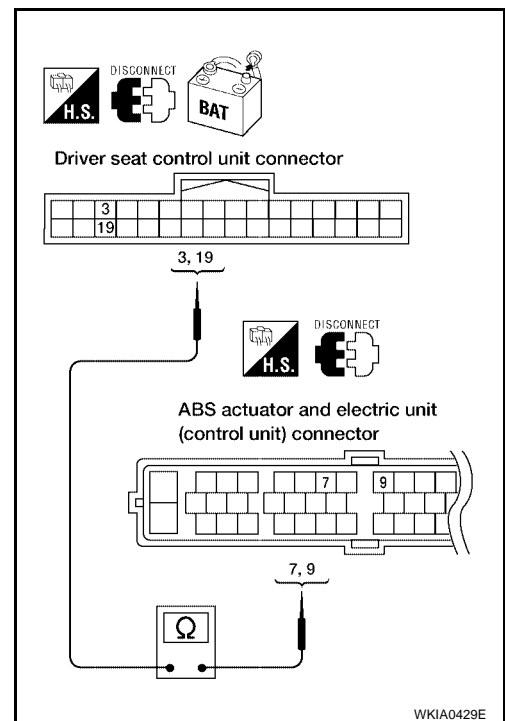
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 7 (L), 9 (Y).

- 3 (BR) - 7 (L) : Continuity should exist.**  
**19 (Y/G) - 9 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-170](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

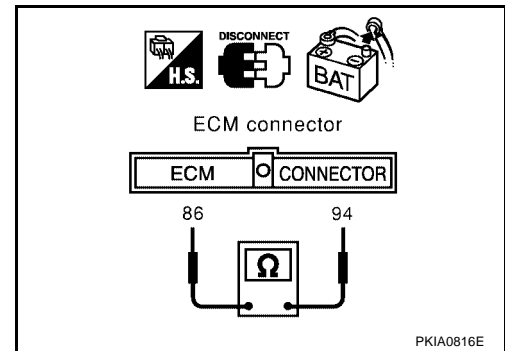
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS004WJ

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

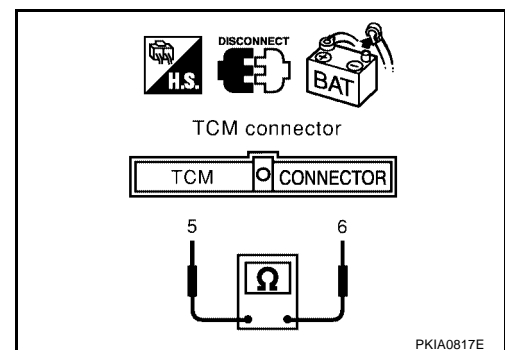
Check resistance between TCM connector F56 terminal 5 (L) and terminal 6 (Y).

**5 (L) - 6 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS004WJ

## 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

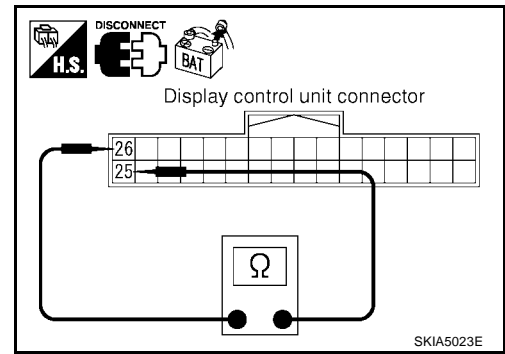
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS004WK

## 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

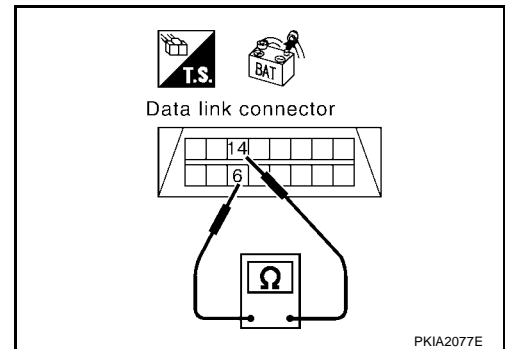
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-170](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS004WL

## 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

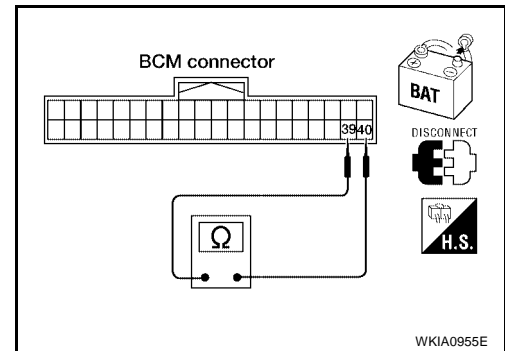
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS004WM

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

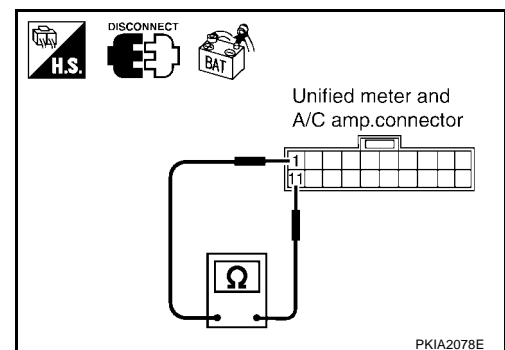
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS004WM

## 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

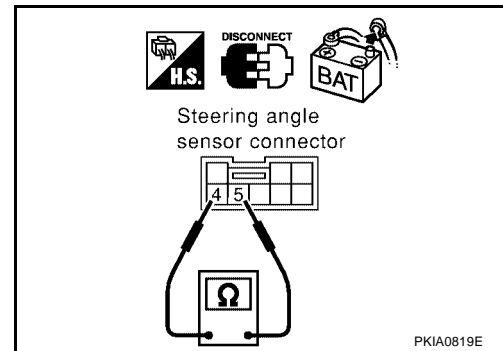
Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**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.



EKS004WO

## 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

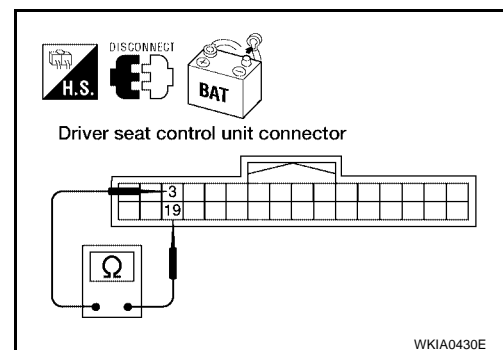
Check resistance between driver seat control unit connector P2 terminal 3 (BR) and terminal 19 (Y/G).

**3 (BR) - 19 (Y/G)**

**: 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.



EKS004WP

## 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

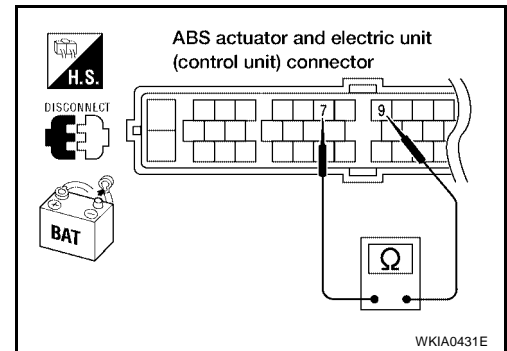
Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**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 IPDM E/R connector E121.



EKS004WQ

## 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

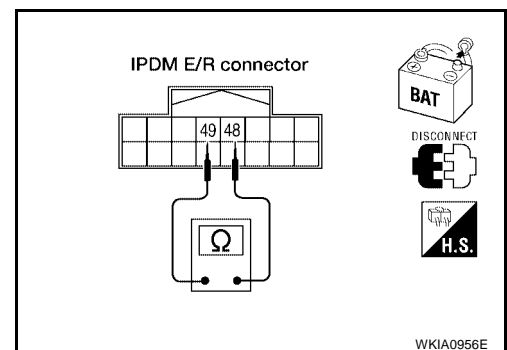
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



**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)
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Steering angle sensor
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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**

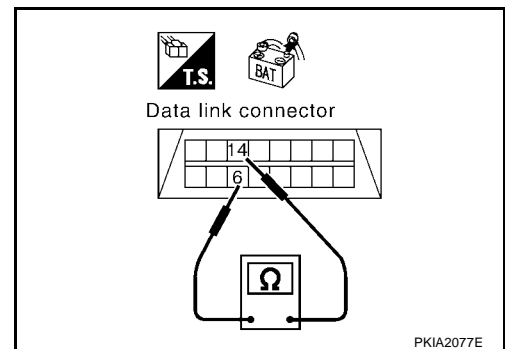
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

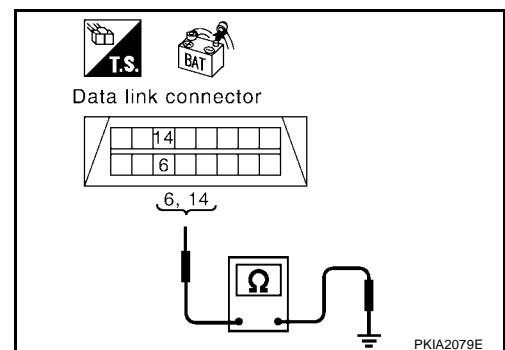
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-188, "Component Inspection"](#).

NG >> Repair the harness.

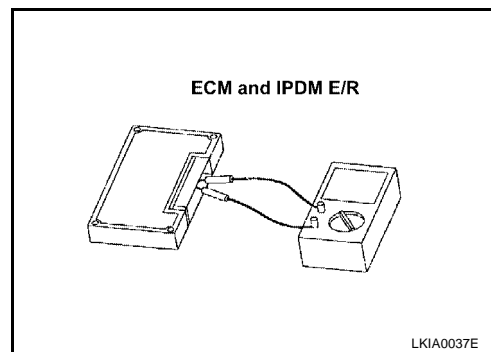
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

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

- Remove ECM and IPDM E/R from vehicle.
- 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**



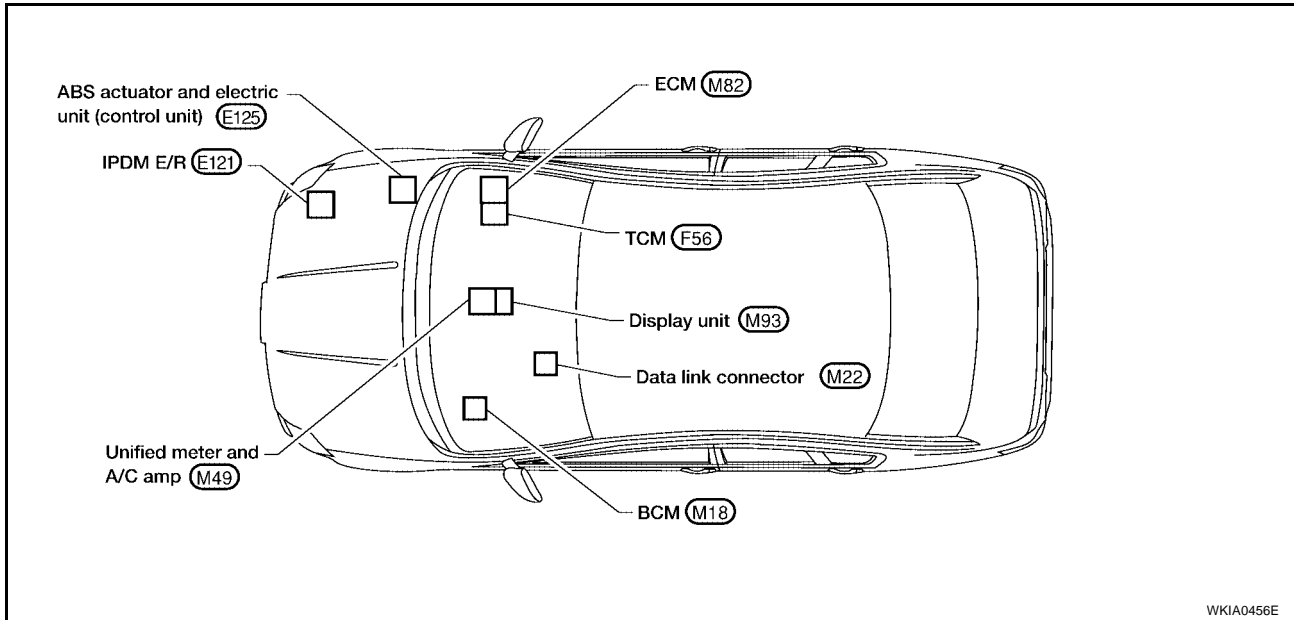


## CAN SYSTEM (TYPE 9)

### System Description

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

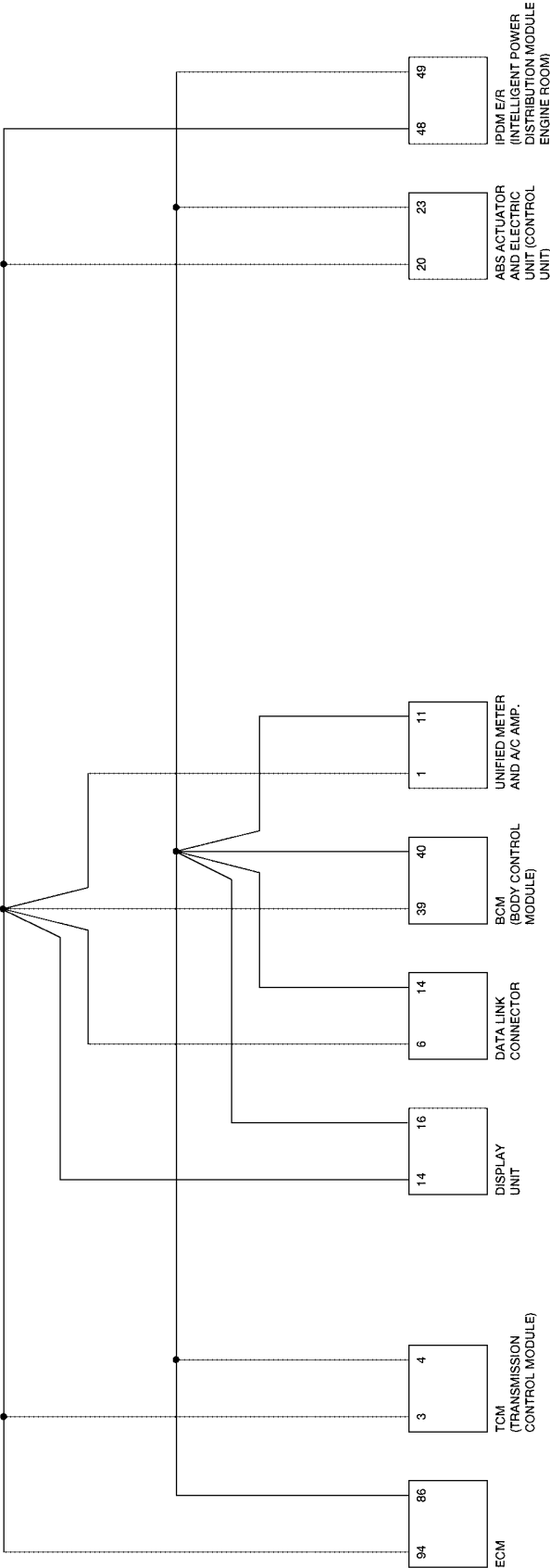
### Component Parts and Harness Connector Location



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

Schematic

EKS005IJ



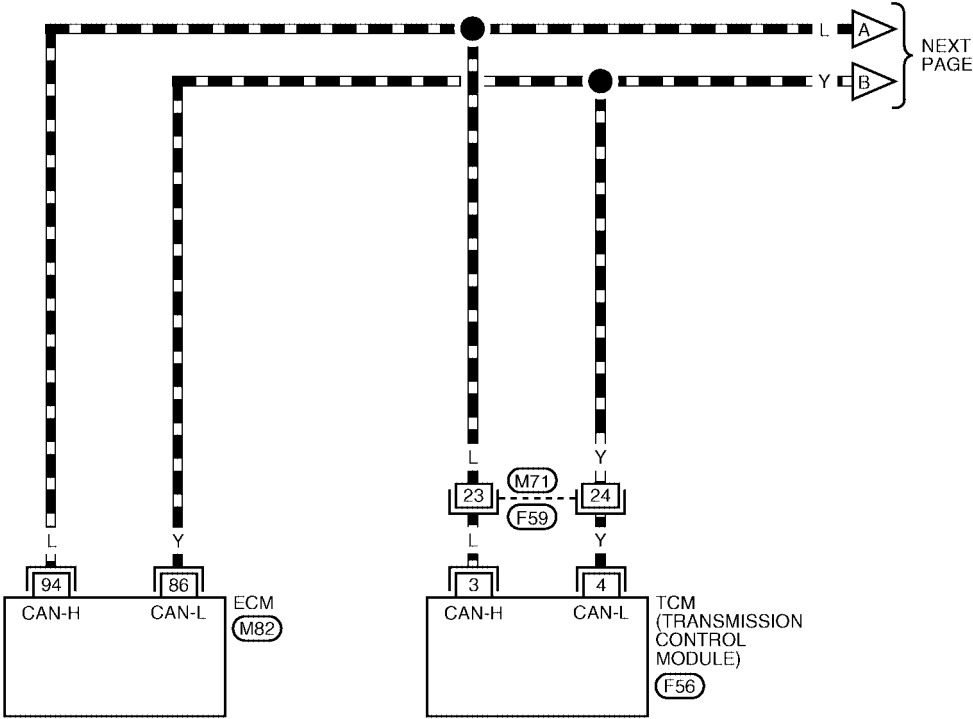
WKWA0468E


Wiring Diagram - CAN -

EKS0051K

LAN-CAN-25

▬ : DATA LINE



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

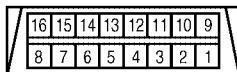
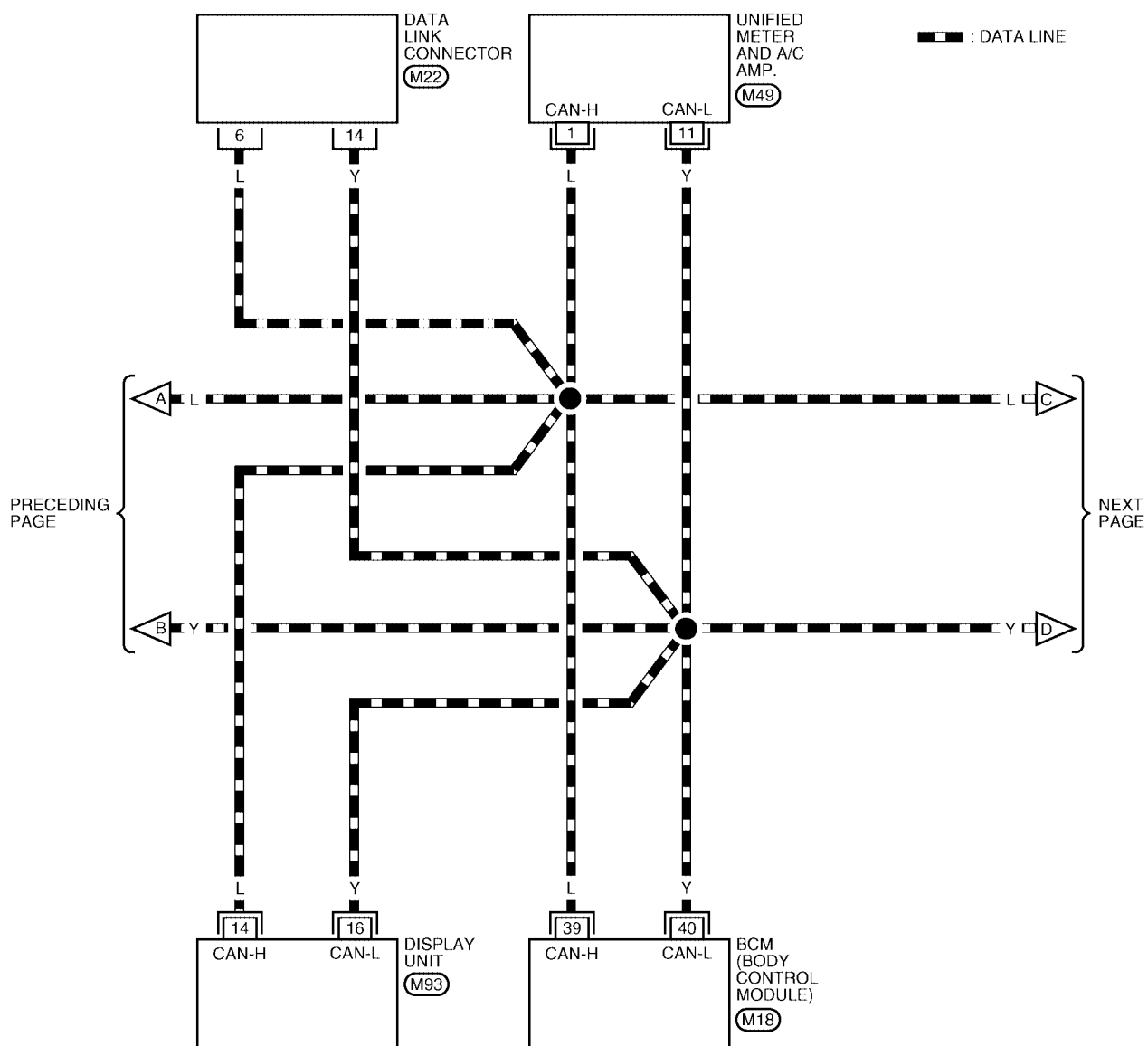
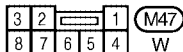
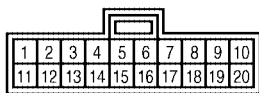
F59

W

(F59)  
W

REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS

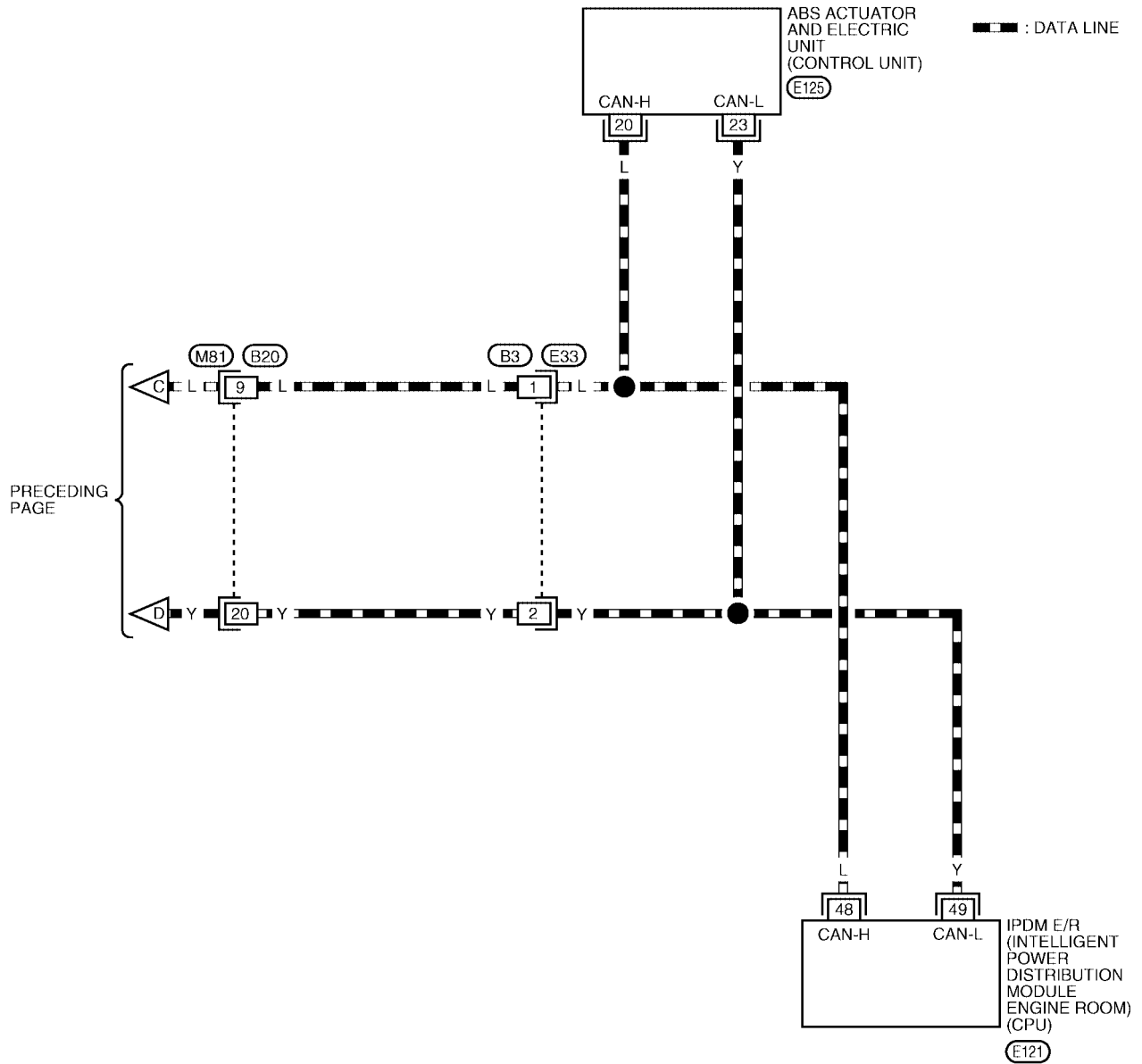
## LAN-CAN-26

M22  
WM47  
WM49  
GR

REFER TO THE FOLLOWING.

(M18) - ELECTRICAL UNITS

## LAN-CAN-27



1	2	3	4	5	6	7	8	9	M81
10	11	12	13	14	15	16	17	18	GR

1	2	E33
3	4	W

45	46	47	48	49	50	51	52	E121
53	54	55	56	57	58	59	60	W

10	9	8	7	6	5	4	3	2	1	B37
18	17	16	15	14	13	12	11			W

REFER TO THE FOLLOWING.  
(E125) - ELECTRICAL UNITS

# CAN SYSTEM (TYPE 9)

[CAN]

EKS005L

## Work Flow

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

(Example)

NISSAN				SELECT SYSTEM	
CONSULT-II				ENGINE	
ENGINE				A/T	
START (NISSAN BASED VHCL)				ABS	
START (RENAULT BASED VHCL)				AIR BAG	
SUB MODE				BCM	
				METER A/C AMP	
LIGHT COPY				BACK LIGHT COPY	

PKIA2093E

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

(Example)

SELECT DIAG MODE		SELF-DIAG RESULTS	
WORK SUPPORT		DTC RESULTS TIME	
SELF-DIAG RESULTS		CAN COMM CIRCUIT [U1000] 0	
DATA MONITOR			
DATA MONITOR (SPEC)			
ACTIVE TEST			
FUNCTION TEST			
Scroll Down		F.F.DATA	
BACK LIGHT COPY		ERASE PRINT	
		MODE BACK LIGHT COPY	

PKIA2094E

- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "IPDM E/R" and "ABS" displayed on CONSULT-II.

(Example)

SELECT DIAG MODE		DATA MONITOR		DATA MONITOR	
WORK SUPPORT		SELECT MONITOR ITEM		MONITOR NO DTC	
SELF-DIAG RESULTS		ECM INPUT SIGNALS		CAN COMM OK	
DATA MONITOR		MAIN SIGNALS		CAN CIRC 1 OK	
DATA MONITOR (SPEC)		CAN DIAG SUPPORT MNTR		CAN CIRC 2 OK	
ACTIVE TEST		SELECTION FROM MENU		CAN CIRC 3 OK	
FUNCTION TEST				CAN CIRC 4 OK	
Scroll Down				CAN CIRC 5 UNKWN	
BACK LIGHT COPY		SETTING Numerical Display		CAN CIRC 6 OK	
		MODE BACK LIGHT COPY		CAN CIRC 7 OK	
				RECORD	
				MODE BACK LIGHT COPY	

PKIA2095E

- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0445E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 9)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0842E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0843E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	✓ CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0844E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	✓ CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	✓ CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0845E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		✓ CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0846E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	✓ CIRC 3	-	-	✓ CIRC 5	✓ CIRC 2		✓ CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0847E



# CAN SYSTEM (TYPE 9)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	✓ CIRC 4			✓ CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0848E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0849E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	✓ CIRC 2	✓ CIRC 3	✓ CIRC 7	-	✓ CIRC 4	✓ CIRC 5	✓ CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM F/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0850E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 6

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx						
				E-CM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0851E

	CONSULT Indication	CAN System	Tx	Rx						
				E-CM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0852E

## Case 7

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				E-CM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0853E

## Case 8

Check harness between TCM and data link connector. Refer to [LAN-202](#).

	CONSULT Indication	CAN System	Tx	Rx						
				E-CM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0854E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 9

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to [LAN-202](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		✓ CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	✓ CIRC 5	✓ CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		✓ CIRC 3
ABS		CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	-	-		
IPDM F/R	✓ No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0855E

## Case 10

Check ECM circuit. Refer to [LAN-203](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	✓ CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	CAN CIRC 4	-		
DISPLAY UNIT		CAN COMM	CIRC 1	✓ CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓ CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	CAN CIRC 4	-		CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	-	-		
IPDM F/R	No Disp	-	CAN CIRC 1	✓ CIRC 3	-	-	-	CAN CIRC 2		

WKIA0856E

## Case 11

Check TCM circuit. Refer to [LAN-204](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	✓ CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	✓ No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	✓ CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-		
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0857E

## Case 12

Check display unit circuit. Refer to [LAN-204](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		
DISPLAY UNIT		CAN COMM	✓ CIRC 1	✓ CIRC 3	-	-	✓ CIRC 5	✓ CIRC 2		✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	✓ CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-		CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-		
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0858E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 13

Check data link connector circuit. Refer to [LAN-205](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Dep		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM F/R	No Dep		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0859E

## Case 14

Check BCM circuit. Refer to [LAN-205](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Dep		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM F/R	No Dep		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0860E

## Case 15

Check unified meter and A/C amp. circuit. Refer to [LAN-206](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Dep		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM F/R	No Dep		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0861E

## Case 16

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-206](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Dep		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Dep	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM F/R	No Dep		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0862E

# CAN SYSTEM (TYPE 9)

[CAN]

## Case 17

Check IPDM E/R circuit. Refer to [LAN-207](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0863E

## Case 18

Check CAN communication circuit. Refer to [LAN-207](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0864E

## Case 19

Check IPDM E/R Ignition relay circuit. Refer to [LAN-208](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0865E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	AHS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6		CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			
DISPLAY UNIT		CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2		CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4			CAN CIRC 3
AHS		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2		

WKIA0866E

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

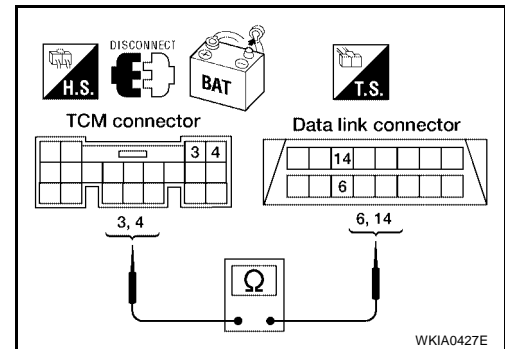
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-194, "Work Flow"](#).  
 NG >> Repair harness.



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

### 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 and ECM connector M82.
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 data link connector M22 terminals 6 (L), 14 (Y) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

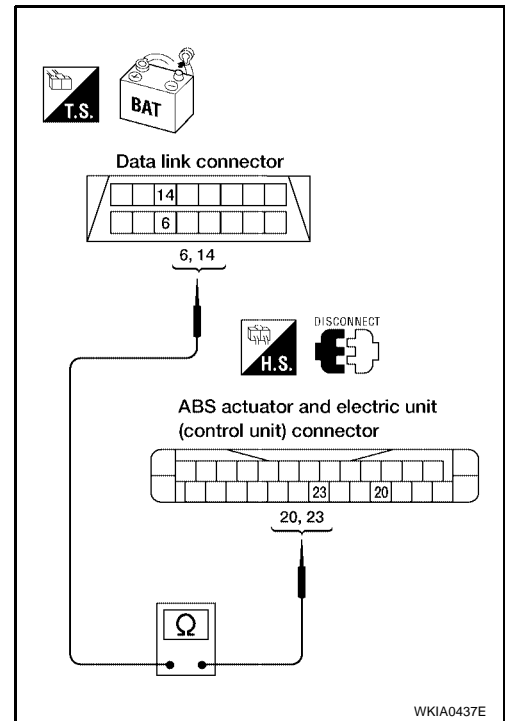
**6 (L) - 20 (L) : Continuity should exist.**

**14 (Y) - 23 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-194](#).

NG >> Repair harness.



EKS00510

## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

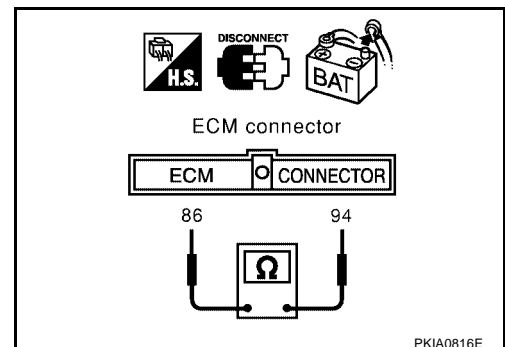
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM connector M82 and TCM connector F56.



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

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

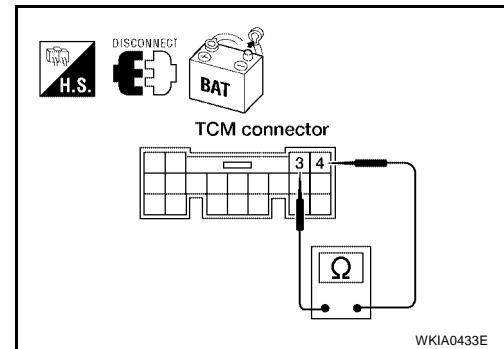
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector F56 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 F56 and ECM connector M82.



EKS0051Q

**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.

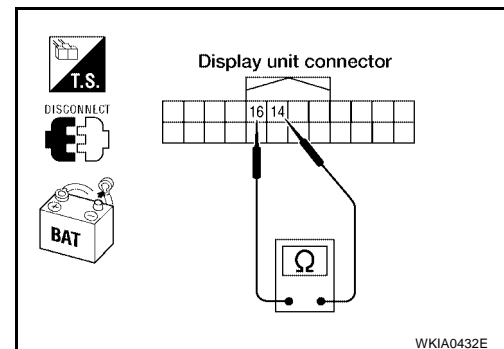
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between display unit connector M93 terminal 25 (L) and terminal 26 (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.



WKIA0432E



**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.

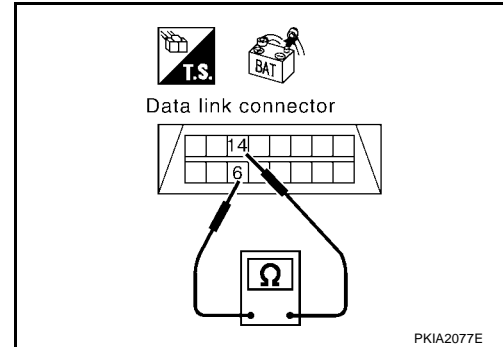
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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-194](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



PKIA2077E

**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.

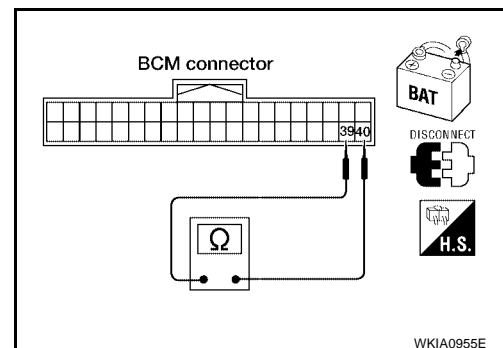
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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.



WKIA0955E

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

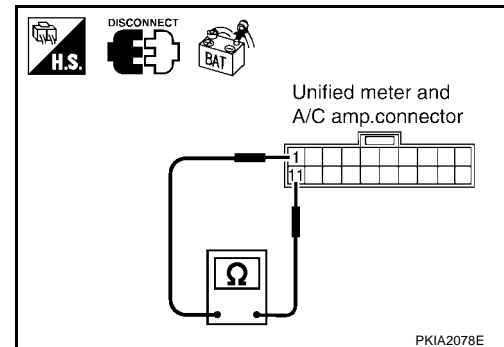
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



## 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.

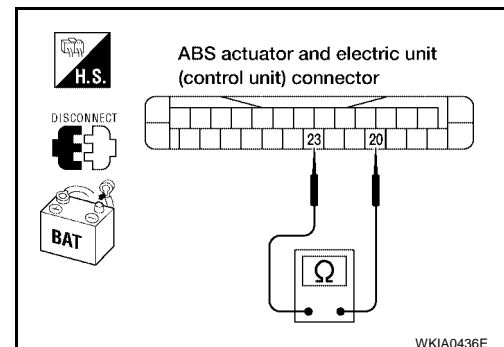
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



**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.

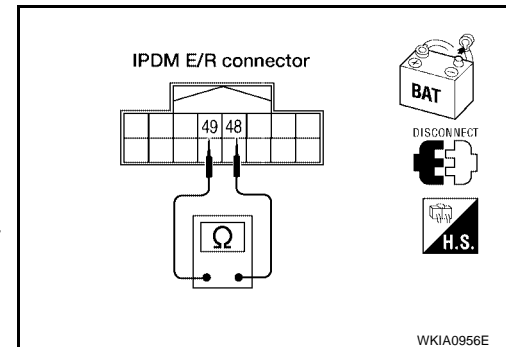
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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 ABS actuator and electric unit (control unit) connector E125.

**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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

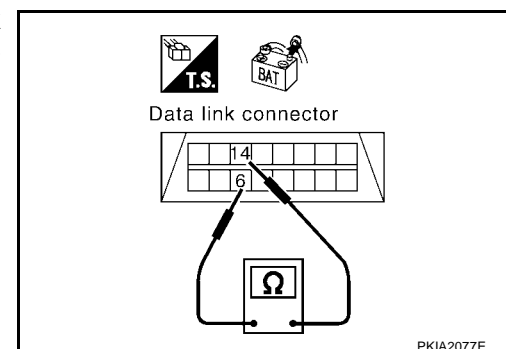
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

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.

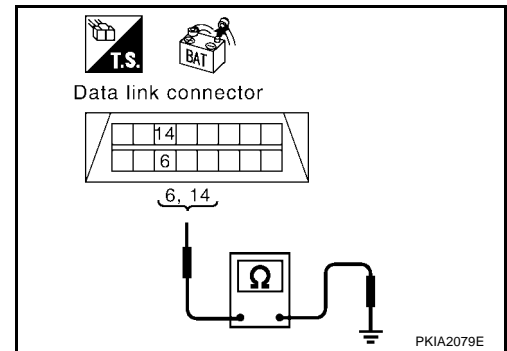
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-208, "Component Inspection"](#).

NG >> Repair the harness.



EKS0051X

### IPDM E/R Ignition Relay Circuit Check

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

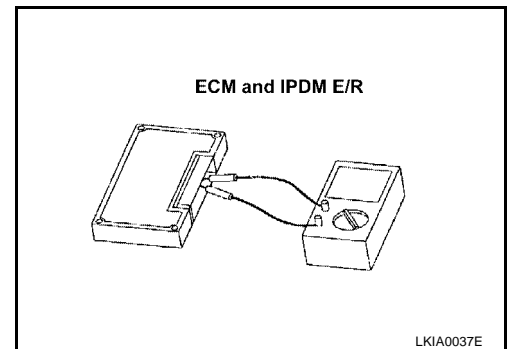
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS0051Y



CAN SYSTEM (TYPE 10)

PFP:23710

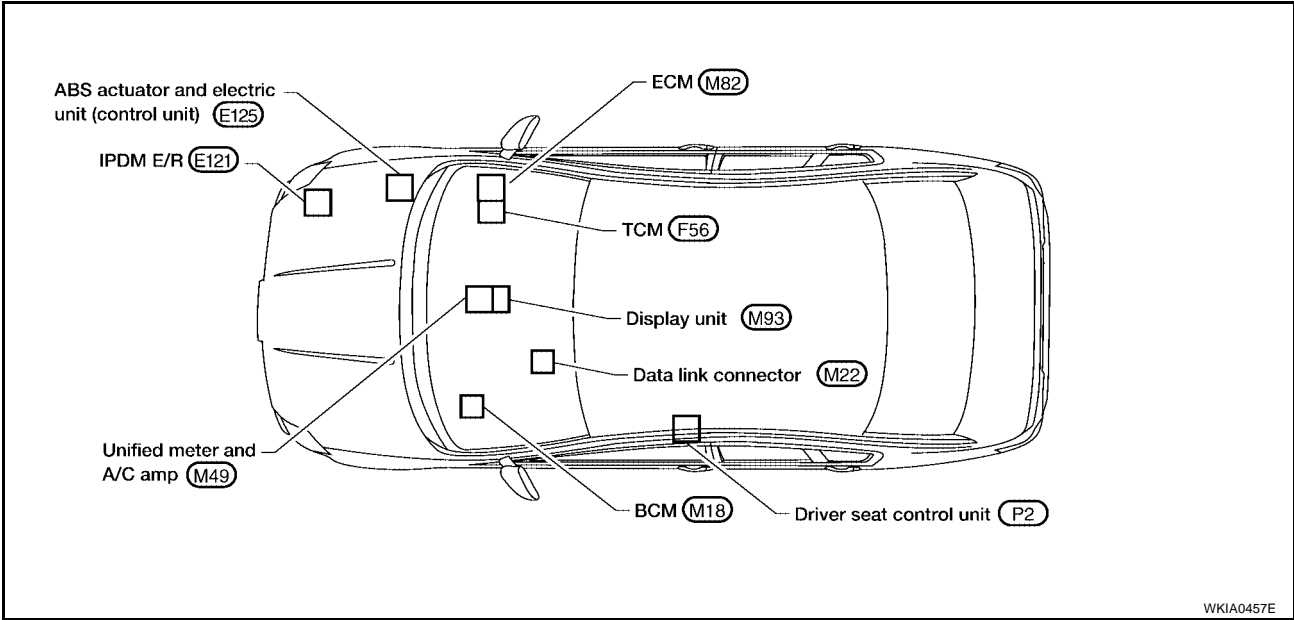
System Description

EKS0051Z

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

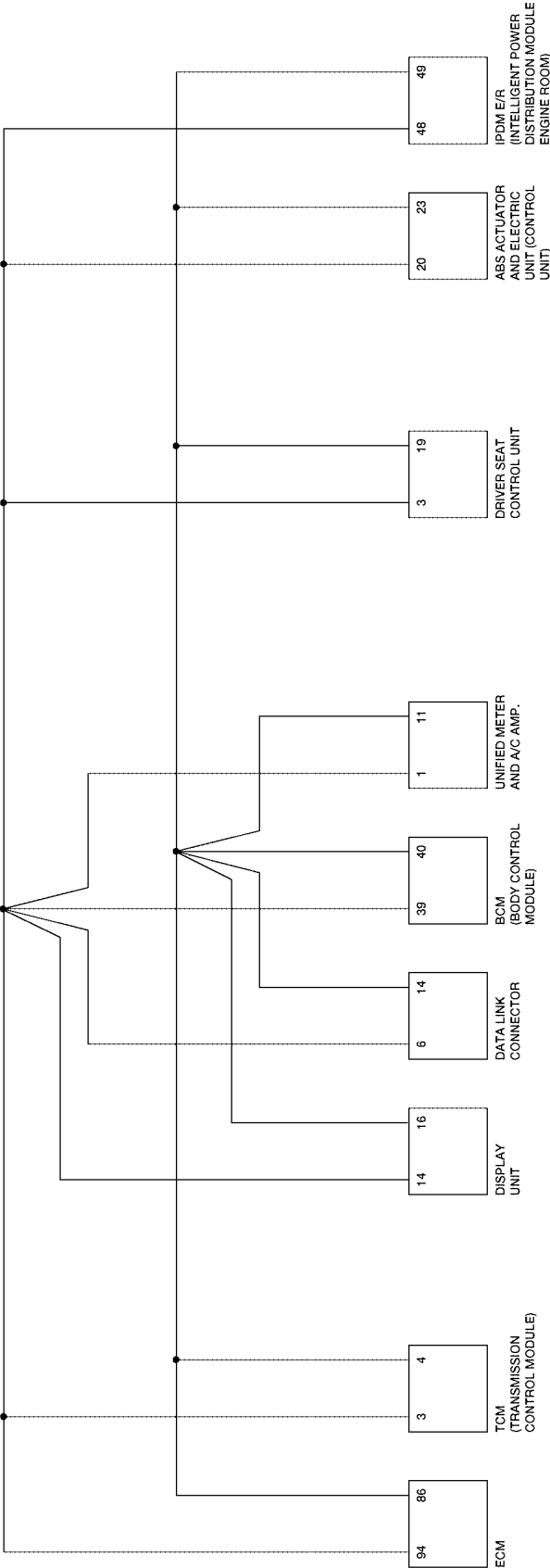
EKS005J0



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

Schematic

EKS005J1



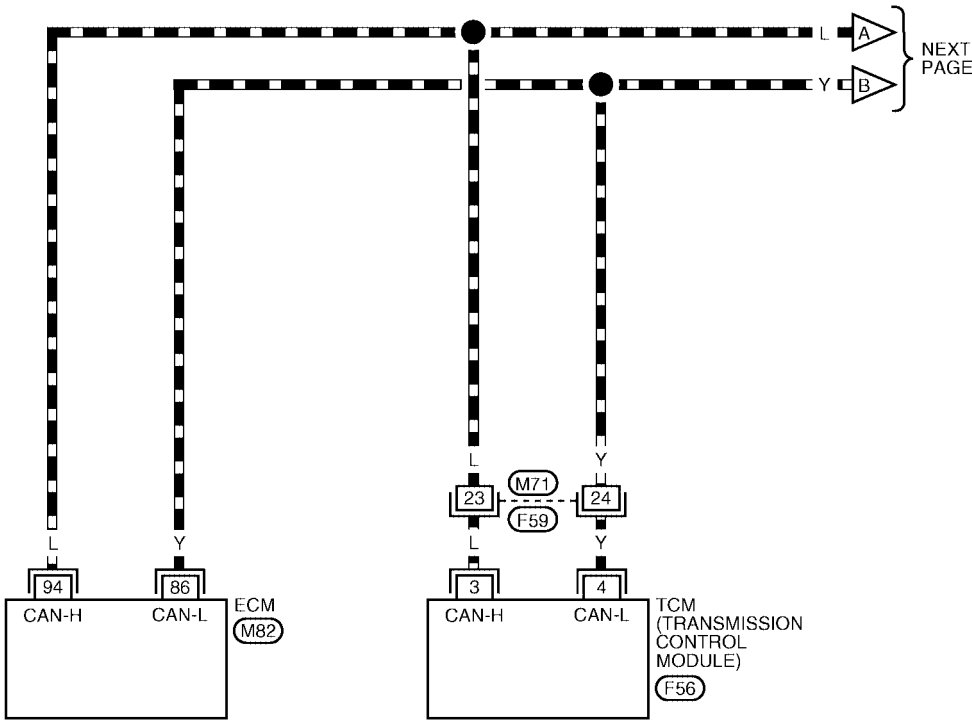
WKWA0469E

Wiring Diagram - CAN -


EKS005J2

LAN-CAN-28

DATA LINE



LAN

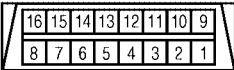
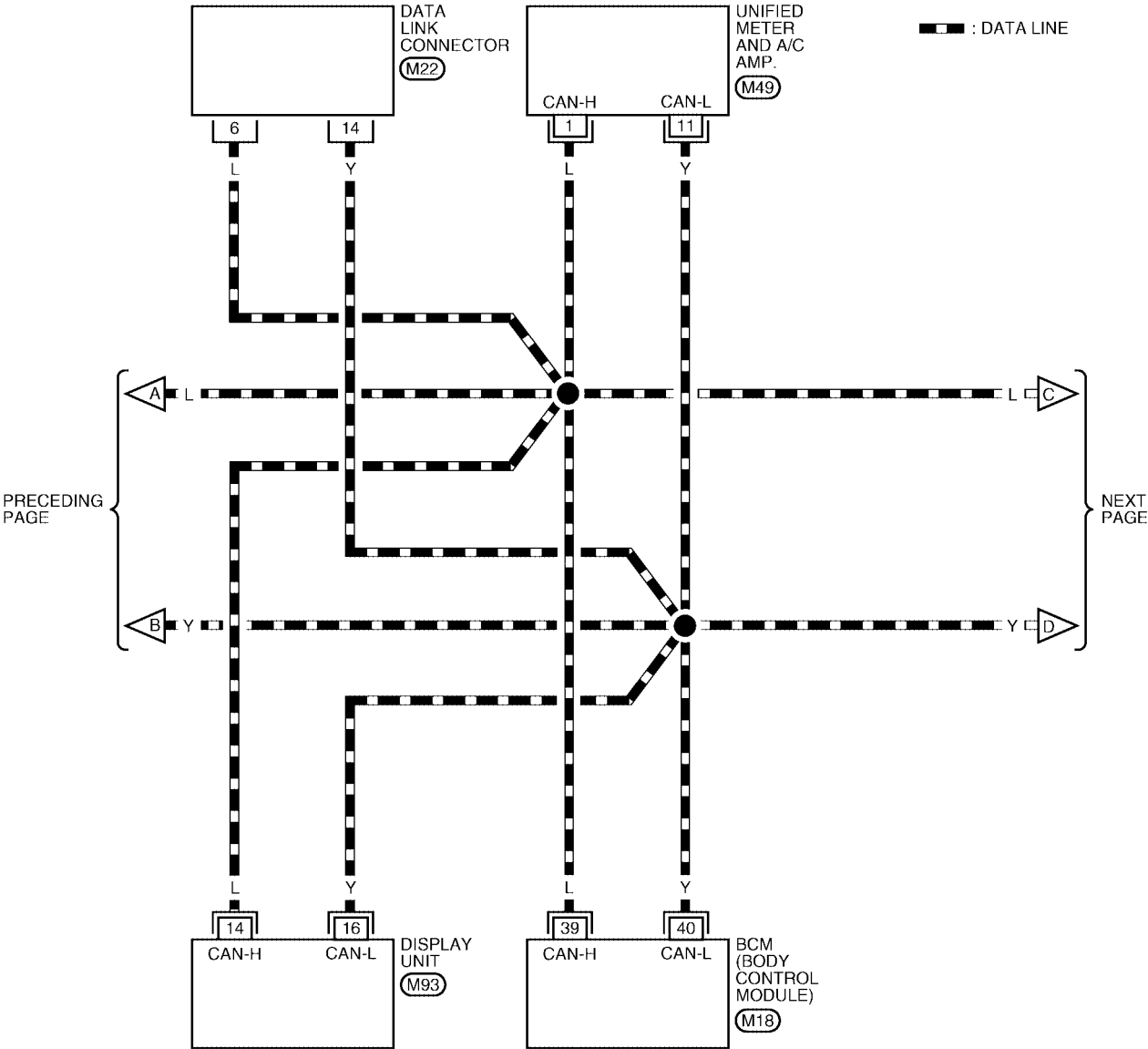
1	2	3	4	5	6			7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22	23	24

F59

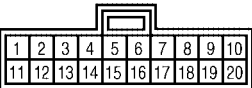
W

F59  
W

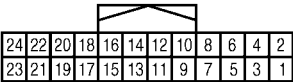
REFER TO THE FOLLOWING.  
(M82) (F56) - ELECTRICAL  
UNITS



M22  
W



M49  
GR

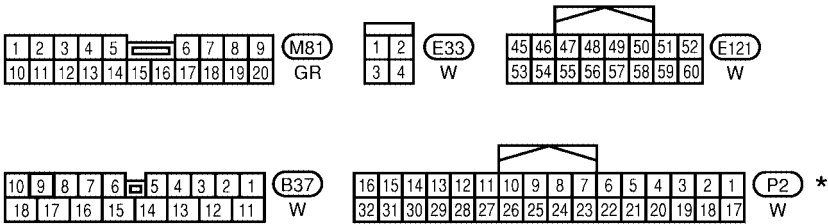
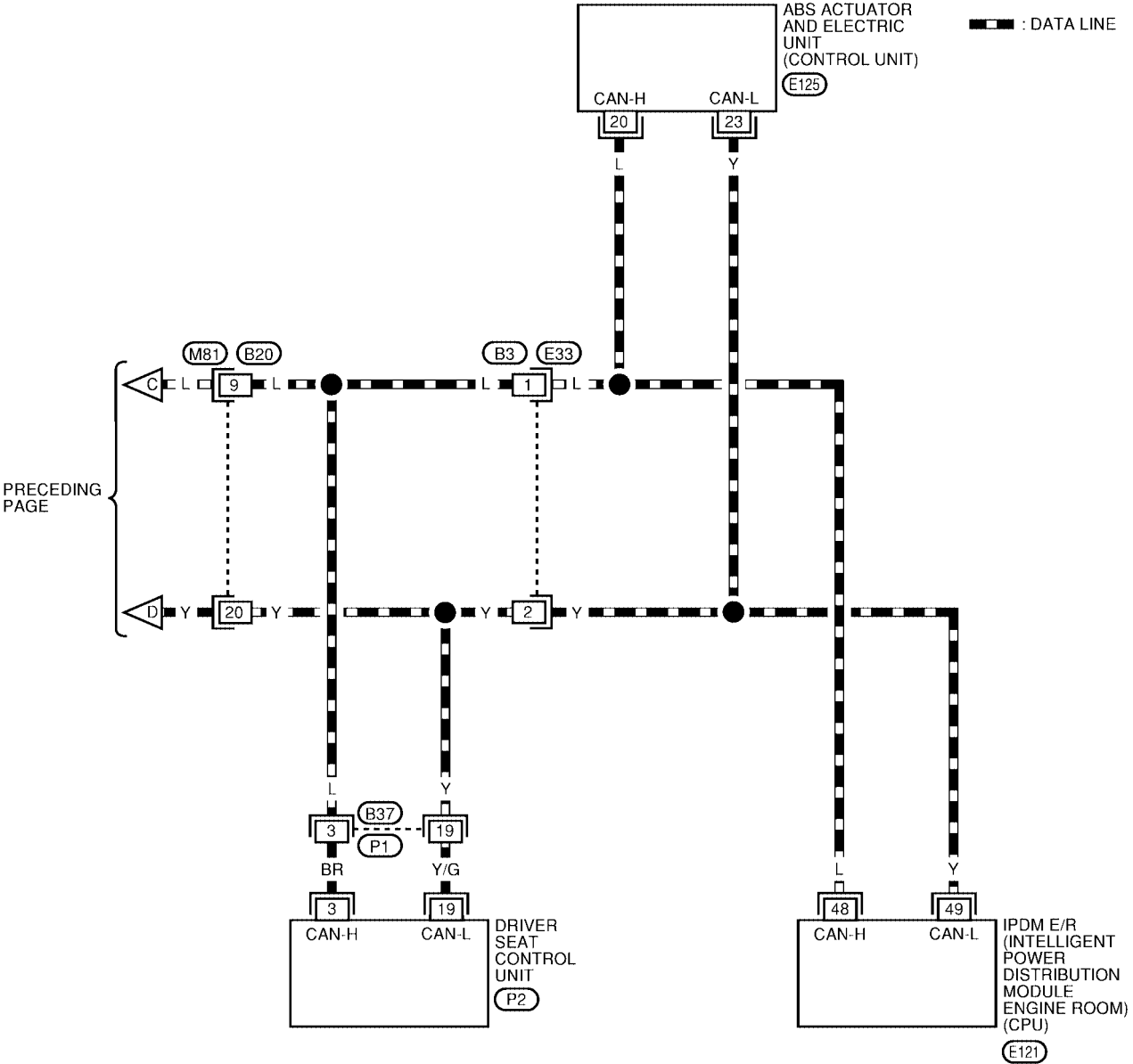


M93  
W

REFER TO THE FOLLOWING.  
M18 - ELECTRICAL UNITS



LAN-CAN-30

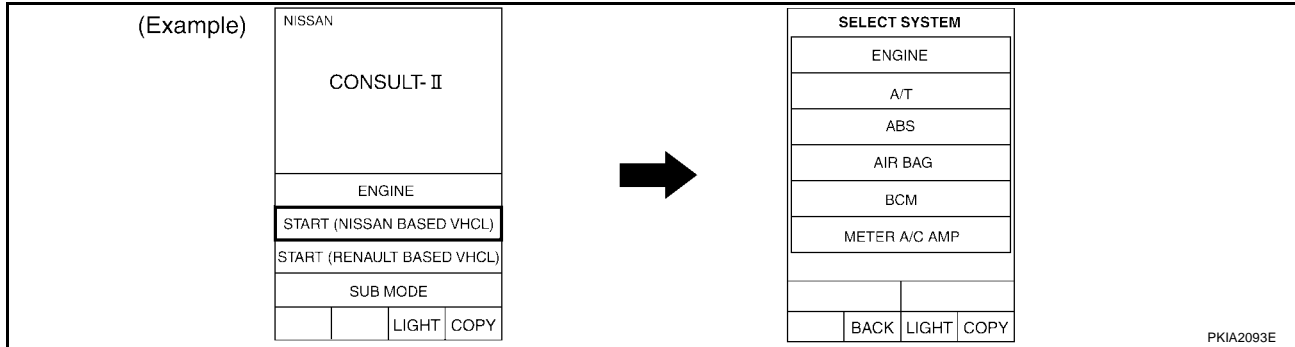


REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

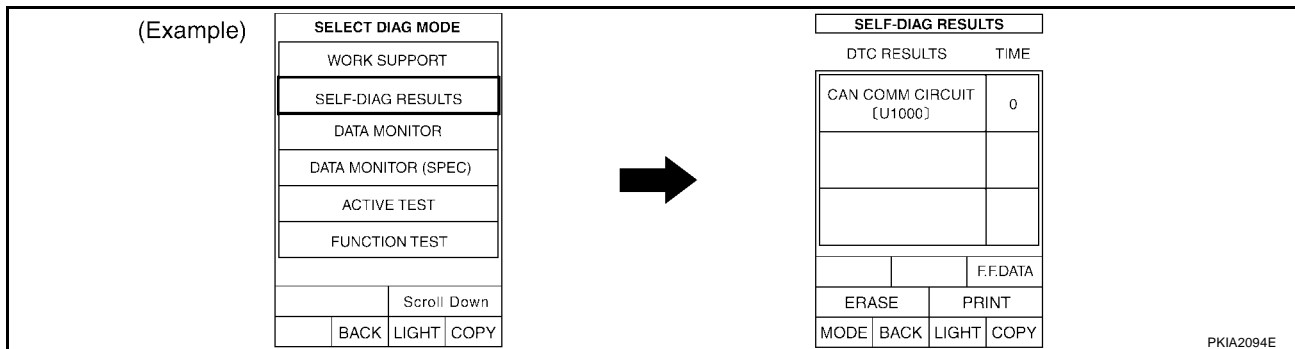
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

## Work Flow

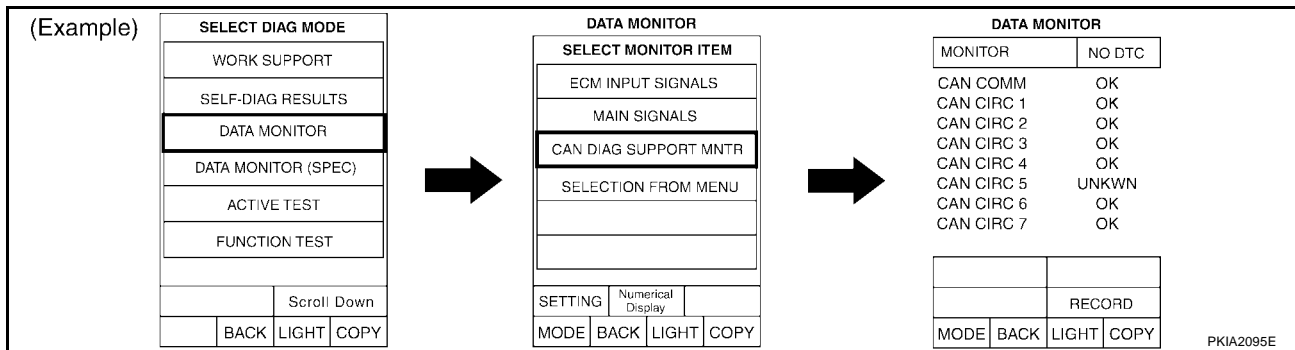
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified motor and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0446E

## NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 10)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT		<input checked="" type="checkbox"/> CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS		<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0867E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	<input checked="" type="checkbox"/> CAN CIRC 4	<input checked="" type="checkbox"/> CAN CIRC 6	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	<input checked="" type="checkbox"/> CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0868E

# CAN SYSTEM (TYPE 10)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 4</del>	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0869E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 2</del>	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 4</del>	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0870E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	<del>CAN COMM</del>	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0871E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	<del>CIRC 3</del>	-	-	<del>CIRC 5</del>	<del>CIRC 2</del>	-	-	<del>CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0872E

# CAN SYSTEM (TYPE 10)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0873E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0874E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0875E

# CAN SYSTEM (TYPE 10)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	<del>CAN COMM</del>	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0876E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 4</del>	-	<del>CAN CIRC 3</del>	<del>CAN CIRC 2</del>	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0877E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0878E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0879E

**Case 8**

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0880E

**Case 9**Check harness between TCM and data link connector. Refer to [LAN-223](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	COMM	CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0881E

**Case 10**Check harness between data link connector and driver seat control unit. Refer to [LAN-223](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0882E

**Case 11**Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-224](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0883E

# CAN SYSTEM (TYPE 10)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-224](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	✓	✓	-	✓	✓	-	-	✓
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	✓	-	-	✓	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	✓	CAN CIRC 4	-	✓	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	✓	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓	-	-	-	CAN CIRC 2	-	-	-

WKIA0884E

## Case 13

Check TCM circuit. Refer to [LAN-225](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	✓	-	✓	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	✓	-	-	✓	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	✓	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	✓	-	✓	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	✓	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓	-	-	-	CAN CIRC 2	-	-	-

WKIA0885E

## Case 14

Check display unit circuit. Refer to [LAN-225](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	✓	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	✓	-	-	✓	CIRC 2	-	-	✓
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	✓	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	✓	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	✓	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓	-	-	-	CAN CIRC 2	-	-	-

WKIA0886E

## Case 15

Check data link connector circuit. Refer to [LAN-226](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	✓	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	✓	-	-	✓	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	✓	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓	-	-	✓	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	✓	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	✓	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓	-	-	-	CAN CIRC 2	-	-	-

WKIA0887E



**Case 16**Check BCM circuit. Refer to [LAN-226](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	<input checked="" type="checkbox"/> CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	<input checked="" type="checkbox"/> CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6 CAN CIRC 3
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	<input checked="" type="checkbox"/> CIRC 2	-	-	-

WKIA0888E

**Case 17**Check unified meter and A/C amp. circuit. Refer to [LAN-227](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	<input checked="" type="checkbox"/> CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	<input checked="" type="checkbox"/> CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6 CAN CIRC 3
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	<input checked="" type="checkbox"/> CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0889E

**Case 18**Check driver seat control unit circuit. Refer to [LAN-227](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6 CAN CIRC 3
BCM	No Disp	CAN COMM	CIRC 1	CIRC 2	-	-	CAN CIRC 4	-	-	-	-
AUTO DRIVE POS.	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0890E

**Case 19**Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-228](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	<input checked="" type="checkbox"/> CIRC 5	CAN CIRC 6 CAN CIRC 3
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0891E

# CAN SYSTEM (TYPE 10)

[CAN]

## Case 20

Check IPDM E/R circuit. Refer to [LAN-228](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	<input checked="" type="checkbox"/> CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	<input checked="" type="checkbox"/> CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	<input checked="" type="checkbox"/> CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0892E

## Case 21

Check CAN communication circuit. Refer to [LAN-229](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	<input checked="" type="checkbox"/> CAN CIRC 4	<input checked="" type="checkbox"/> CAN CIRC 6	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	<input checked="" type="checkbox"/> CIRC 1	<input checked="" type="checkbox"/> CIRC 3	-	-	<input checked="" type="checkbox"/> CIRC 5	<input checked="" type="checkbox"/> CIRC 2	-	-	<input checked="" type="checkbox"/> CIRC 7
METER A/C AMP	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0893E

## Case 22

Check IPDM E/R Ignition relay circuit. Refer to [LAN-230](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0894E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<input checked="" type="checkbox"/> CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	<input checked="" type="checkbox"/> CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0895E

**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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector F56 terminals 3 (L), 4 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

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

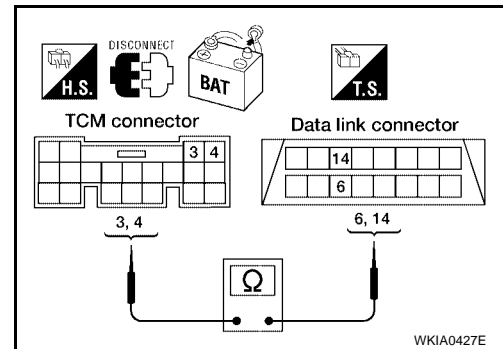
**4 (Y) - 14 (Y) : Continuity should exist.**

OK or NG

OK &gt;&gt; Connect all connectors and diagnose again. Refer to

[LAN-214, "Work Flow"](#)

NG &gt;&gt; Repair harness.

**Circuit Check Between Driver Seat Control Unit and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

**3 (BR) - 6 (L) : Continuity should exist.**

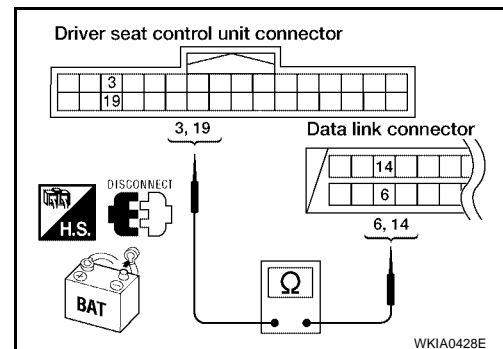
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

OK &gt;&gt; Connect all connectors and diagnose again. Refer to

[LAN-214](#).

NG &gt;&gt; Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

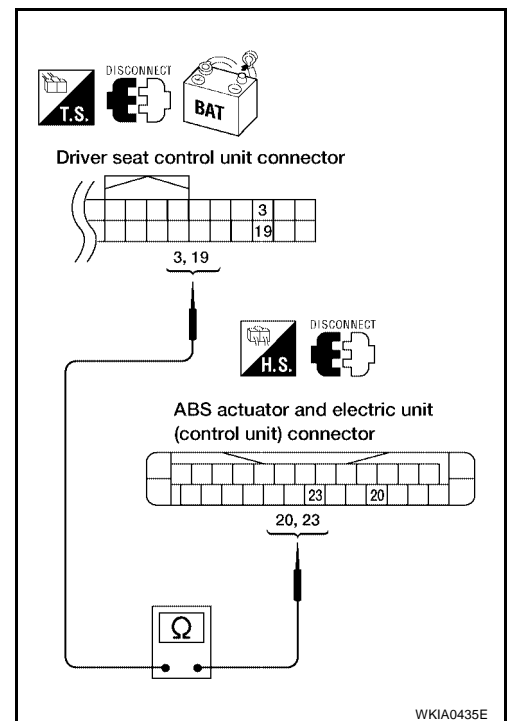
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

- 3 (BR) - 20 (L) : Continuity should exist.**  
**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-214](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

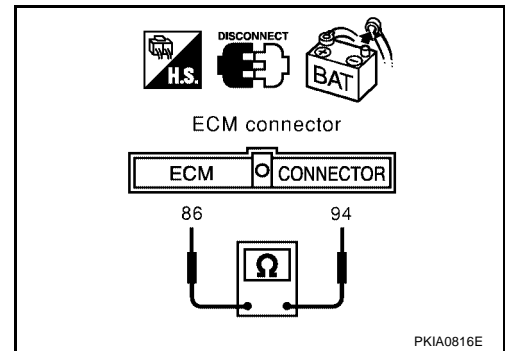
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS005J8

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

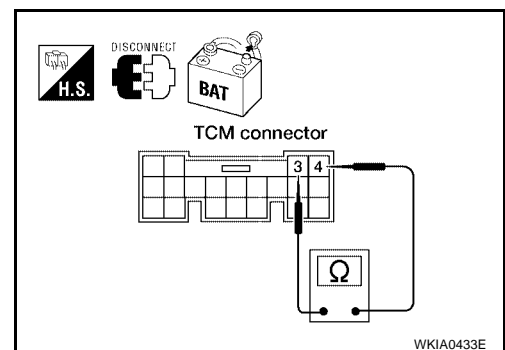
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS005J9

## 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 25 (L) and terminal 26 (Y).

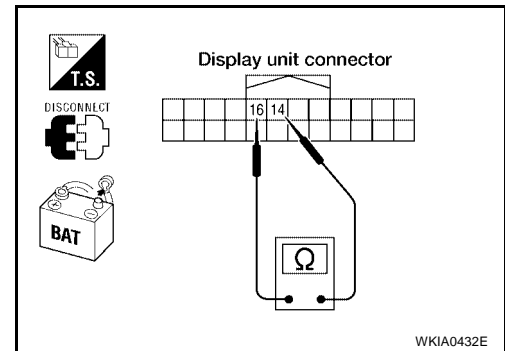
14 (L) - 16 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Replace display unit.

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



EKS005JA

## 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).

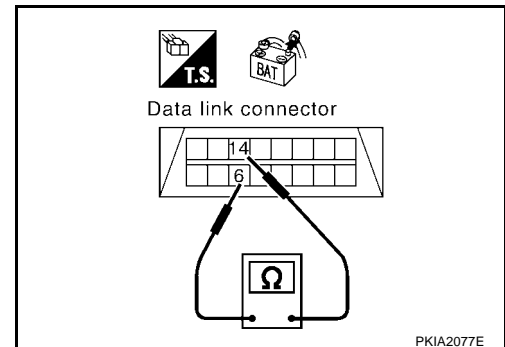
6 (L) - 14 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-214](#).

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



EKS005JB

## 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

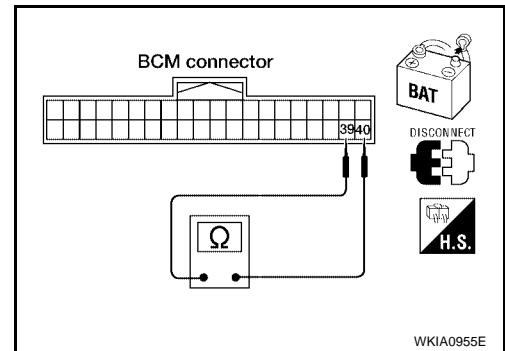
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS005JC

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

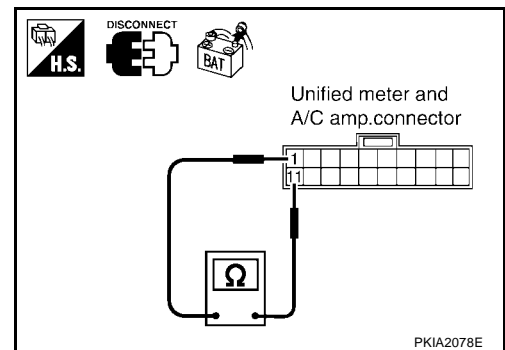
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS005JD

## 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.

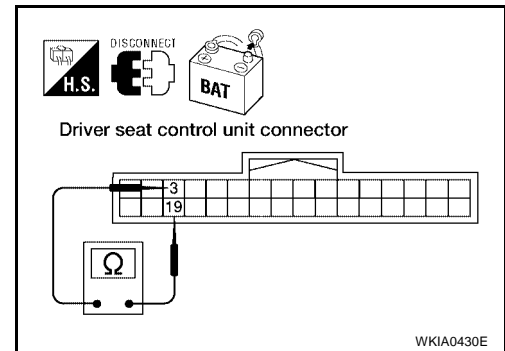
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS005JE

### 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.

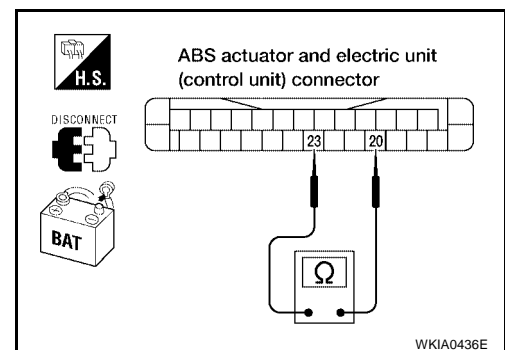
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



## IPDM E/R Circuit Check

EKS005JF

### 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

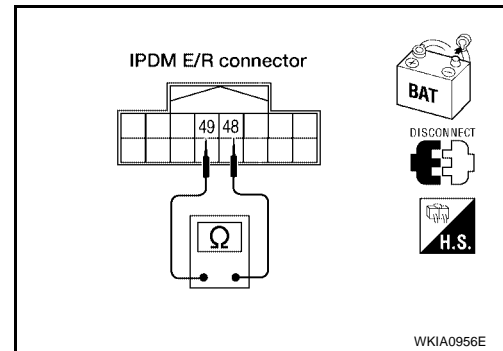
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS005JG

## 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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

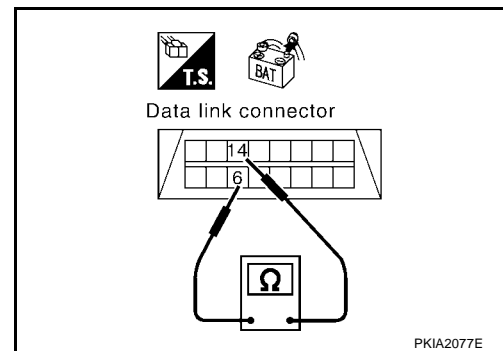
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

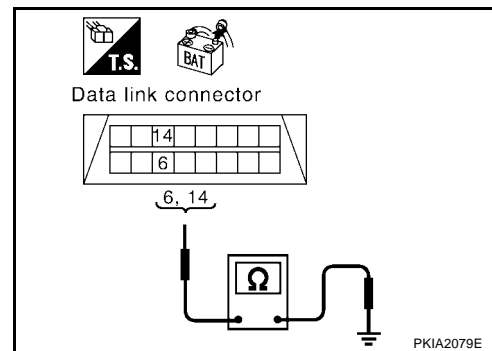
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-230, "Component Inspection"](#).

NG >> Repair the harness.



EKS005JH

### IPDM E/R Ignition Relay Circuit Check

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

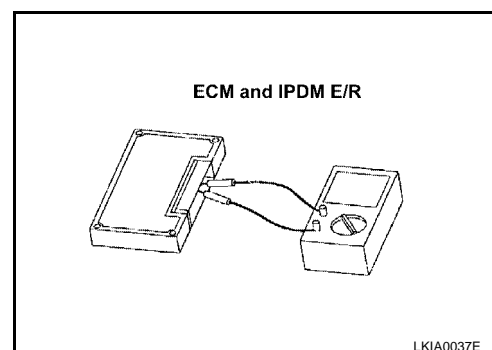
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS005JI



CAN SYSTEM (TYPE 11)

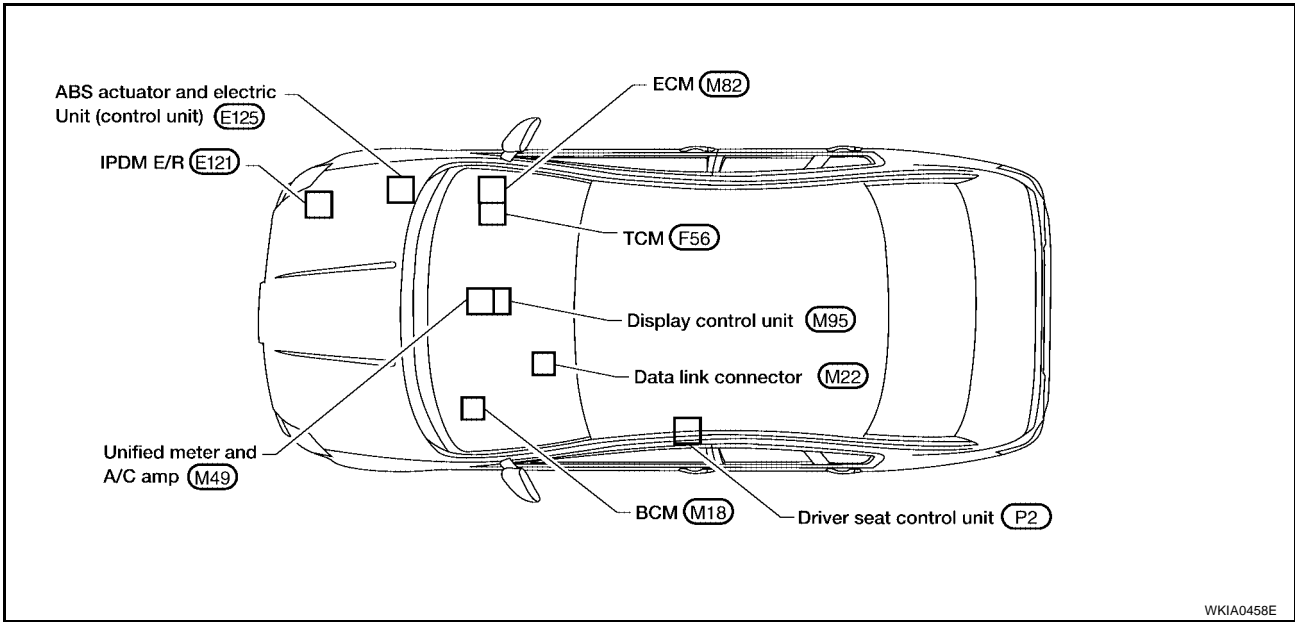
System Description

EKS005JJ

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

EKS005JK



A

B

C

D

E

F

G

H

I

J

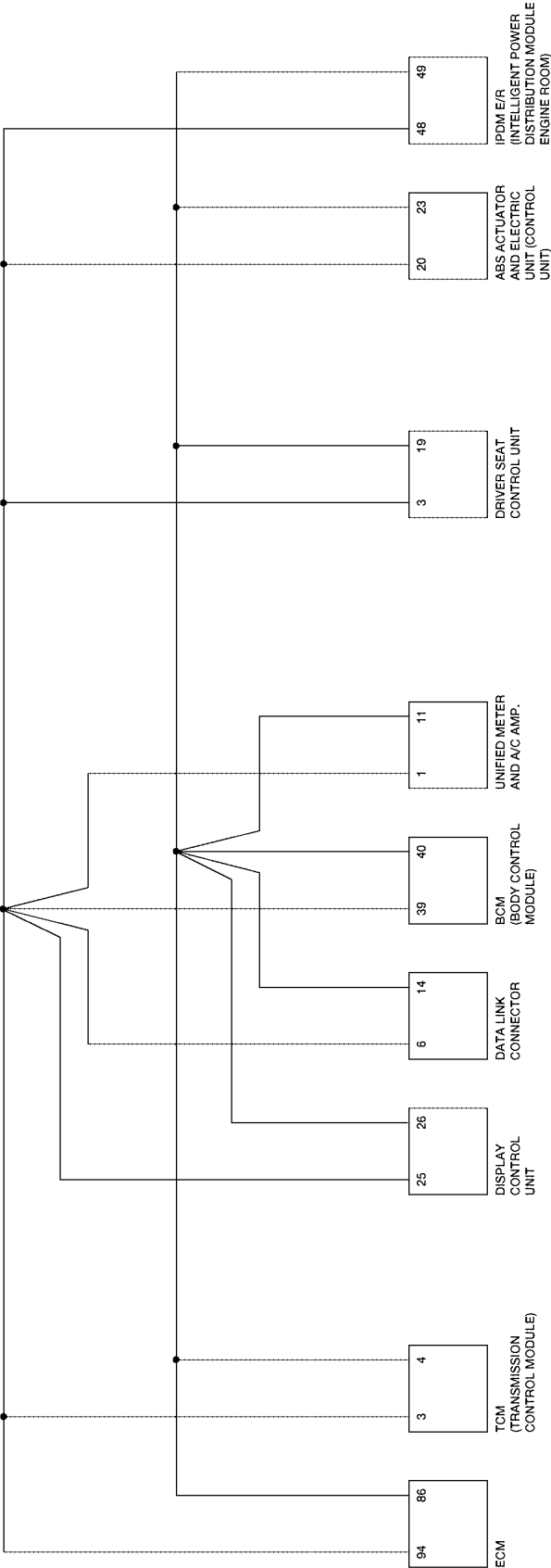
LAN

L

M

Schematic

EKS005JL



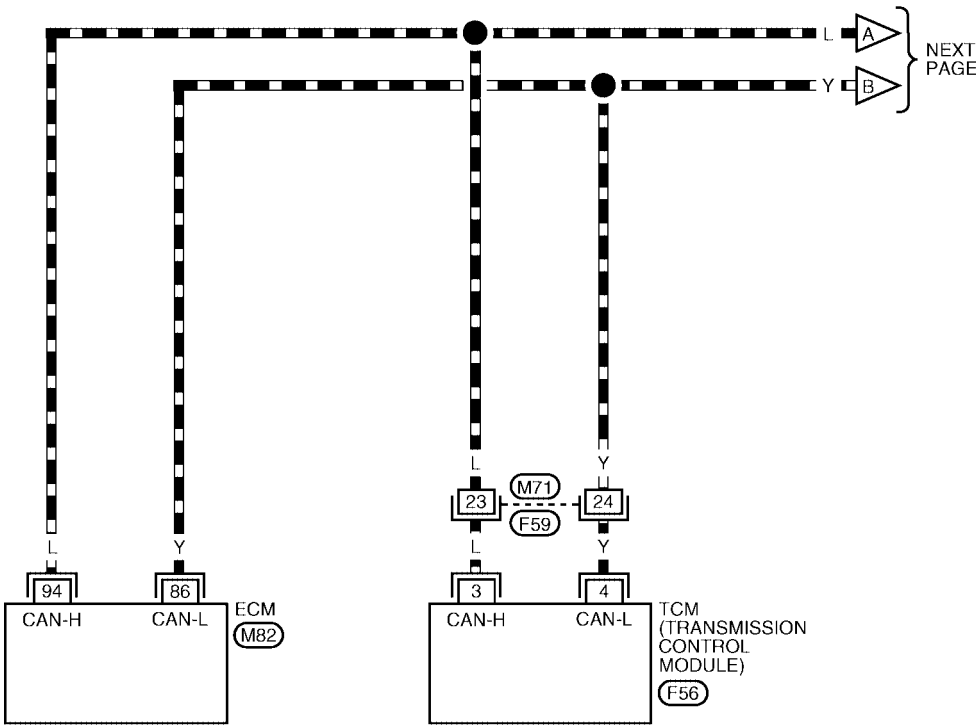
WKWA0470E


Wiring Diagram - CAN -

EKS005JM

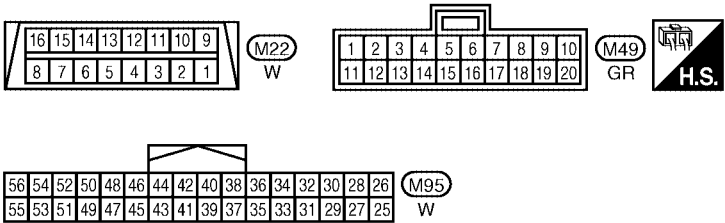
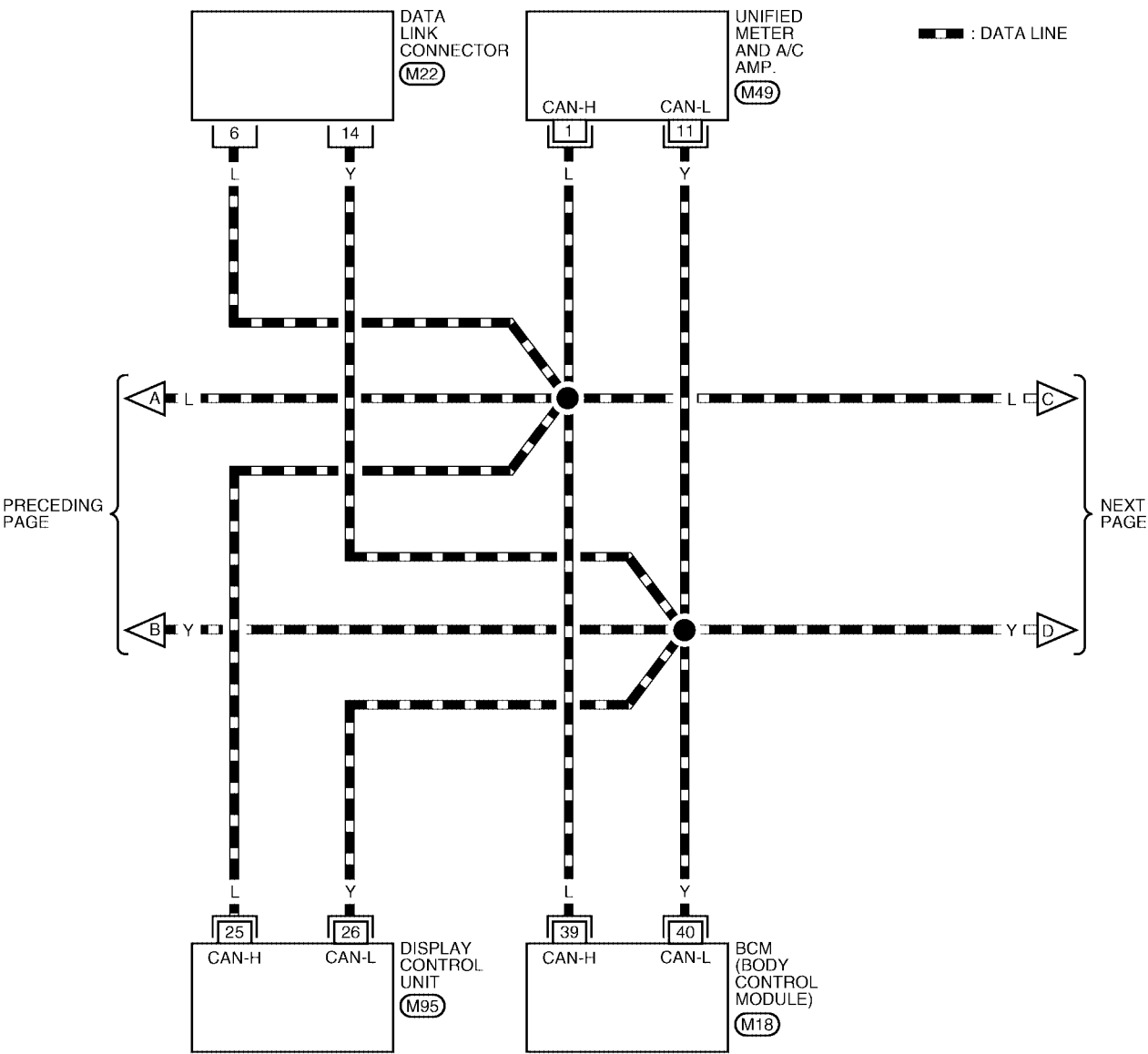
LAN-CAN-31

: DATA LINE



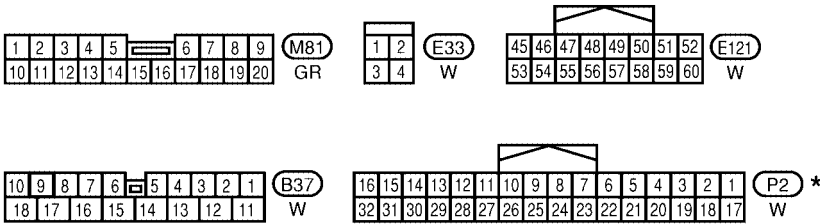
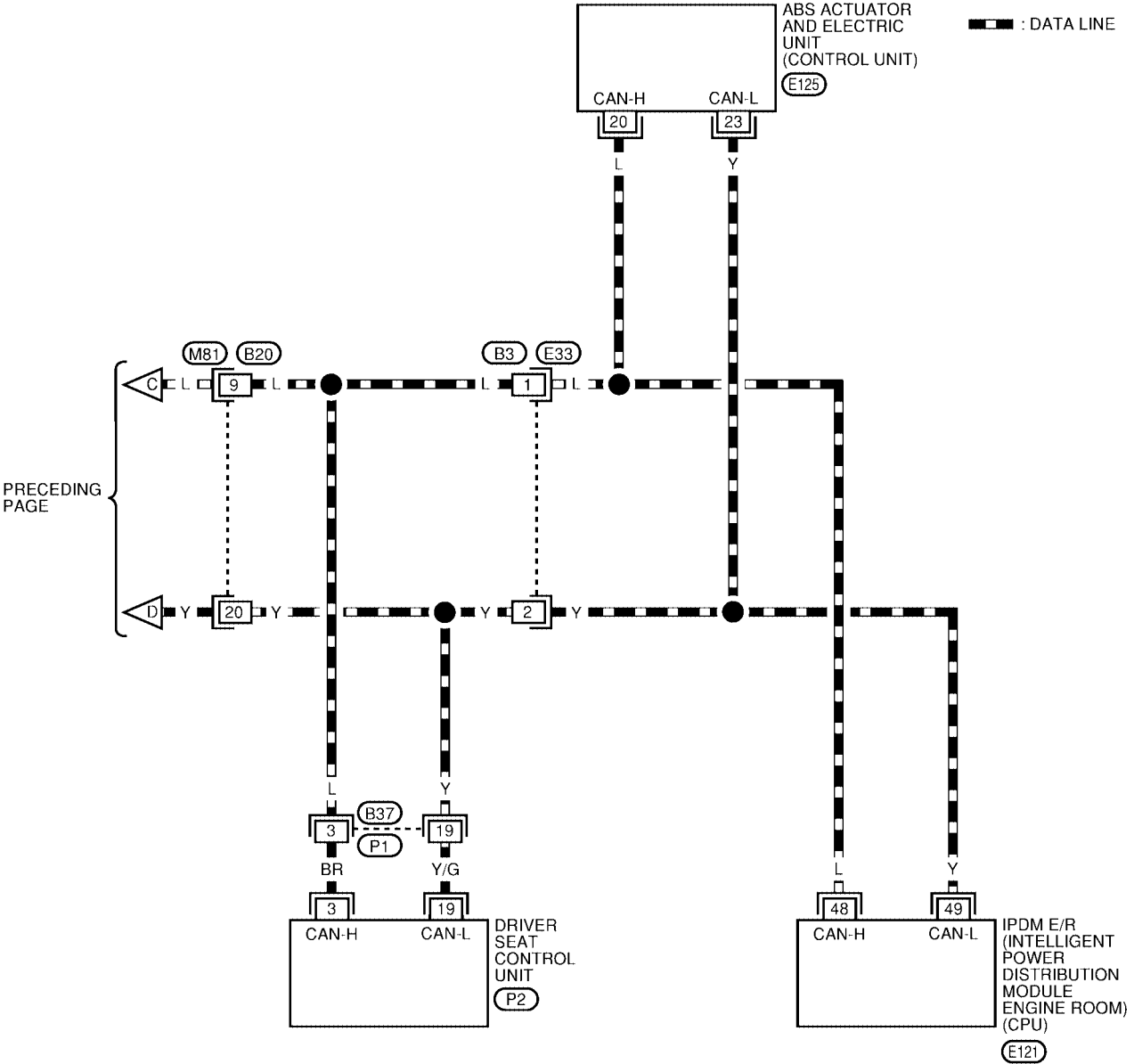
1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS



REFER TO THE FOLLOWING.  
(M18) - ELECTRICAL UNITS

LAN-CAN-33

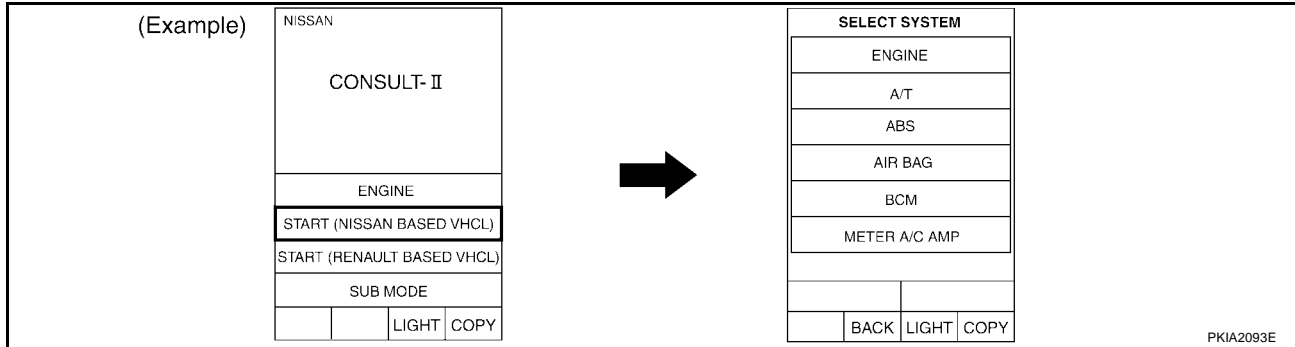


REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

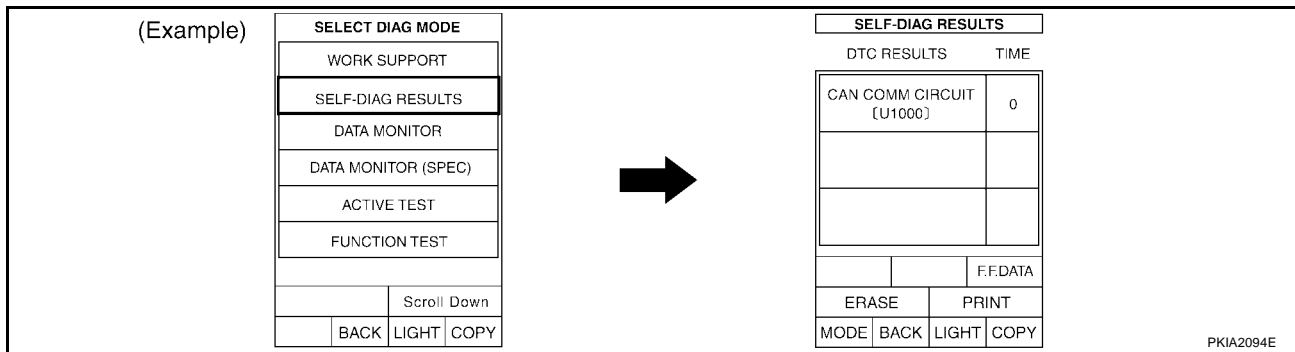
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

## Work Flow

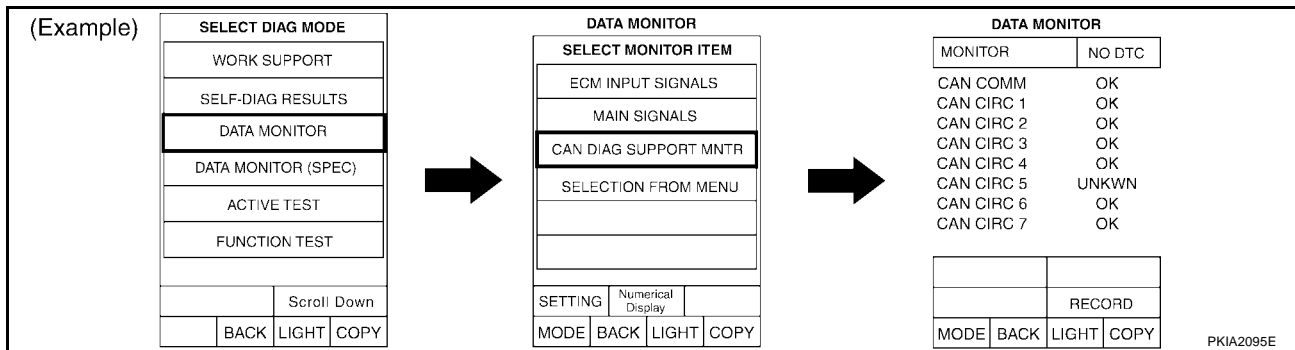
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0447E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.



- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- Check CAN communication line of the navigation system.
- 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.

- According to the Check Sheet Results, start inspection.

**CHECK SHEET RESULTS****Case 1**

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0896E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0897E

# CAN SYSTEM (TYPE 11)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0898E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0899E

## Case 3

Replace display control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0900E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0901E

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0902E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0903E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0904E

# CAN SYSTEM (TYPE 11)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0905E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0906E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0907E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0908E

# CAN SYSTEM (TYPE 11)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0909E

## Case 9

Check harness between TCM and data link connector. Refer to LAN-245

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0910E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to LAN-245 .

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0911E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to LAN-246 .

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0912E

# CAN SYSTEM (TYPE 11)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-246](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0913E

## Case 13

Check TCM circuit. Refer to [LAN-247](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0914E

## Case 14

Check display control unit circuit. Refer to [LAN-247](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0915E

## Case 15

Check data link connector circuit. Refer to [LAN-248](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0916E

# CAN SYSTEM (TYPE 11)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-248](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	CAN CIRC 2	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0917E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-249](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	CAN CIRC 2	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0918E

## Case 18

Check driver seat control unit circuit. Refer to [LAN-249](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0919E

## Case 19

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-250](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0920E

**Case 20**Check IPDM E/R circuit. Refer to [LAN-250](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	<input checked="" type="checkbox"/> CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	<input checked="" type="checkbox"/> CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0921E

**Case 21**Check CAN communication circuit. Refer to [LAN-251](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	<input checked="" type="checkbox"/> CAN CIRC 4	<input checked="" type="checkbox"/> CAN CIRC 6	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 3	-	-	<input checked="" type="checkbox"/> CAN CIRC 5	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 7
METER A/C AMP	<input checked="" type="checkbox"/> No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	<input checked="" type="checkbox"/> No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	<input checked="" type="checkbox"/> CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	<input checked="" type="checkbox"/> No Disp	-	CIRC 1	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0922E

**Case 22**Check IPDM E/R Ignition relay circuit. Refer to [LAN-252](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<input checked="" type="checkbox"/> CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0923E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	-	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<input checked="" type="checkbox"/> CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	<input checked="" type="checkbox"/> CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0924E



**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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

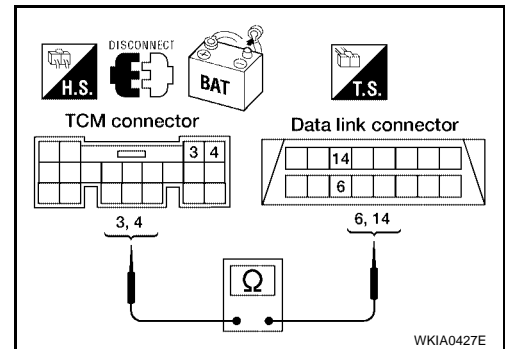
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector F56 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-236, "Work Flow"](#).  
 NG >> Repair harness.



WKIA0427E

**Circuit Check Between Driver Seat Control Unit and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

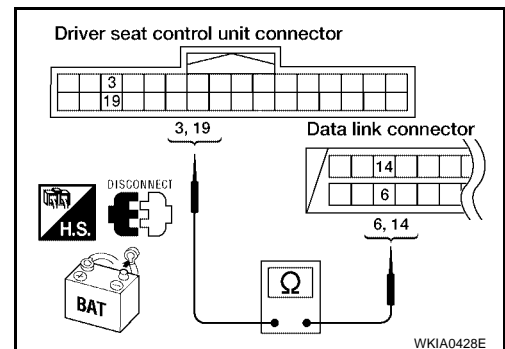
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-236](#).  
 NG >> Repair harness.



WKIA0428E

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

EKS005JQ

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
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

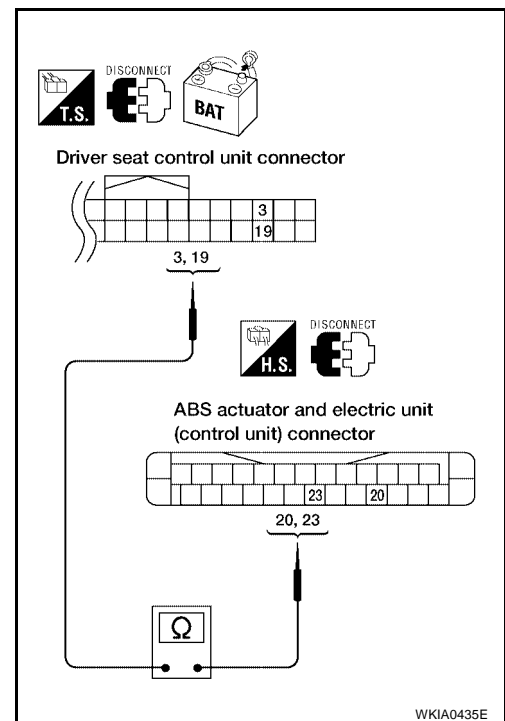
Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**3 (BR) - 20 (L) : Continuity should exist.**

**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-236](#).  
NG >> Repair harness.



## ECM Circuit Check

EKS005JR

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

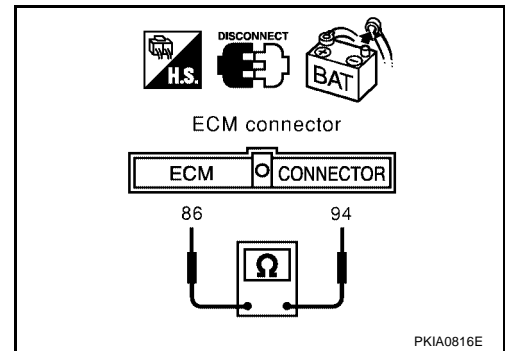
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS005JS

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

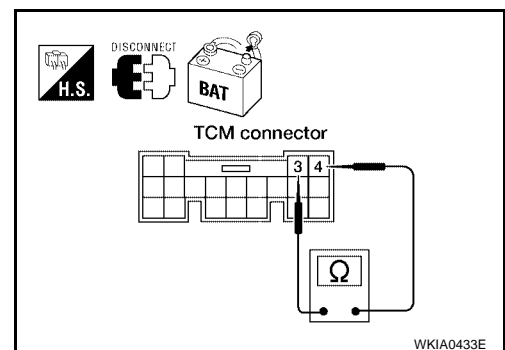
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS005JT

## 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

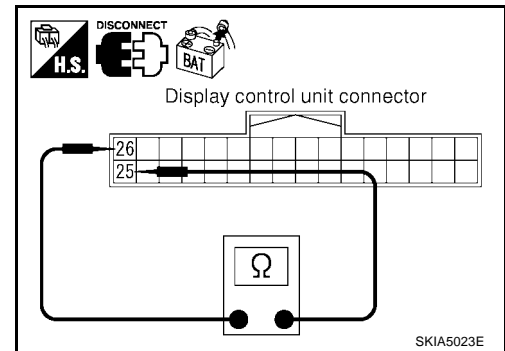
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS005JU

## 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

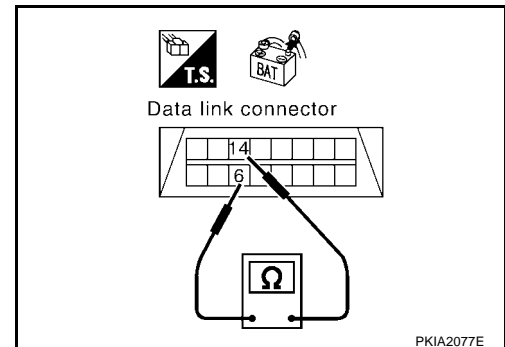
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-236](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS005JV

## 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

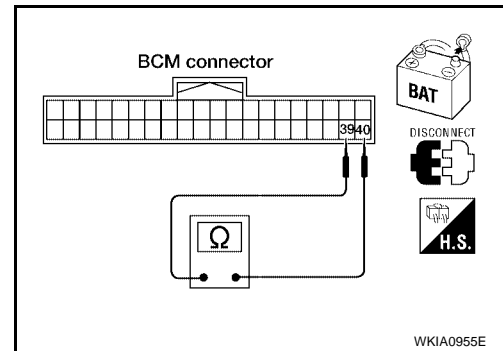
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS005JW

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

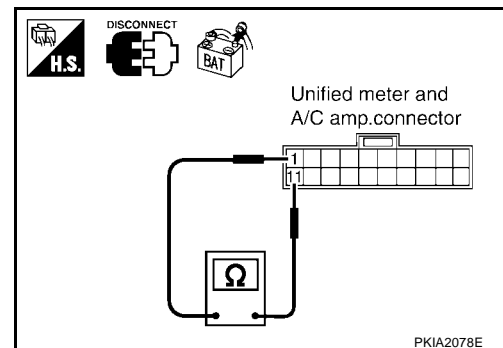
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS005JX

## 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.

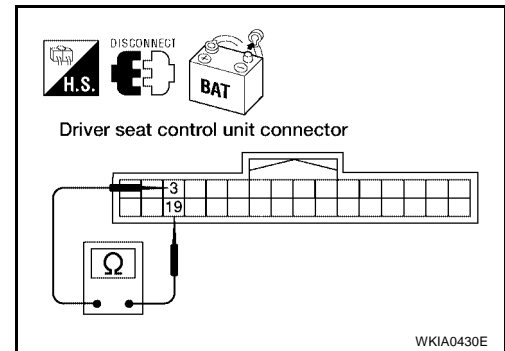
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS005JY

### 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.

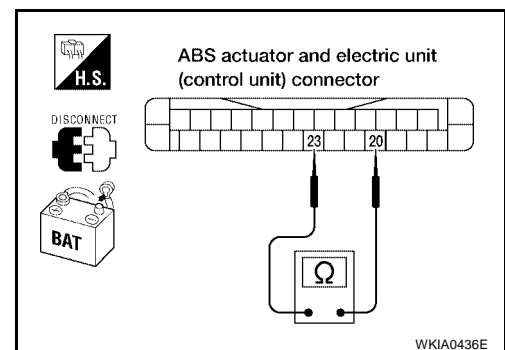
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



## IPDM E/R Circuit Check

EKS005JZ

### 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

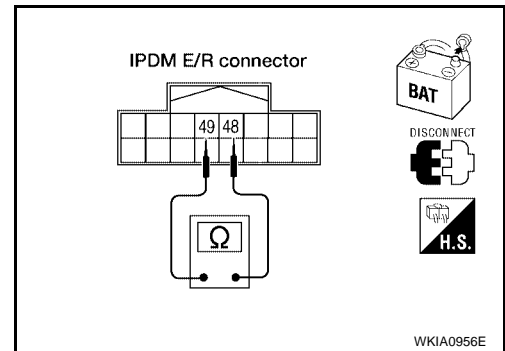
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS005K0

## 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)
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

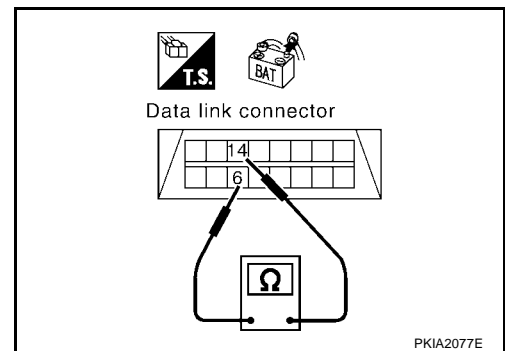
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

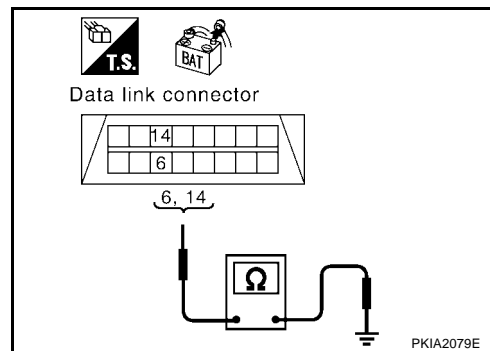
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-252, "Component Inspection"](#).

NG >> Repair the harness.



EKS005K1

### IPDM E/R Ignition Relay Circuit Check

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

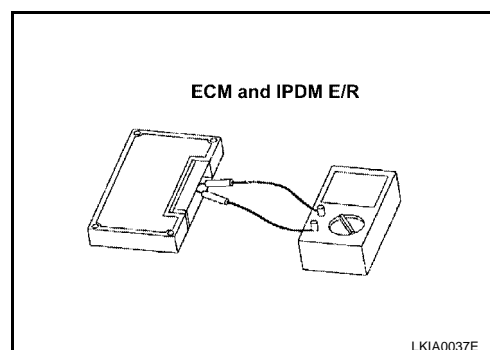
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS005K2





CAN SYSTEM (TYPE 12)

PFP:23710

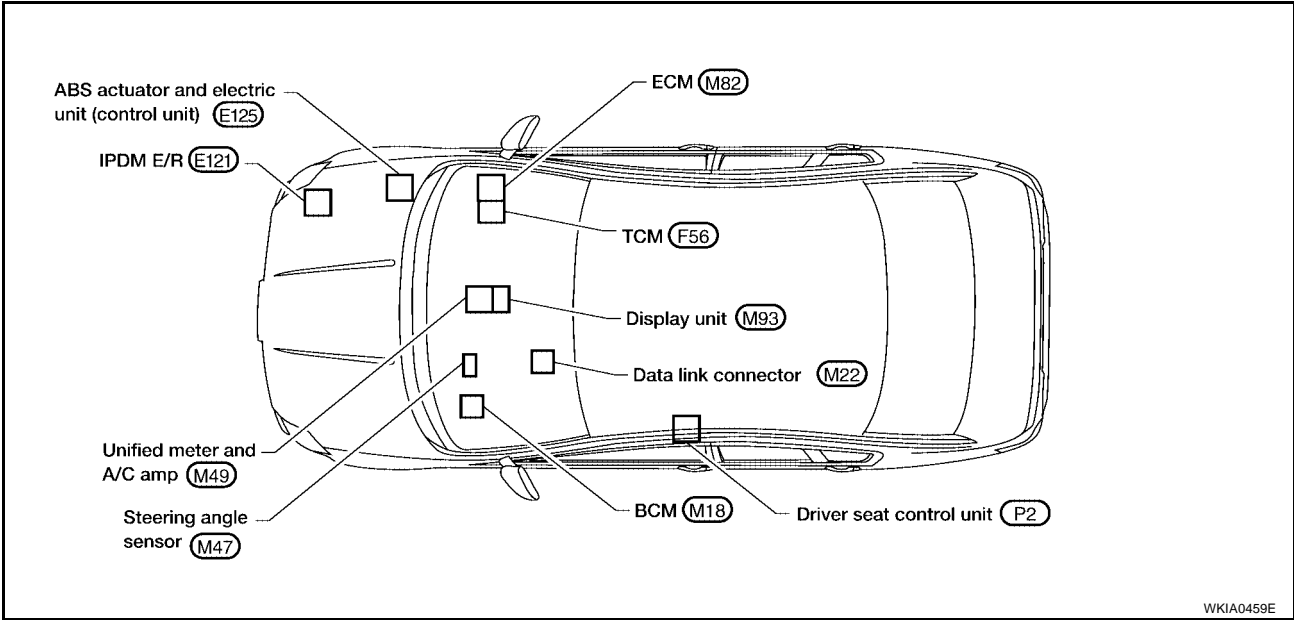
System Description

EKS005HB

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

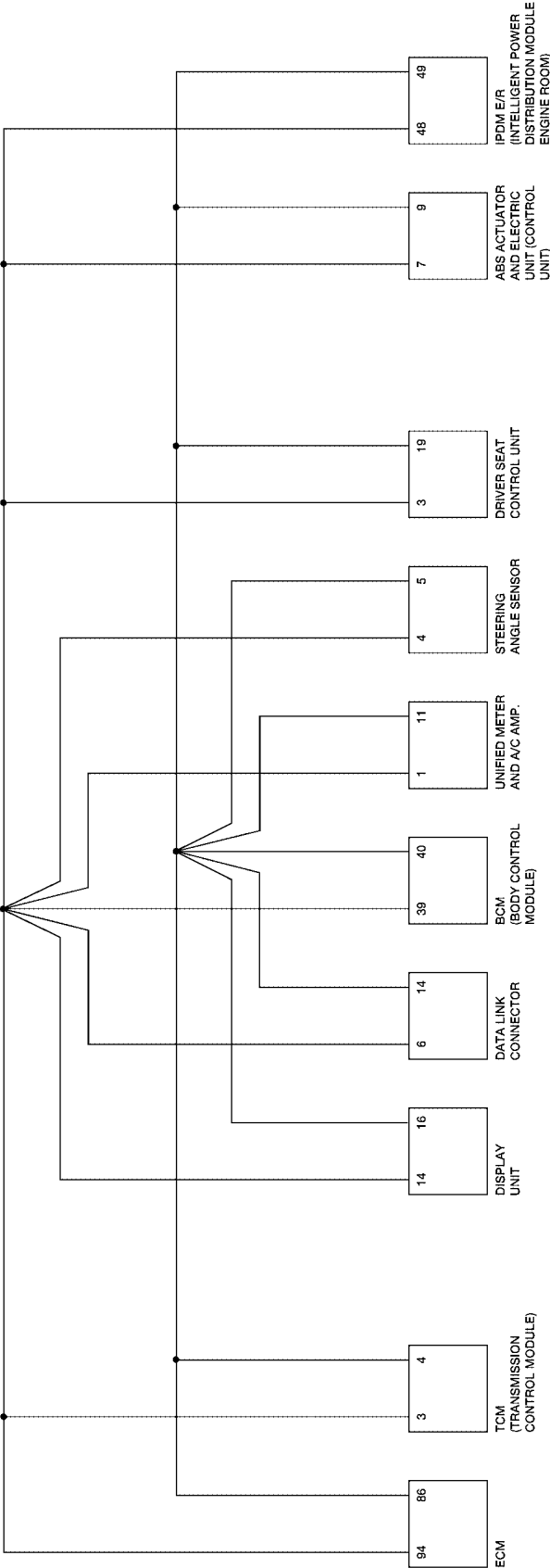
EKS005HC



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

Schematic

EKS005HD

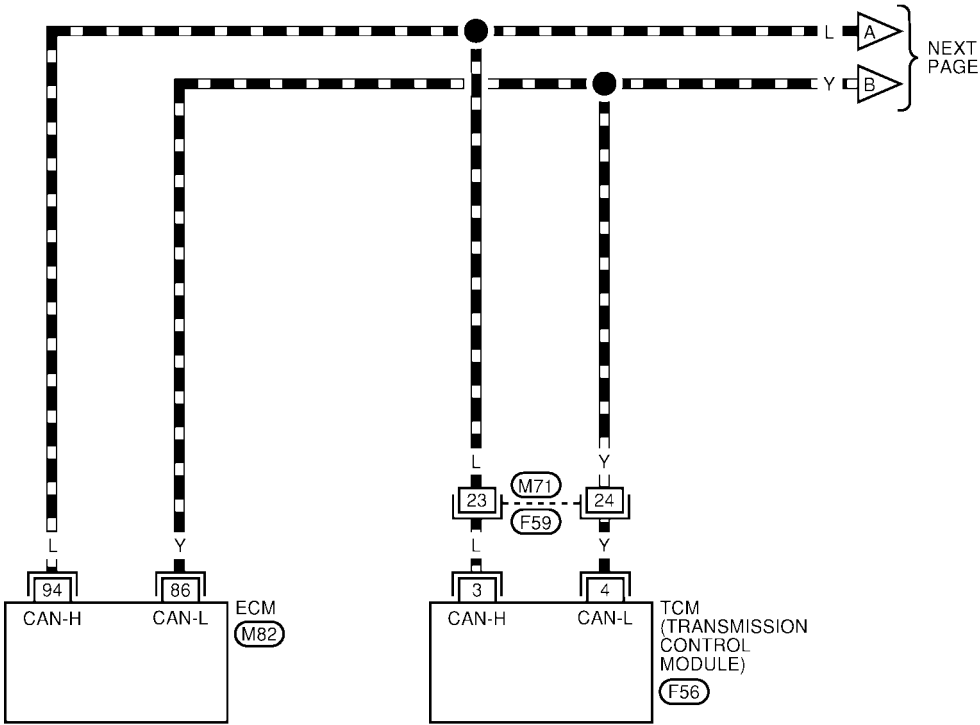



Wiring Diagram - CAN -

EKS005HE

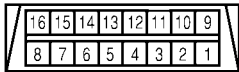
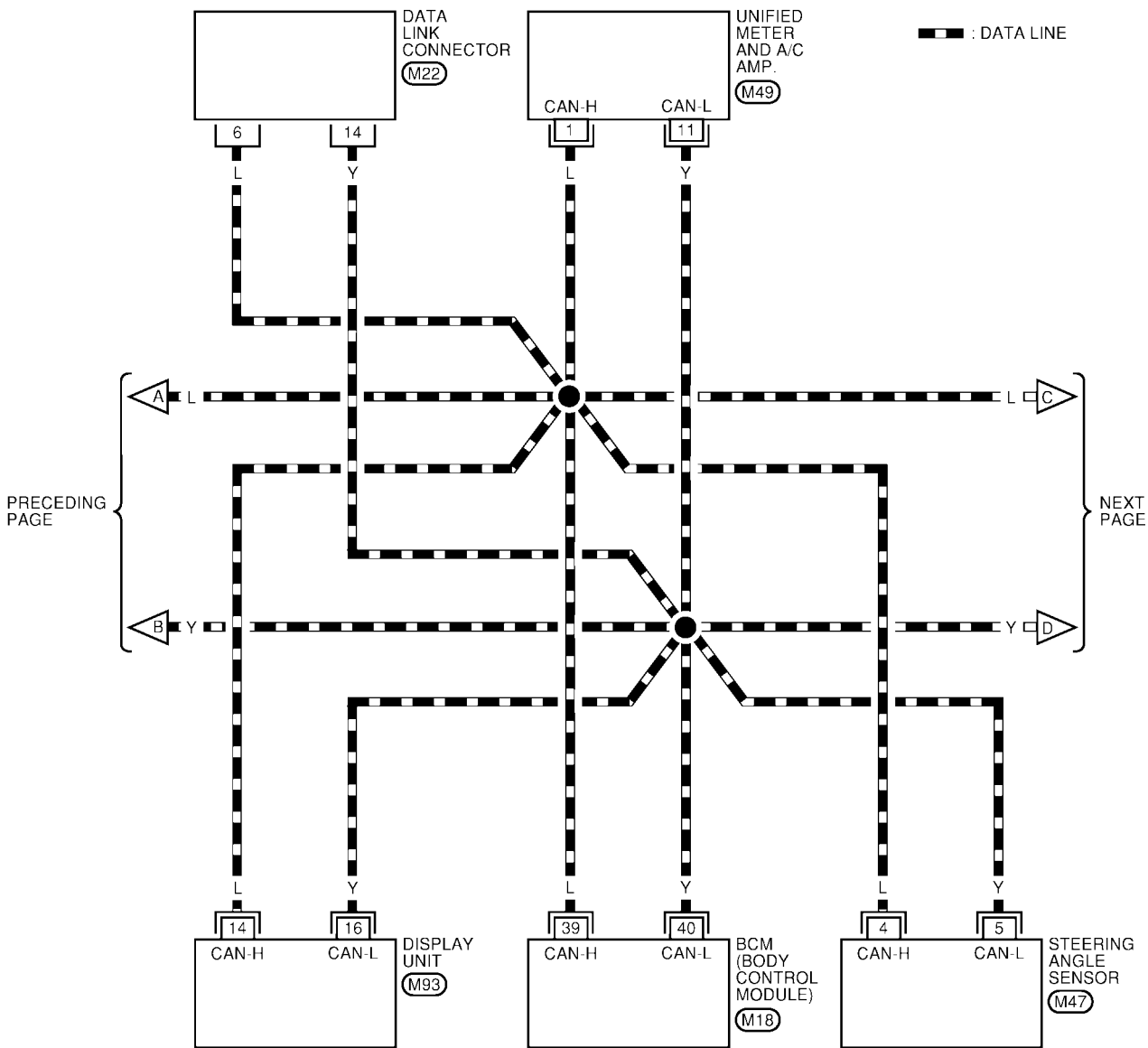
LAN-CAN-34

DATA LINE

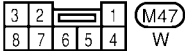


1	2	3	4	5	6			7	8	9	10	11	<div>F59</div> <div>W</div>
12	13	14	15	16	17	18	19	20	21	22	23	24	

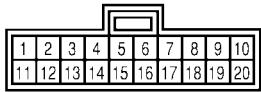
REFER TO THE FOLLOWING.  
M82 , F56 - ELECTRICAL  
UNITS



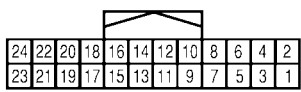
M22  
W



M47  
W

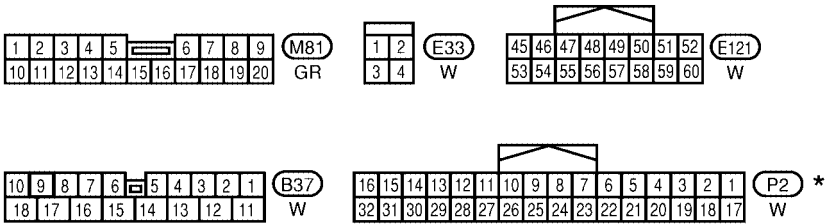
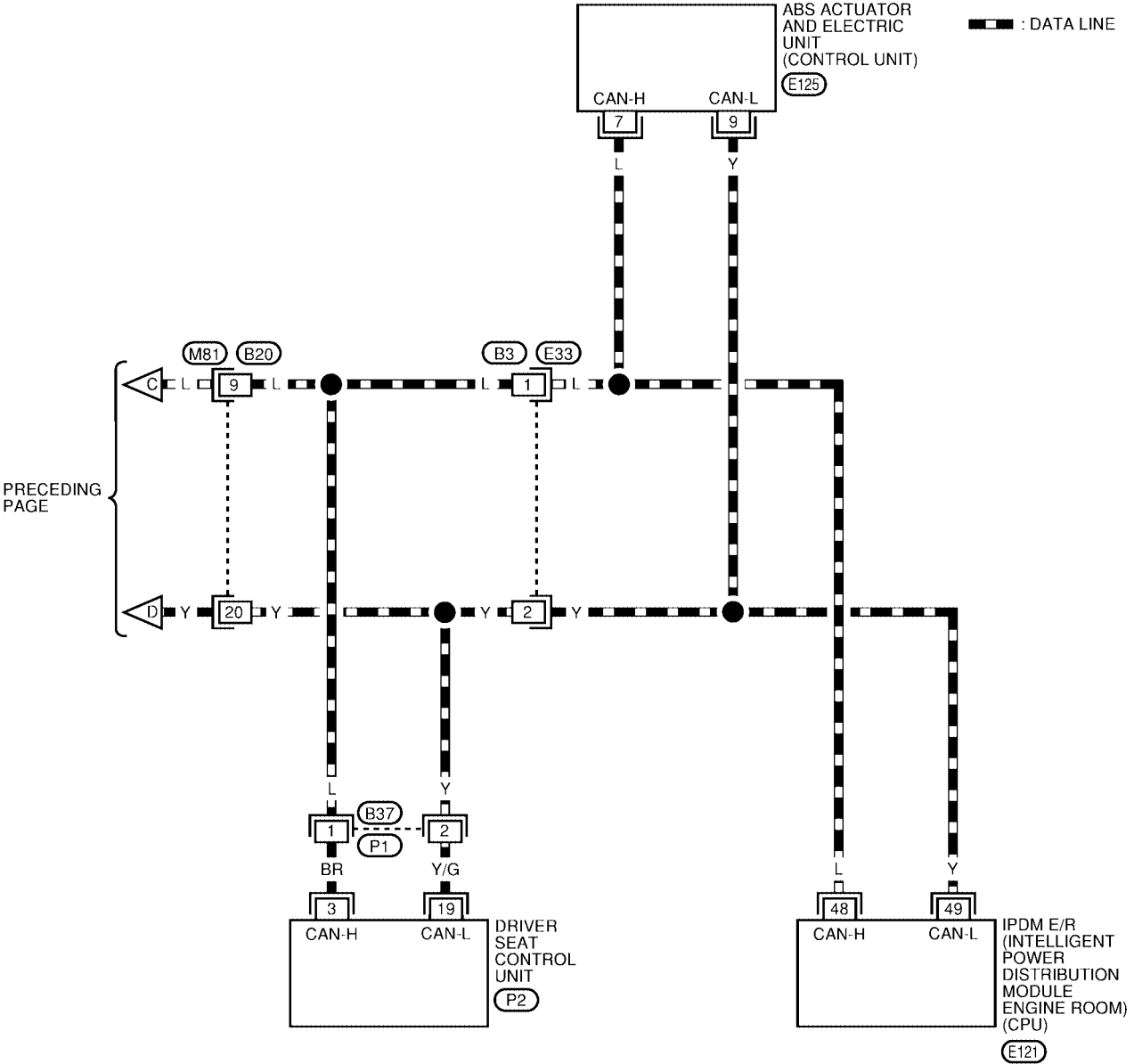


M49  
GR



M93  
W

REFER TO THE FOLLOWING.  
M18 - ELECTRICAL UNITS



REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

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

## Work Flow

- When there are no indications of “TRANSMISSION”, “METER A/C AMP”, “BCM”, “IPDM E/R” or “AUTO DRIVE POS.” on “SELECT SYSTEM” display of CONSULT-II, print the “SELECT SYSTEM”.

(Example)

NISSAN				SELECT SYSTEM	
CONSULT-II				ENGINE	
ENGINE				A/T	
START (NISSAN BASED VHCL)				ABS	
START (RENAULT BASED VHCL)				AIR BAG	
SUB MODE				BCM	
				METER A/C AMP	
	LIGHT			BACK LIGHT COPY	

PKIA2093E

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

(Example)

SELECT DIAG MODE		SELF-DIAG RESULTS	
WORK SUPPORT		DTC RESULTS TIME	
SELF-DIAG RESULTS		CAN COMM CIRCUIT [U1000] 0	
DATA MONITOR			
DATA MONITOR (SPEC)			
ACTIVE TEST			
FUNCTION TEST			
Scroll Down		F.F.DATA	
BACK LIGHT COPY		ERASE PRINT	
		MODE BACK LIGHT COPY	

PKIA2094E

- Print all the data of “DATA MONITOR (CAN DIAG SUPPORT MNTR)” for “ENGINE”, “TRANSMISSION”, “BCM”, “METER A/C AMP”, “AUTO DRIVE POS.”, “IPDM E/R” and “ABS” displayed on CONSULT-II.

(Example)

SELECT DIAG MODE		DATA MONITOR		DATA MONITOR	
WORK SUPPORT		SELECT MONITOR ITEM		MONITOR NO DTC	
SELF-DIAG RESULTS		ECM INPUT SIGNALS		CAN COMM OK	
DATA MONITOR		MAIN SIGNALS		CAN CIRC 1 OK	
DATA MONITOR (SPEC)		CAN DIAG SUPPORT MNTR		CAN CIRC 2 OK	
ACTIVE TEST		SELECTION FROM MENU		CAN CIRC 3 OK	
FUNCTION TEST				CAN CIRC 4 OK	
Scroll Down				CAN CIRC 5 UNKWN	
BACK LIGHT COPY		SETTING Numerical Display		CAN CIRC 6 OK	
		MODE BACK LIGHT COPY		CAN CIRC 7 OK	
				RECORD	
				MODE BACK LIGHT COPY	

PKIA2095E

- Based on the indications of “SELECT SYSTEM” and the results of “DATA MONITOR (CAN DIAG SUPPORT MNTR)”, put marks onto the items with “No indication”, “NG”, or “UNKWN” in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator (and electric unit control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0448E

## NOTE:

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

# CAN SYSTEM (TYPE 12)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0925E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0926E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 2</del>	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 4</del>	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>	-	-	CAN CIRC5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0927E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	-	-	<del>CAN CIRC 4</del>	-	-	-	<del>CAN CIRC 3</del>	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRCS	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0928E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE PGS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRCS	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0929E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0930E



# CAN SYSTEM (TYPE 12)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<b>CAN COMM</b>	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE PGS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-







WKIA0931E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0932E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	 CAN CIRC 2	 CAN CIRC 3	 CAN CIRC 7	-	-	 CAN CIRC 4	-	 CAN CIRC 5	 CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0933E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	<del>CAN COMM</del>	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0934E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 4</del>	-	<del>CAN CIRC 3</del>	-	<del>CAN CIRC 2</del>	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0935E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	<del>CAN CIRC 3</del>	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	<del>CAN CIRC 3</del>	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	<del>CAN COMM</del>	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0936E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	<del>CAN CIRC 3</del>	-	-	<del>CAN CIRC 5</del>	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-



WKIA0937E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE PGS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	 CAN CIRC 3	-	-	-	-	 CAN CIRC 2	-	-	-

WKIA0938E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-268](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0939E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-268](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	<del>CAN CIRC 3</del>	<del>CAN CIRC 7</del>
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	<del>CAN CIRC 3</del>	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	<del>CAN CIRC 7</del>
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	<del>CAN CIRC 5</del>	<del>CAN CIRC 6</del>
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	<del>CAN CIRC 3</del>
AUTO DRIVE POS.	<del>No Disp</del>	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	<del>CAN CIRC 2</del>	<del>CAN CIRC 3</del>	-	-	<del>CAN CIRC 5</del>	-	-	-	-
IPDM E/R	<del>No Disp</del>	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0940E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-269](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	✓ CIRC 3	✓ CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	✓	✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	✓ CIRC 5	✓ CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	✓ CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	✓ CIRC 2	✓ CIRC 3	-	-	✓ CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0941E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-269](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0942E

## Case 13

Check TCM circuit. Refer to [LAN-270](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 2	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0943E

## Case 14







Check display unit circuit. Refer to [LAN-270](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 2	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0944E

## Case 15

Check data link connector circuit. Refer to [LAN-271](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP		-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.		CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R		-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0945E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-271](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	- CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0946E

WKIA0946E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-272](#).


	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0947E

WKIA0947E

## Case 18

Check steering angle sensor circuit. Refer to [LAN-272](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	 CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0948E

WKIA0948E

## Case 19

Check driver seat control unit circuit. Refer to [LAN-273](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0949E

WKIA0949E

# CAN SYSTEM (TYPE 12)

[CAN]

## Case 20

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-273](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0950E

## Case 21

Check IPDM E/R circuit. Refer to [LAN-274](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0951E

## Case 22





Check CAN communication circuit. Refer to [LAN-275](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0952E

## Case 23

Check IPDM E/R Ignition relay circuit. Refer to [LAN-275](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	 CAN CIRC 2	-	-	 CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE PGS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	 CAN CIRC 2	CAN CIRC 3	-	-	 CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0953E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 2</del>	-	CAN CIRC 4	-	CAN CIRC 6	-	<del>CAN CIRC 3</del>	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	-	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	<del>CAN CIRC 3</del>	CAN CIRC 7	-	-	CAN CIRC 4	-	<del>CAN CIRC 5</del>	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	<del>CAN CIRC 4</del>	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0954E

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

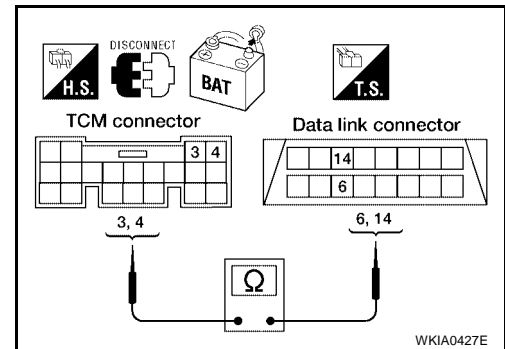
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-258, "Work Flow"](#).  
 NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

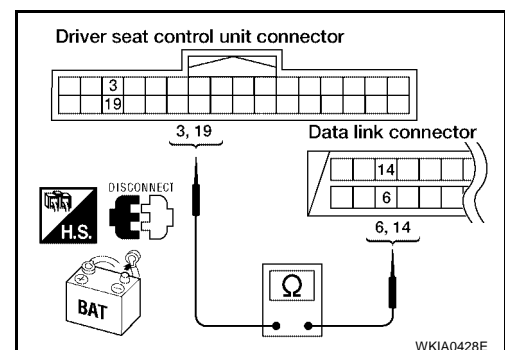
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-258](#).  
 NG >> Repair harness.





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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

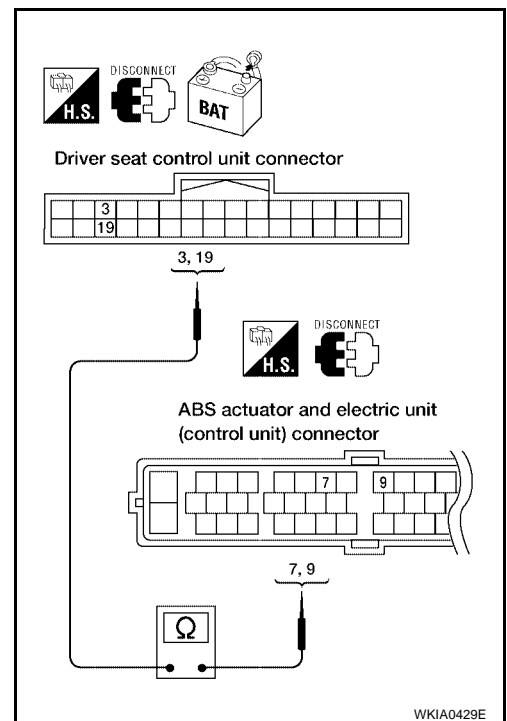
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 7 (L), 9 (Y).

- 3 (BR) - 7 (L) : Continuity should exist.**  
**19 (Y/G) - 9 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-258](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

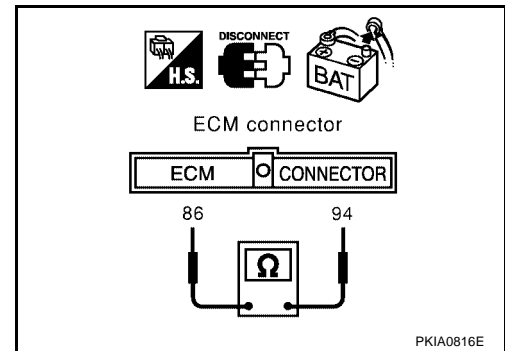
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS005HK

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

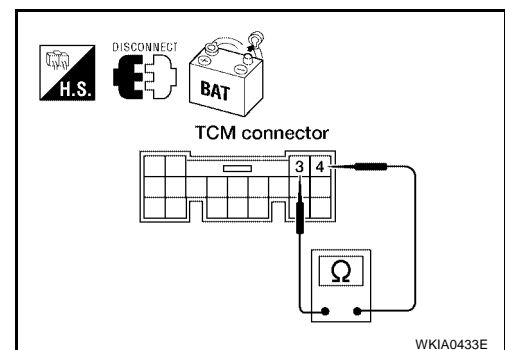
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS005HL

## 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

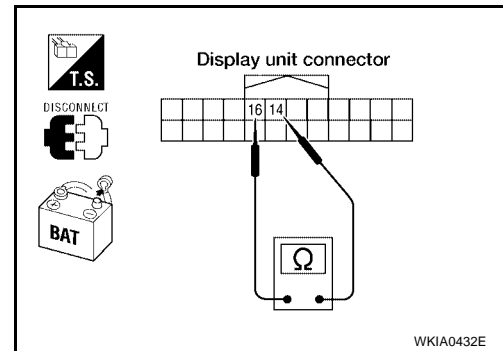
Check resistance between display control unit connector M93 terminal 14 (L) and terminal 16 (Y).

**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.



EKS005HM

## 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

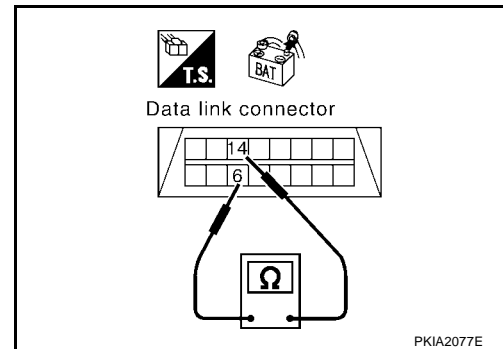
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-258](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS005HN

## 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

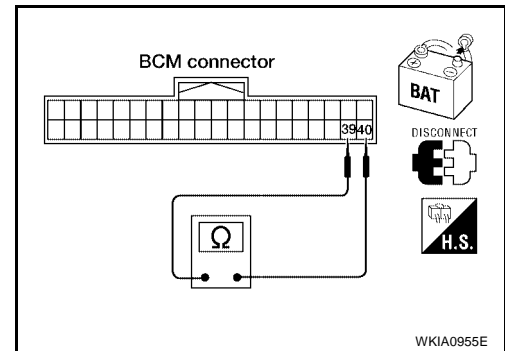
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS005HO

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

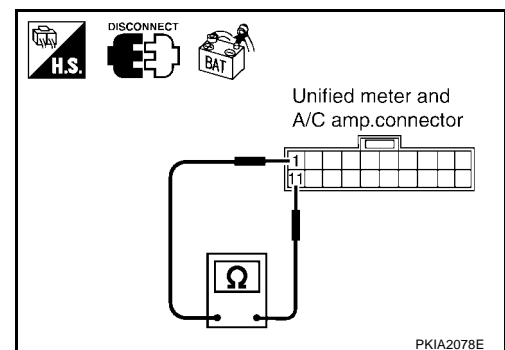
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS005HP

## 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

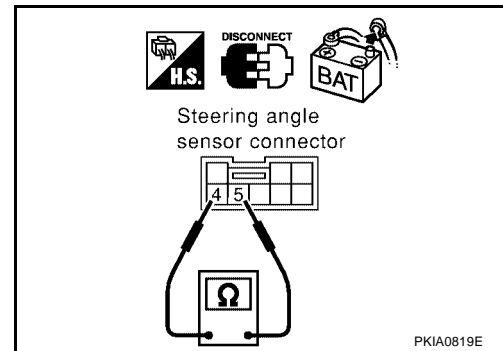
Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**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.



EKS005HQ

## 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

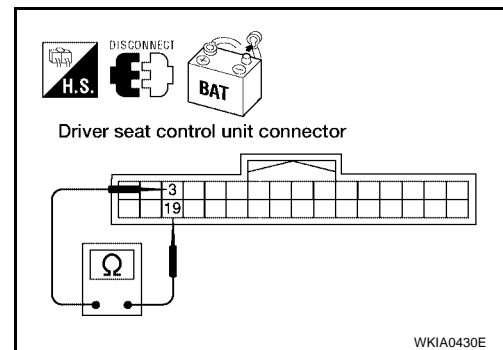
Check resistance between driver seat control unit connector P2 terminal 3 (BR) and terminal 19 (Y/G).

**3 (BR) - 19 (Y/G)**

**: 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.



EKS005HR

## 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

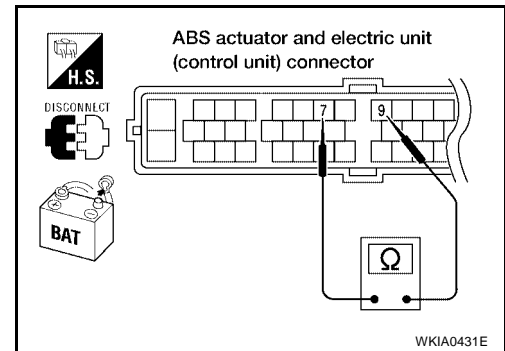
Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**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 IPDM E/R connector E121.



EKS005HS

## 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

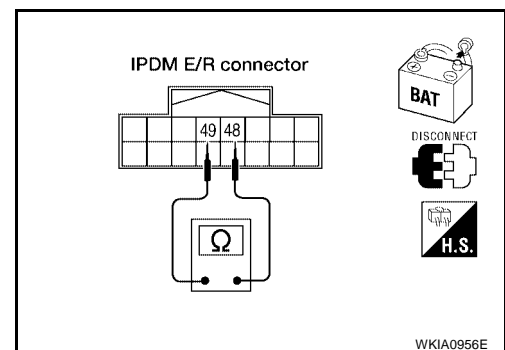
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



**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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Steering angle sensor
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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**

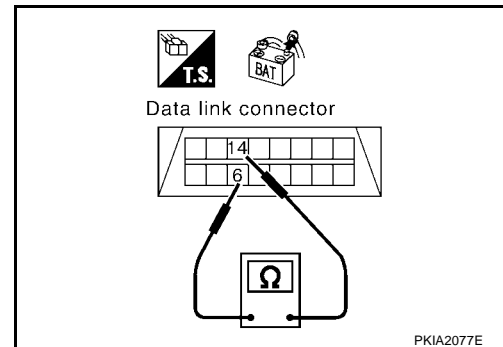
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

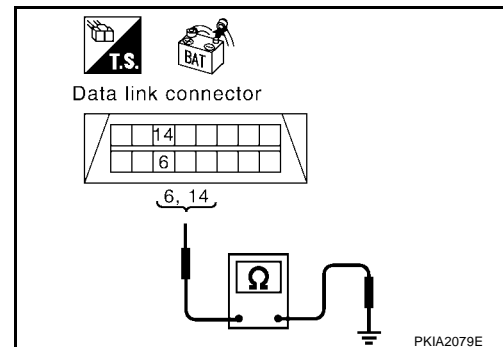
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-276, "Component Inspection"](#)

NG >> Repair the harness.

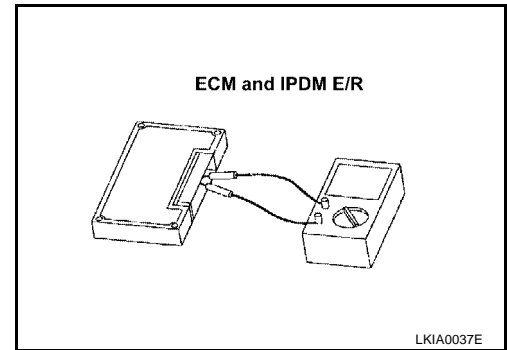
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

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

- Remove ECM and IPDM E/R from vehicle.
- 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 13)

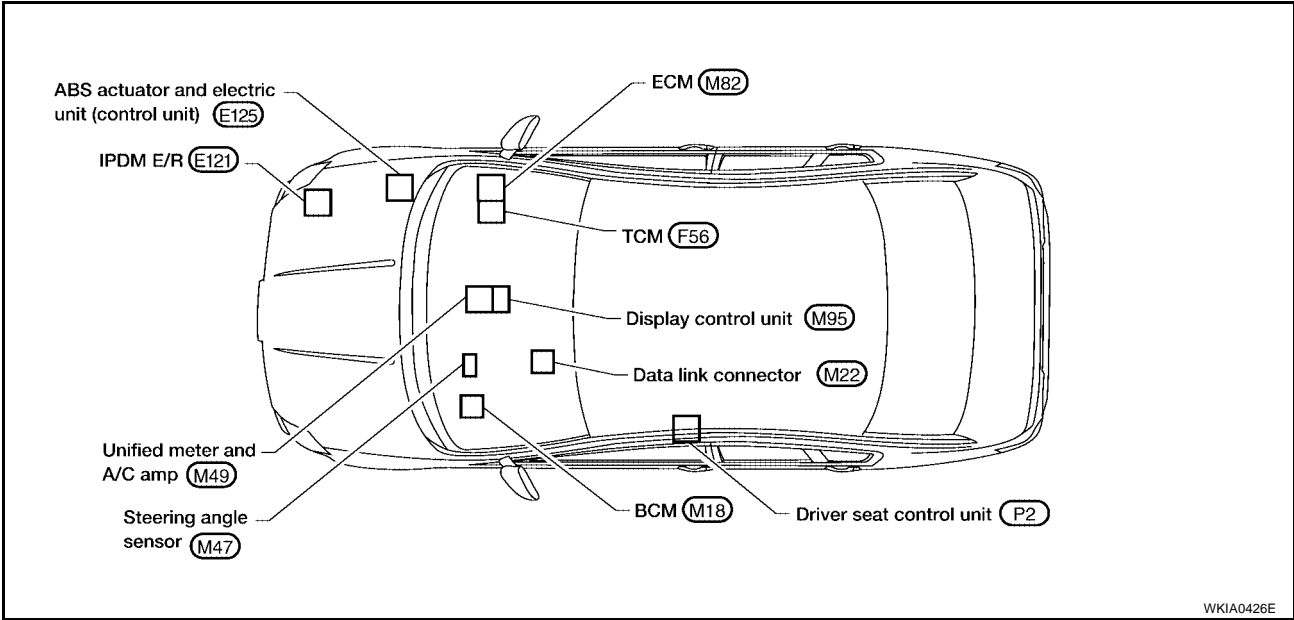
System Description

EKS005HW

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

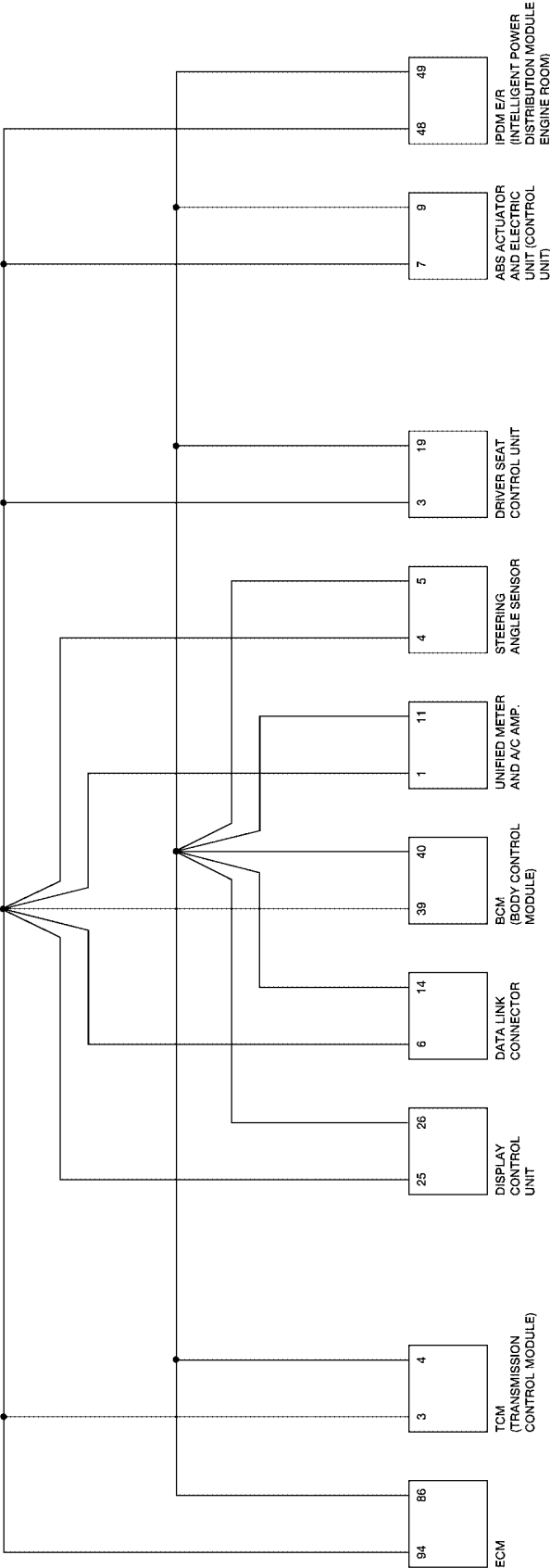
EKS005HX



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

Schematic

EKS005HY

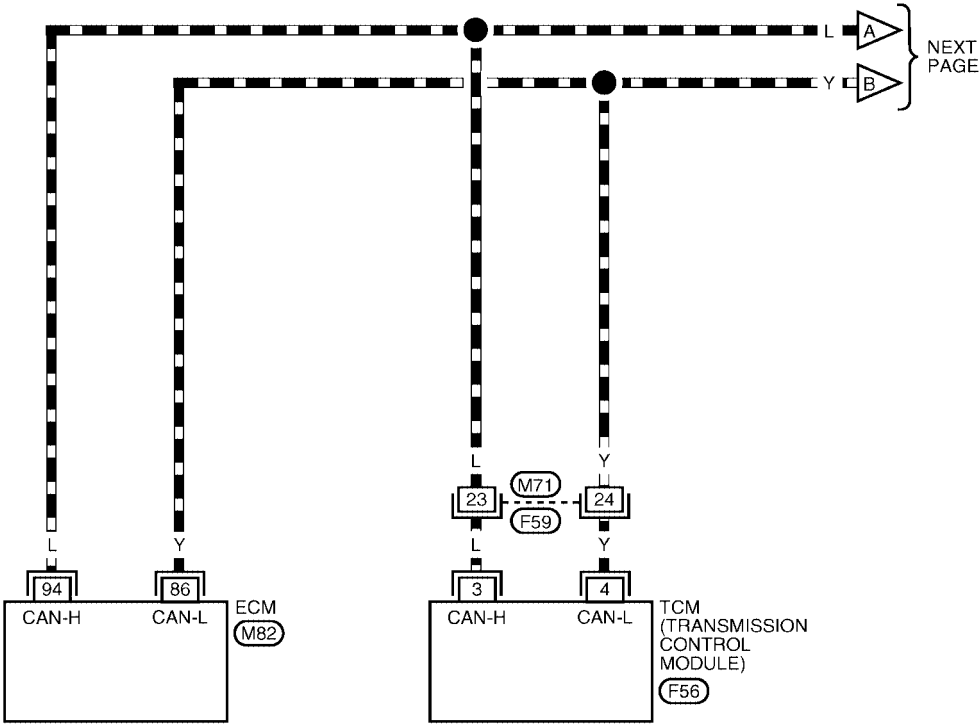



Wiring Diagram - CAN -

EKS005HZ

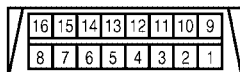
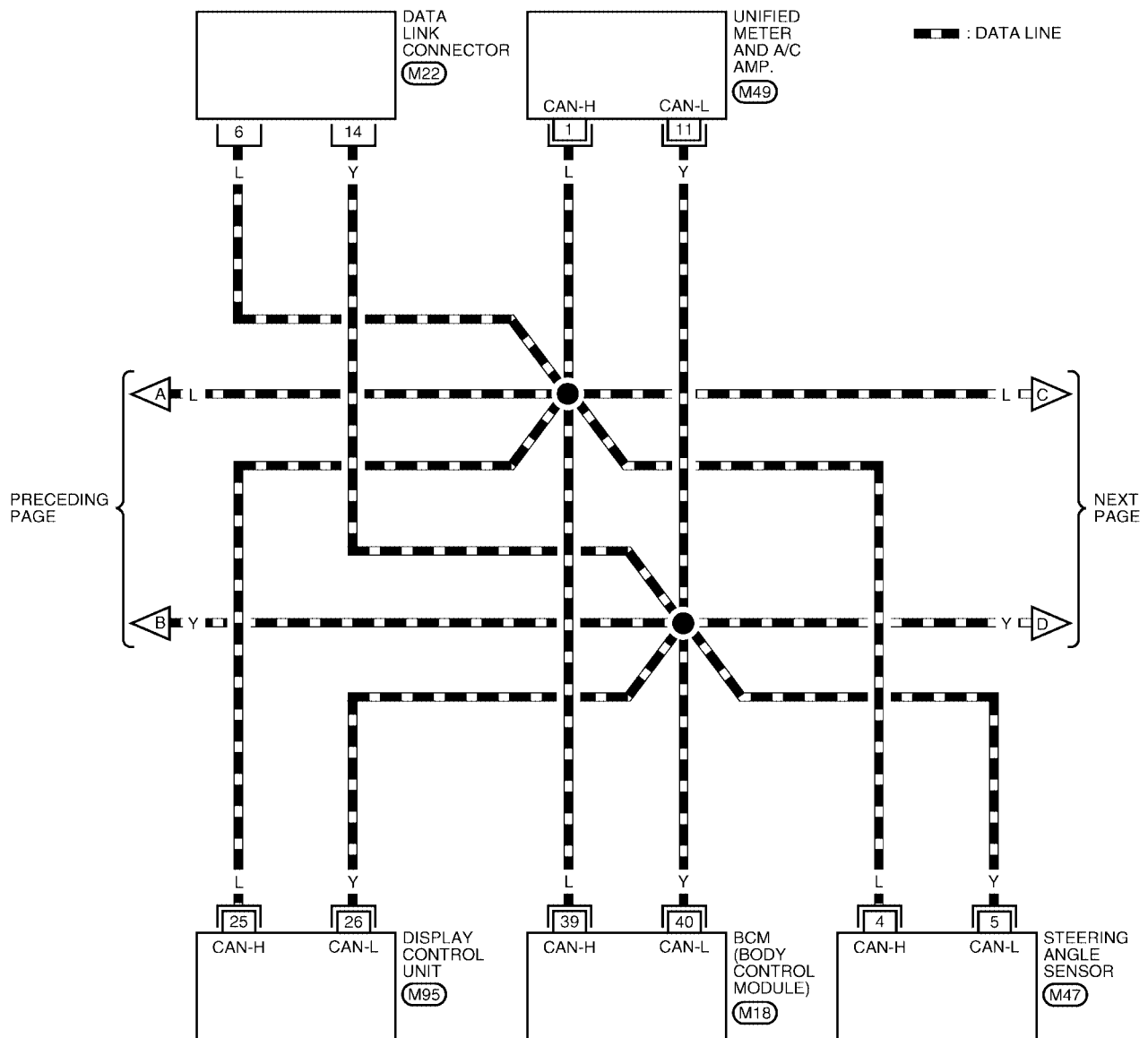
LAN-CAN-37

DATA LINE

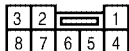


1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

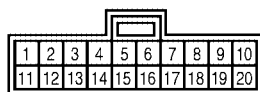
REFER TO THE FOLLOWING.  
M82 , F56 - ELECTRICAL  
UNITS



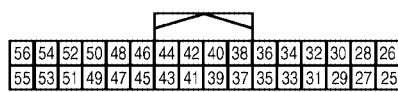
M22  
W



M47  
W



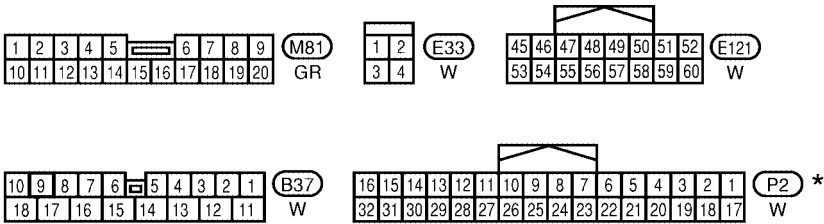
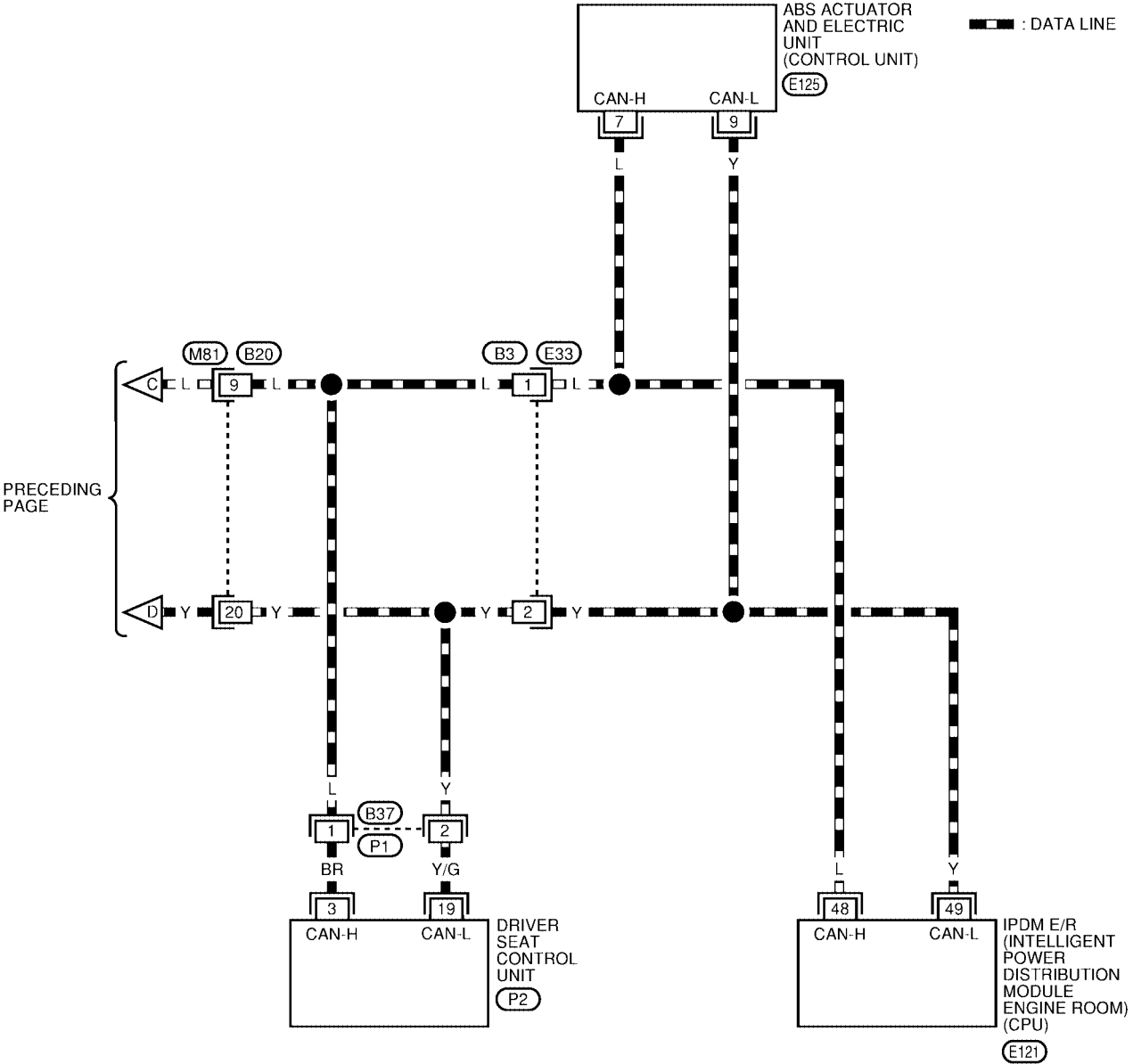
M49  
GR



M95  
W

REFER TO THE FOLLOWING.

**(M18) - ELECTRICAL UNITS**

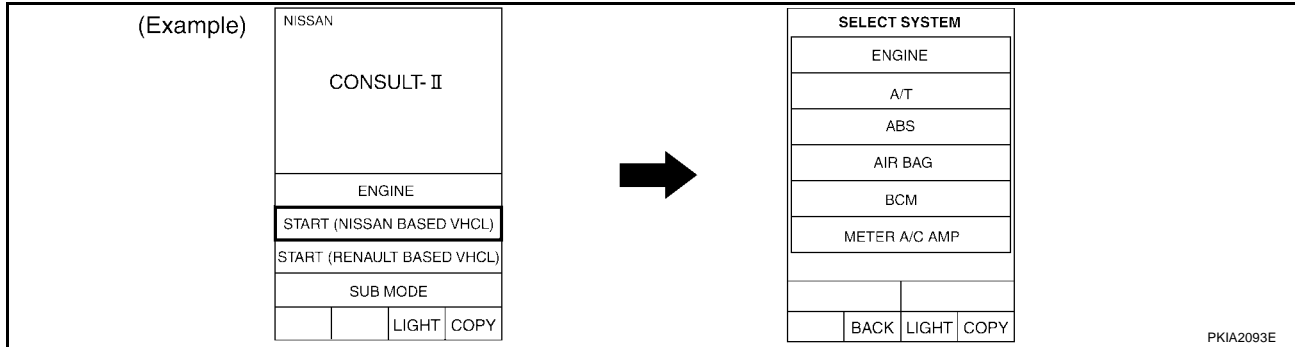


REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

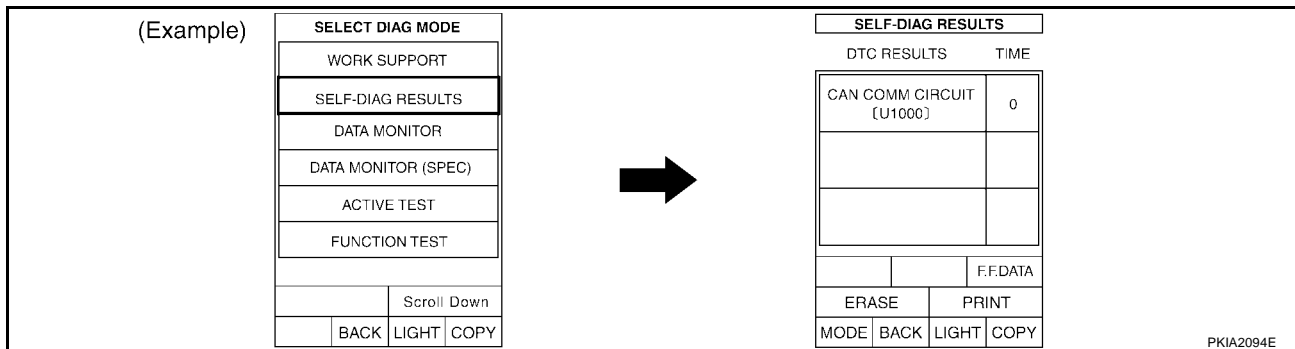
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

## Work Flow

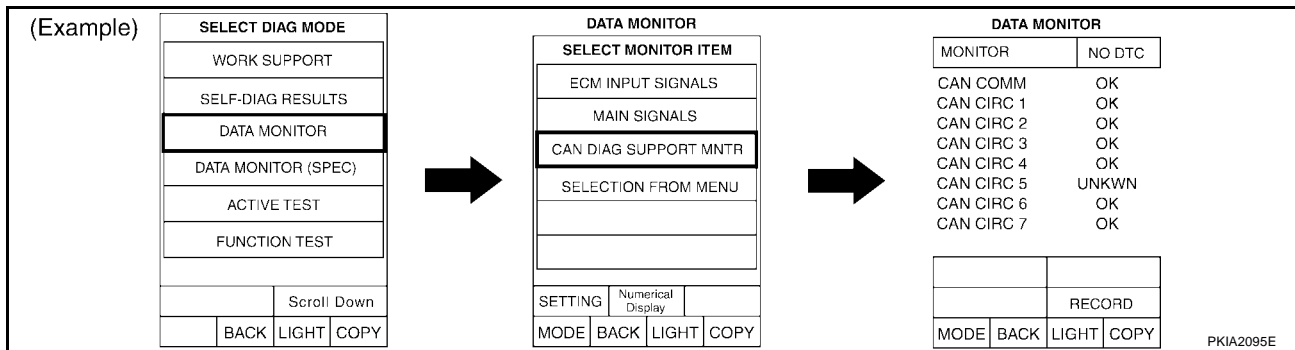
- When there are no indications of “TRANSMISSION”, “METER A/C AMP”, “BCM”, “IPDM E/R” or “AUTO DRIVE POS.” on “SELECT SYSTEM” display of CONSULT-II, print the “SELECT SYSTEM”.



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



- Print all the data of “DATA MONITOR (CAN DIAG SUPPORT MNTR)” for “ENGINE”, “TRANSMISSION”, “BCM”, “METER A/C AMP”, “AUTO DRIVE POS.”, “IPDM E/R” and “ABS” displayed on CONSULT-II.



- Based on the indications of “SELECT SYSTEM” and the results of “DATA MONITOR (CAN DIAG SUPPORT MNTR)”, put marks onto the items with “No indication”, “NG”, or “UNKWN” in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0449E

## NOTE:

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

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- Check CAN communication line of the navigation system.
- 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.

- According to the Check Sheet Results, start inspection.

**CHECK SHEET RESULTS****Case 1**

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		<input checked="" type="checkbox"/> CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0518E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	<input checked="" type="checkbox"/> CAN CIRC 2	-	<input checked="" type="checkbox"/> CAN CIRC 4	-	<input checked="" type="checkbox"/> CAN CIRC 6	-	<input checked="" type="checkbox"/> CAN CIRC 3	<input checked="" type="checkbox"/> CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0519E

# CAN SYSTEM (TYPE 13)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0520E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	-	CAN CIRC 3	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0521E

## Case 3

Replace display control unit.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0522E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0523E



# CAN SYSTEM (TYPE 13)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2		-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-		-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2		-	-

WKIA0524E

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2		-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-		-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2		-	-

WKIA0525E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2		-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-		-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2		-	-

WKIA0526E

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0527E

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0528E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0529E

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5				
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0530E

**Case 8**

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2		-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-		-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2		-	-

WKIA0531E

**Case 9**Check harness between TCM and data link connector. Refer to [LAN-292](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0532E

**Case 10**Check harness between data link connector and driver seat control unit. Refer to [LAN-292](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2		-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2		-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-		-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2		-	-

WKIA0533E

**Case 11**Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-293](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5		CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1		CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0534E

# CAN SYSTEM (TYPE 13)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-293](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5		CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0535E

## Case 13

Check TCM circuit. Refer to [LAN-294](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION		CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0536E

## Case 14

Check display control unit circuit. Refer to [LAN-294](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1		CAN CIRC 2		CAN CIRC 4		CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4				CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3			CAN CIRC 5		CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7			CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2			CAN CIRC 4					CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1		CAN CIRC 4		CAN CIRC 3		CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3			CAN CIRC 5				
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3					CAN CIRC 2			

WKIA0537E

## Case 15

Check data link connector circuit. Refer to [LAN-295](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0538E

# CAN SYSTEM (TYPE 13)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-295](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 5	-	CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-		CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 2	-		CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	-	-		
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-			
IPDM C/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-		

WKIA0539E

WKIA0539E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-296](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-			
IPDM C/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0540E

WKIA0540E

## Case 18

Check steering angle sensor circuit. Refer to [LAN-296](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-			
IPDM C/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0541E

WKIA0541E

## Case 19

Check driver seat control unit circuit. Refer to [LAN-297](#).

	CONSULT Indication	CAN System	Tx	Rx								
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM C/R
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-			
IPDM C/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0542E

WKIA0542E

# CAN SYSTEM (TYPE 13)

[CAN]

## Case 20

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-297](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0543E

## Case 21

Check IPDM E/R circuit. Refer to [LAN-298](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0544E

## Case 22

Check CAN communication circuit. Refer to [LAN-299](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2	-	-	-
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2	-	-	-

WKIA0545E

# CAN SYSTEM (TYPE 13)

[CAN]

## Case 23

Check IPDM E/R Ignition relay circuit. Refer to [LAN-299](#).

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓ CAN CIRC 2	-	-	✓ CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	✓ CAN CIRC 2	CAN CIRC 3	-	-	✓ CAN CIRC 5	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0546E

	CONSULT Indication	CAN System	Tx	Rx								IPDM E/R
				ECM	TCM	Display control unit	Unified meter and A/C amp.	Steering angle sensor	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	
ENGINE		CAN COMM	CAN CIRC 1	-	✓ CAN CIRC 2	-	CAN CIRC 4	-	CAN CIRC 6		✓ CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-		CAN CIRC 3	
DISPLAY CONTROL UNIT		CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	-	CAN CIRC 2			CAN CIRC 7
METER A/C AMP	No Disp		CAN CIRC 1	CAN CIRC 2	✓ CAN CIRC 3	CAN CIRC 7	-	-	CAN CIRC 4		✓ CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-			CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	✓ CAN CIRC 4	-	CAN CIRC 3	-	CAN CIRC 2			
ABS		CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	CAN CIRC 5	-			
IPDM E/R	No Disp		CAN CIRC 1	CAN CIRC 3	-	-	-	-	CAN CIRC 2			

WKIA0547E

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

LAN

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

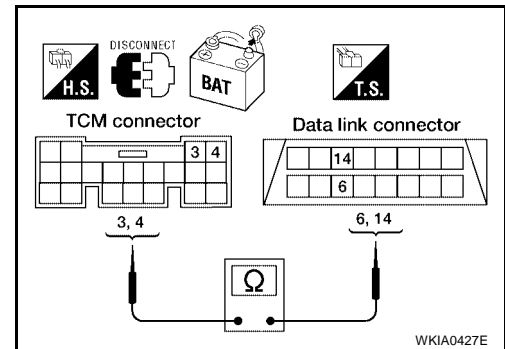
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-282, "Work Flow"](#).  
 NG >> Repair harness.



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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

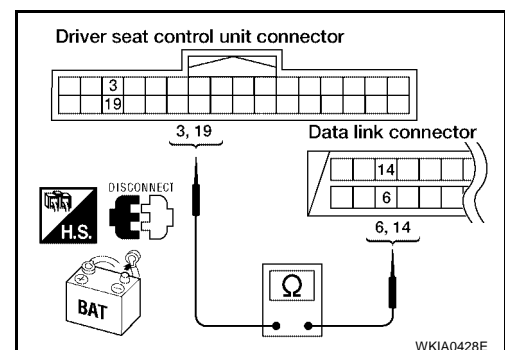
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-282](#).  
 NG >> Repair harness.





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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

#### OK or NG

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

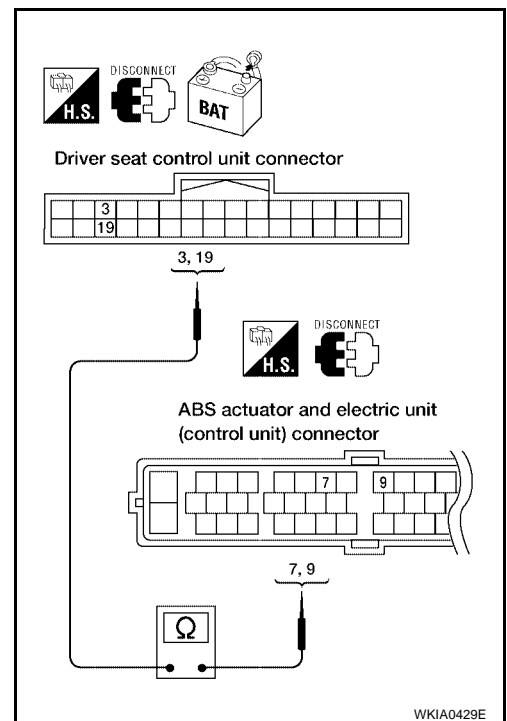
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 7 (L), 9 (Y).

- 3 (BR) - 7 (L) : Continuity should exist.**  
**19 (Y/G) - 9 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-282](#).  
NG >> Repair harness.



## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

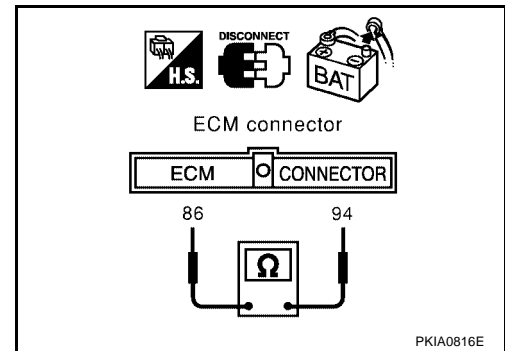
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS00515

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

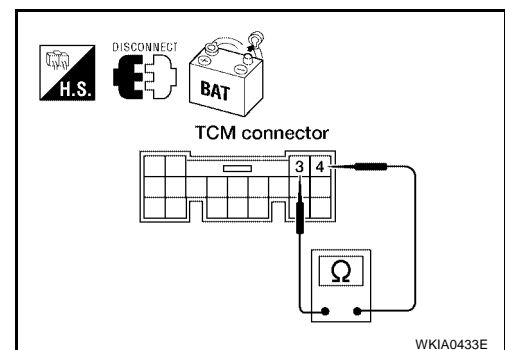
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS00516

## 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

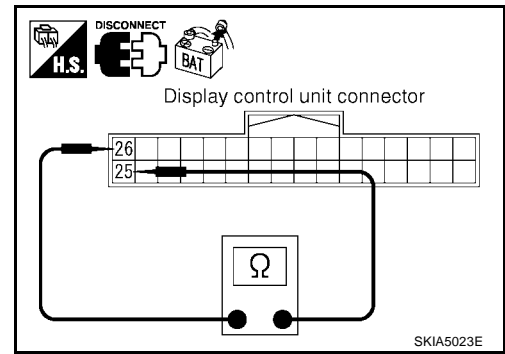
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS00517

## 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

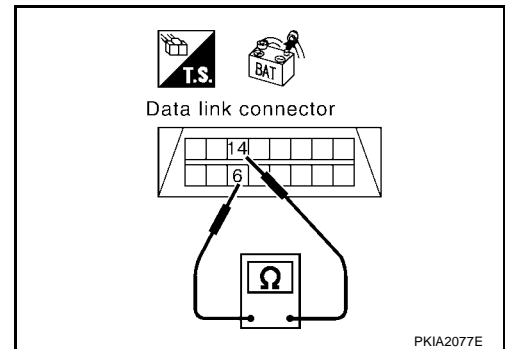
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-282](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS00518

## 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

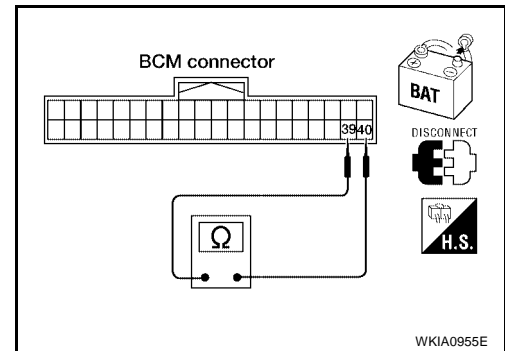
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS00519

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

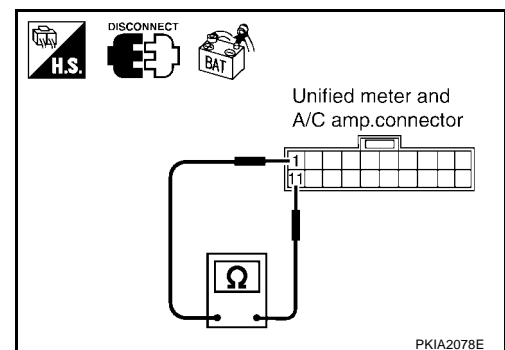
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS0051A

## 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

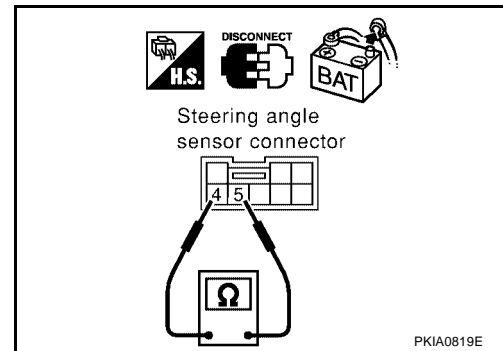
Check resistance between steering angle sensor connector M47 terminal 4 (L) and terminal 5 (Y).

**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.



EKS0051B

## 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

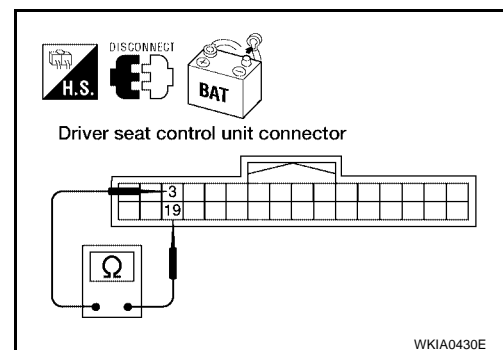
Check resistance between driver seat control unit connector P2 terminal 3 (BR) and terminal 19 (Y/G).

**3 (BR) - 19 (Y/G)**

**: 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.



EKS0051C

## 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

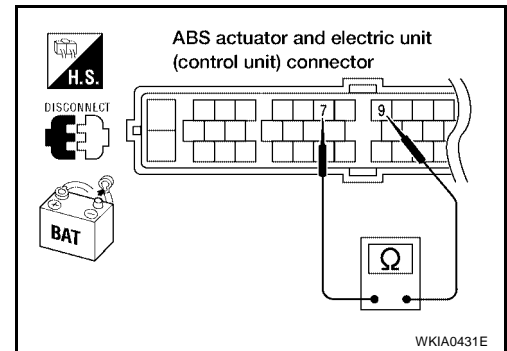
Check resistance between ABS actuator and electric unit (control unit) connector E125 terminal 7 (L) and terminal 9 (Y).

**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 IPDM E/R connector E121.



EKS0051D

## 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

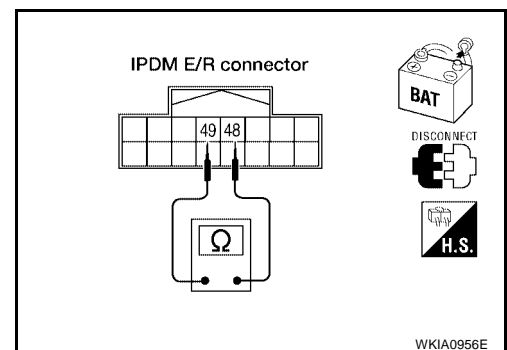
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



**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)
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Steering angle sensor
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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**

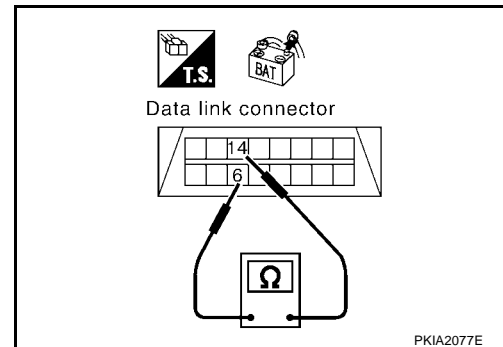
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

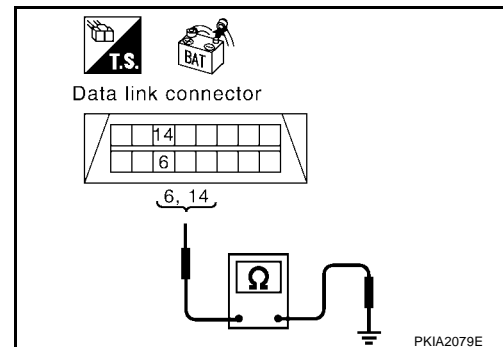
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-300, "Component Inspection"](#).

NG >> Repair the harness.

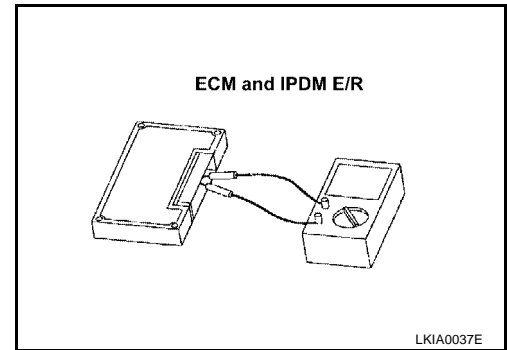
**IPDM E/R Ignition Relay Circuit Check**

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

- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

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

- Remove ECM and IPDM E/R from vehicle.
- 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**



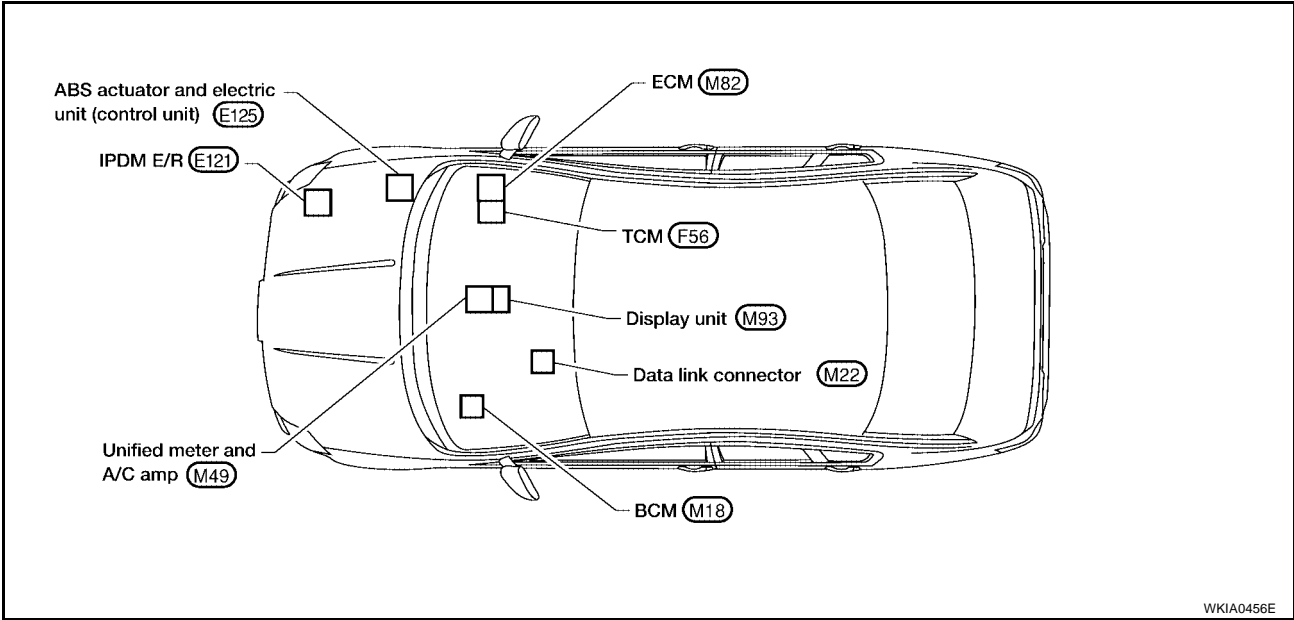


CAN SYSTEM (TYPE 14)

System Description

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

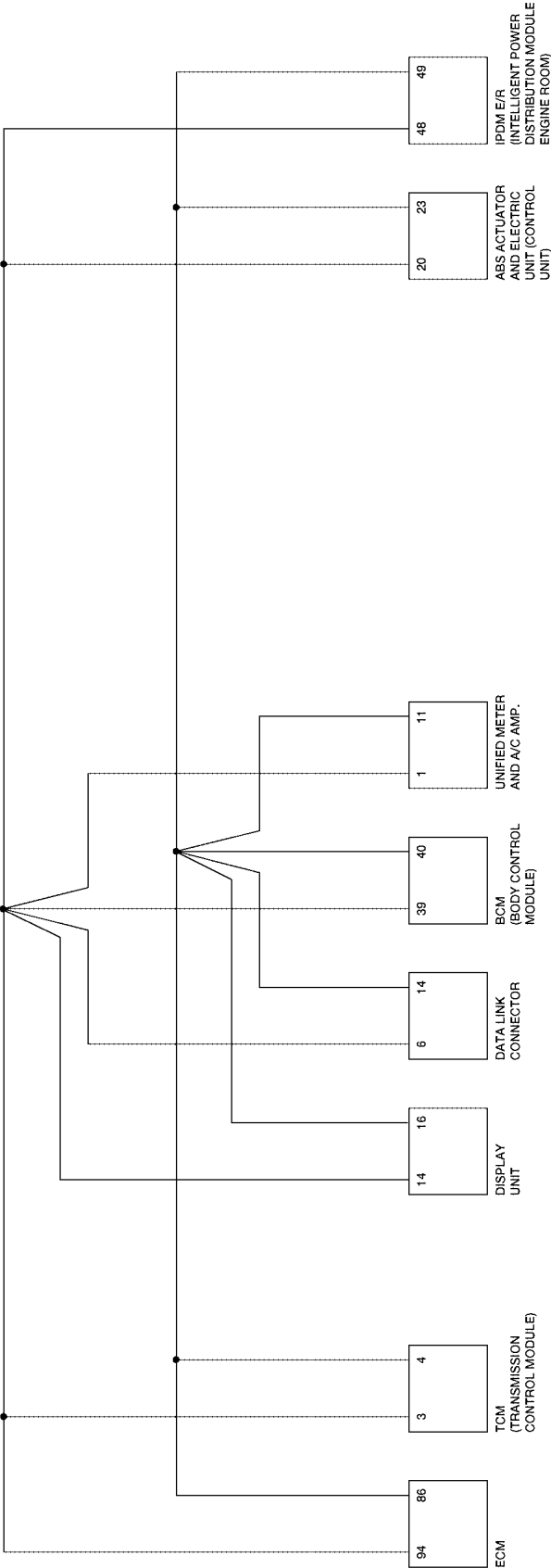
Component Parts and Harness Connector Location



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

Schematic

EKS005EX



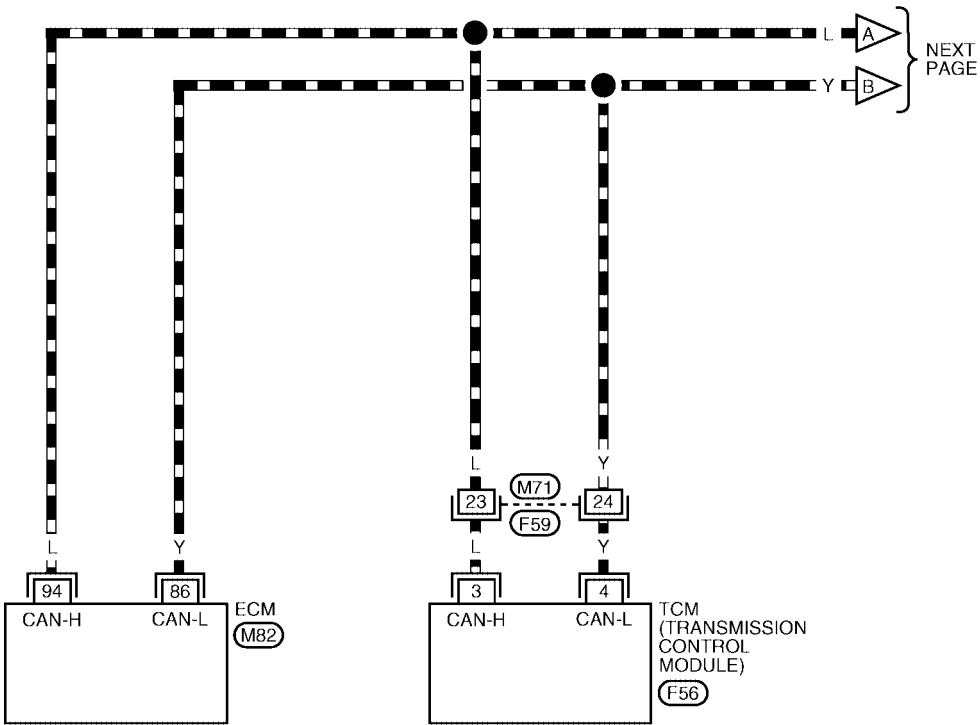
WKWA0468E

Wiring Diagram - CAN -

EKS005EY

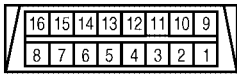
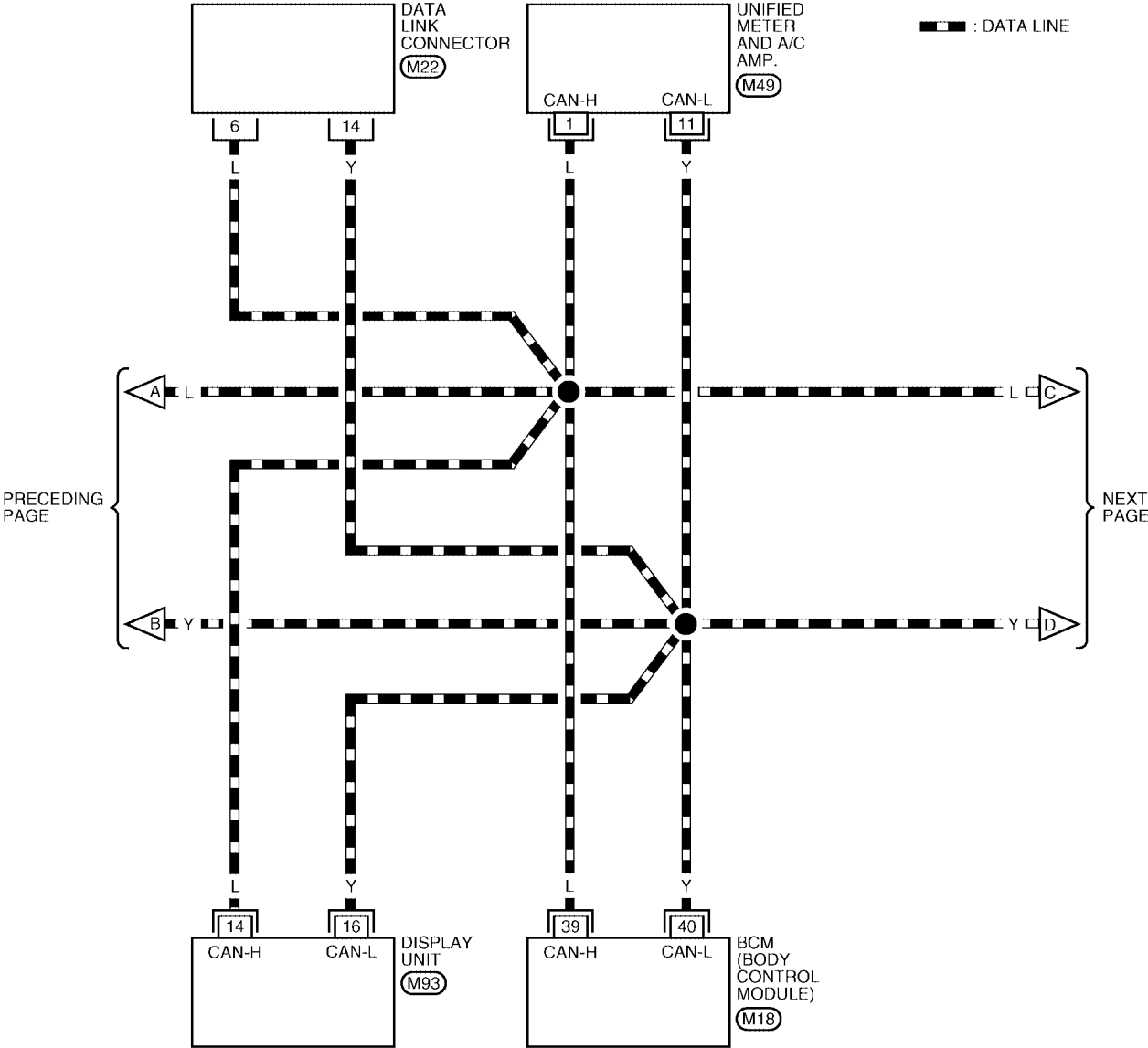
LAN-CAN-40

: DATA LINE

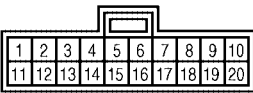


1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

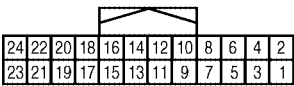
REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS



(M22)  
W



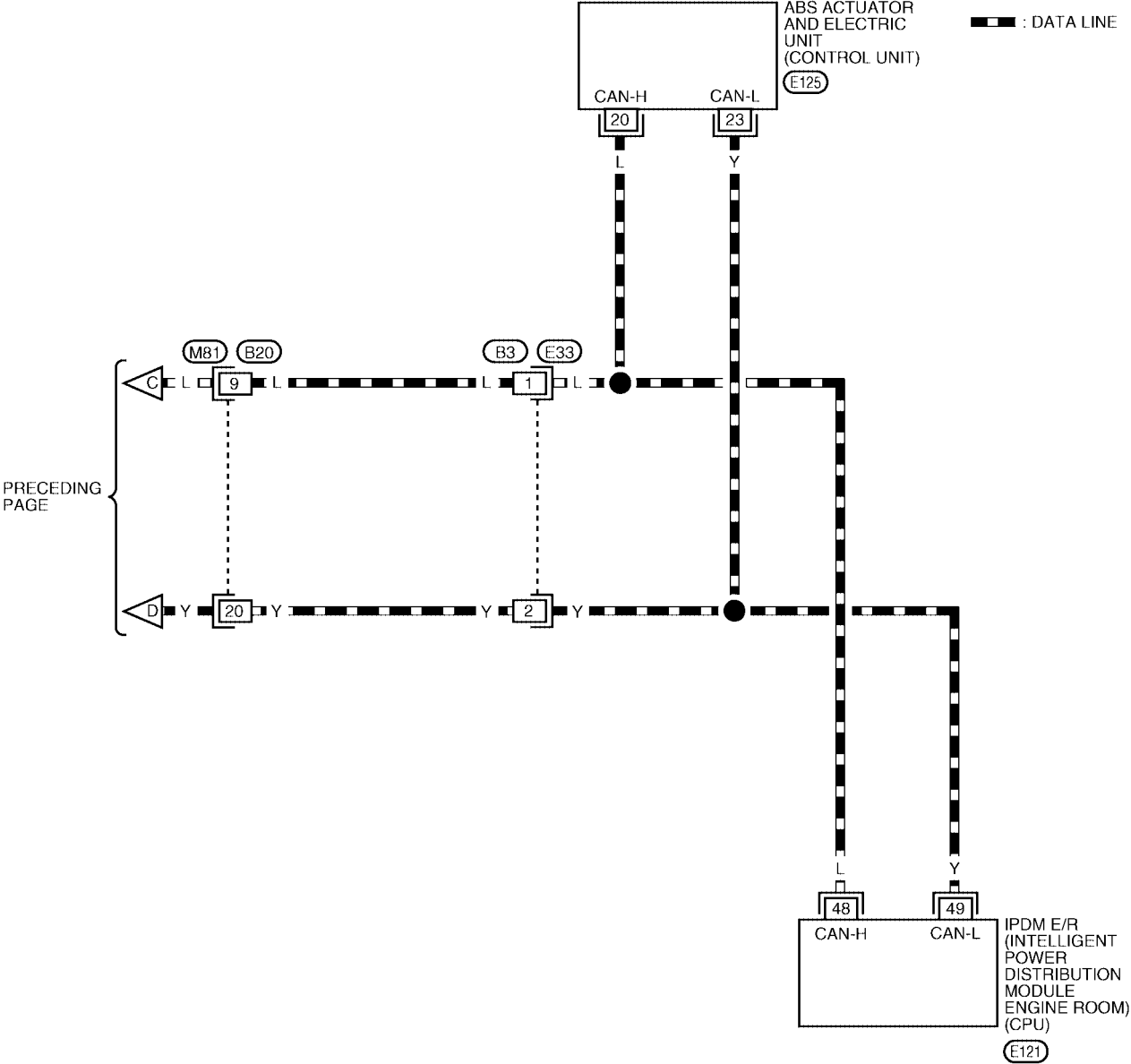
(M49)  
GR



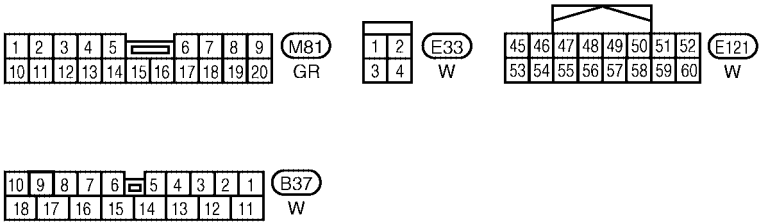
(M93)  
W

REFER TO THE FOLLOWING.  
(M18) - ELECTRICAL UNITS

LAN-CAN-42



PRECEDING PAGE

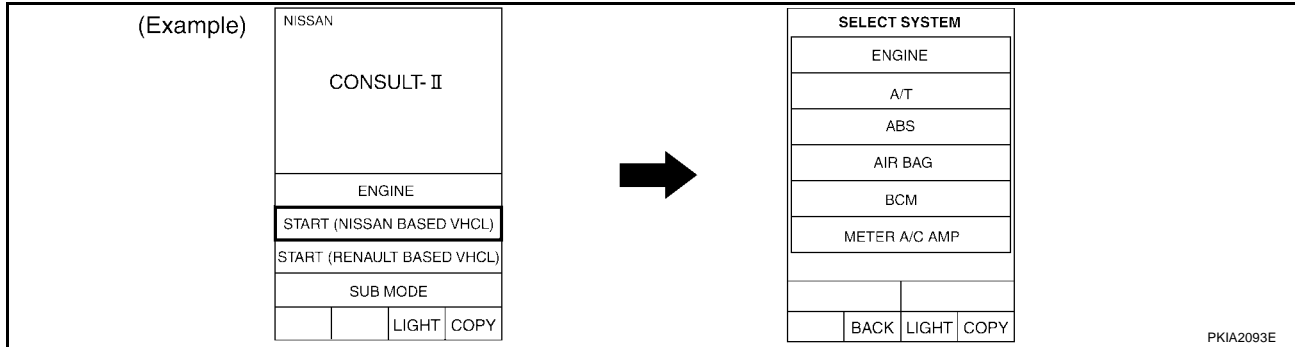


REFER TO THE FOLLOWING.  
(E125) - ELECTRICAL UNITS

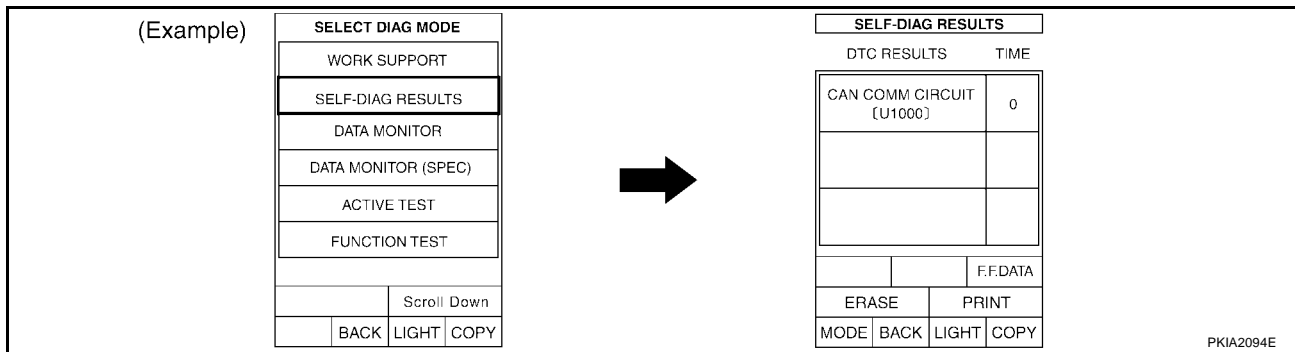
LAN

## Work Flow

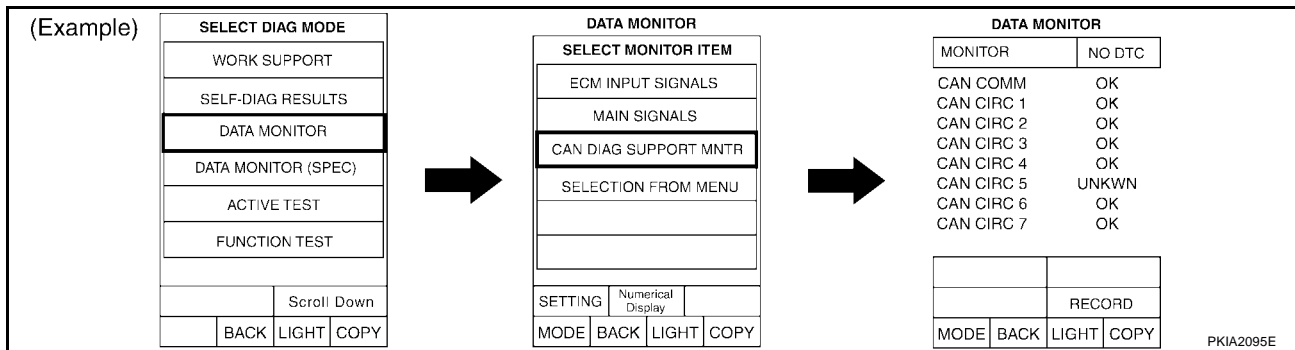
- When there are no indications of "TRANSMISSION", "BCM", "IPDM E/R" or "METER A/C AMP" on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	-	CAN CIRC 4	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	-	CAN CIRC 4	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	-	CIRC 5	CIRC 2	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0450E

### NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

# CAN SYSTEM (TYPE 14)

[CAN]

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

## CHECK SHEET RESULTS

### Case 1

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0548E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0549E

# CAN SYSTEM (TYPE 14)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0550E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0551E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0552E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0553E



## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	✓ CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0554E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and electric unit and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	✓ CAN COMM	CAN CIRC 1	✓ CAN CIRC 2	-	-	✓ CAN CIRC 4	-	-	✓ CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0555E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓ CAN CIRC 2	✓ CAN CIRC 3	✓ CAN CIRC 7	-	✓ CAN CIRC 4	✓ CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0556E

# CAN SYSTEM (TYPE 14)

[CAN]

## Case 6

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0557E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0558E

## Case 7

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0559E

## Case 8

Check harness between TCM and data link connector. Refer to [LAN-314](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0560E

# CAN SYSTEM (TYPE 14)

[CAN]

## Case 9

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to [LAN-314](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	✓ CIRC 3	✓ CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	✓ CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	✓ CIRC 6
BCM	No Disp	CAN COMM	CIRC 1	CIRC 2	-	-	CAN CIRC 4	-	-	✓ CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	✓ CIRC 2	✓ CIRC 3	-	-	-	-	-
IPDM E/R	✓ No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0561E

## Case 10

Check ECM circuit. Refer to [LAN-315](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	✓ CIRC 1	-	✓ CIRC 2	-	✓ CIRC 4	✓ CIRC 6	✓ CIRC 3	✓ CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	✓ CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	✓ CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	✓ CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	✓ CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	✓ CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0562E

## Case 11

Check TCM circuit. Refer to [LAN-316](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	✓ CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	✓ No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	✓ CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	✓ CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0563E

## Case 12

Check display unit circuit. Refer to [LAN-316](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	✓ CIRC 1	✓ CIRC 3	-	-	✓ CIRC 5	✓ CIRC 2	-	✓ CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	✓ CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0564E

**Case 13**Check data link connector circuit. Refer to [LAN-317](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0565E

**Case 14**Check BCM circuit. Refer to [LAN-317](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0566E

**Case 15**Check unified meter and A/C amp. circuit. Refer to [LAN-318](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0567E

**Case 16**Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-318](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0568E

# CAN SYSTEM (TYPE 14)

[CAN]

## Case 17

Check IPDM E/R circuit. Refer to [LAN-319](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0569E

## Case 18

Check CAN communication circuit. Refer to [LAN-319](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0570E

## Case 19

Check IPDM E/R Ignition relay circuit. Refer to [LAN-320](#).

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0571E

	CONSULT Indication	CAN System	Tx	Rx						
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-

WKIA0572E

## 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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

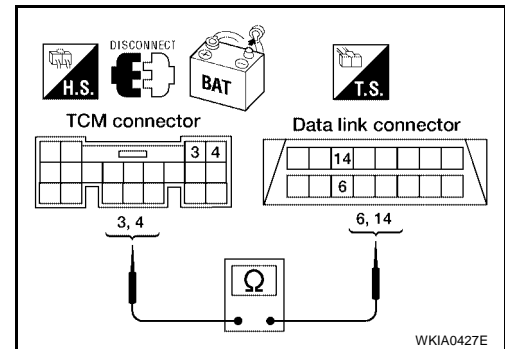
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check continuity between TCM connector F56 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-306, "Work Flow"](#).  
 NG >> Repair harness.



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

### 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 and ECM connector M82.
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 data link connector M22 terminals 6 (L), 14 (Y) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**6 (L) - 20 (L) : Continuity should exist.**

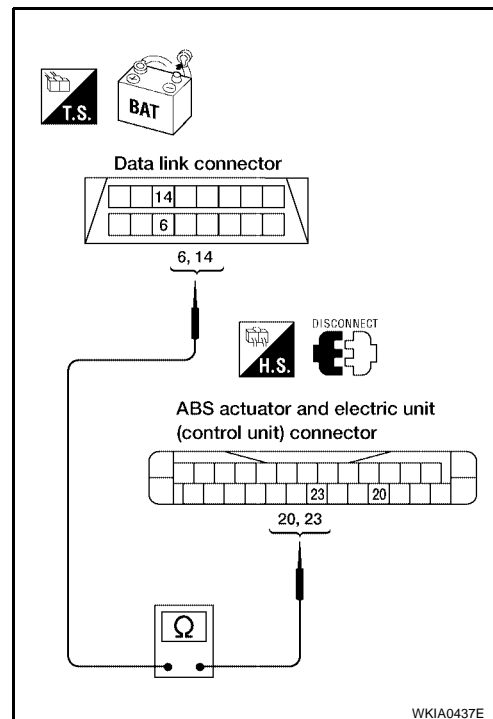
**14 (Y) - 23 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to

[LAN-306](#).

NG >> Repair harness.



EKS005F2

## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

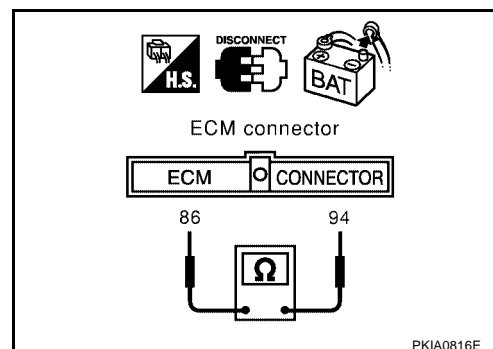
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

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

OK or NG

OK >> Replace ECM.

NG >> Repair harness between ECM connector M82 and TCM connector F56.



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

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

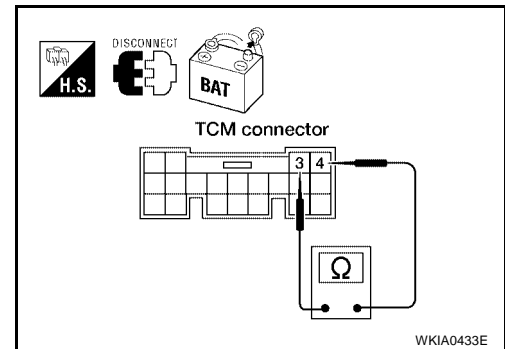
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between TCM connector F56 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 F56 and ECM connector M82.



EKS005F4

**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.

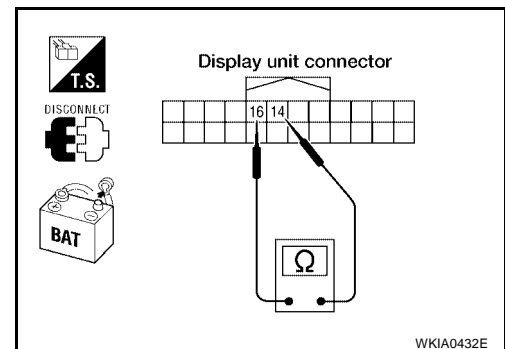
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check resistance between display unit connector M93 terminal 25 (L) and terminal 26 (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.



WKIA0432E



**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.

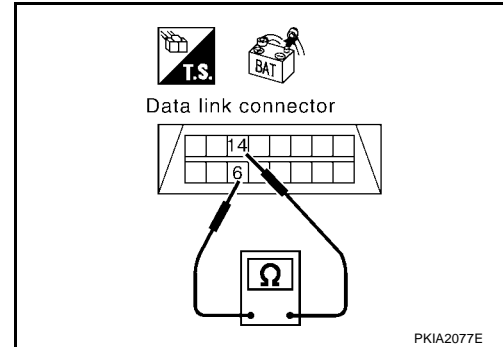
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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-306](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



PKIA2077E

**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.

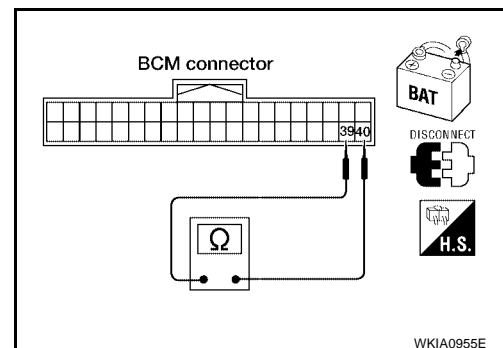
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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.



WKIA0955E

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

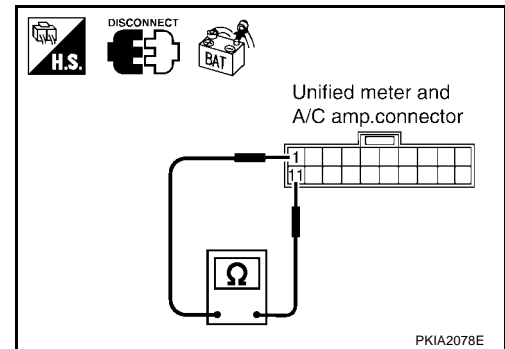
### 2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y) : Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



## 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.

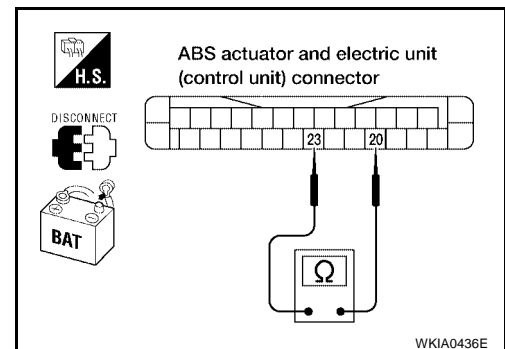
### 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



**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.

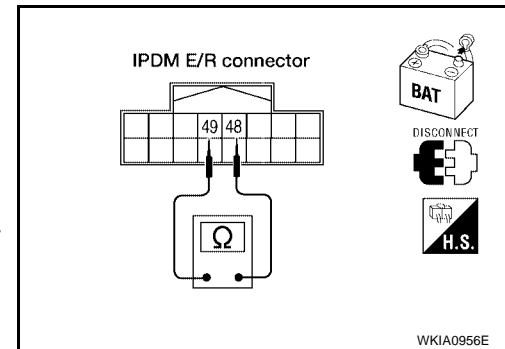
**2. CHECK HARNESS FOR OPEN CIRCUIT**

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 ABS actuator and electric unit (control unit) connector E125.

**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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - ABS actuator and electric unit (control unit)
  - IPDM E/R (Intelligent power distribution module engine room)

**OK or NG**

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

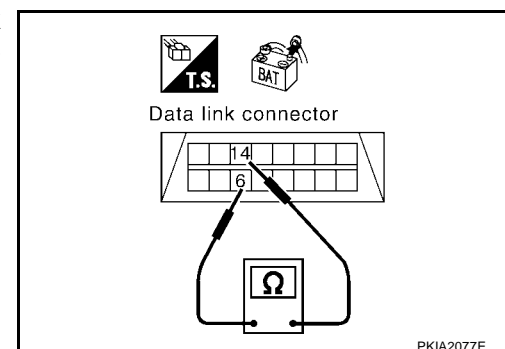
**2. CHECK HARNESS FOR SHORTED CIRCUITS**

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.



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

### 3. CHECK HARNESS FOR SHORT TO GROUND

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

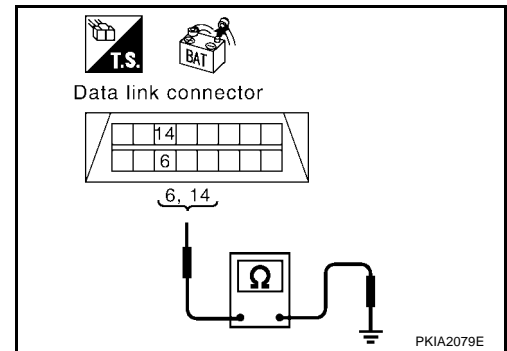
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-320, "Component Inspection"](#).

NG >> Repair the harness.



EKS005FB

### IPDM E/R Ignition Relay Circuit Check

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

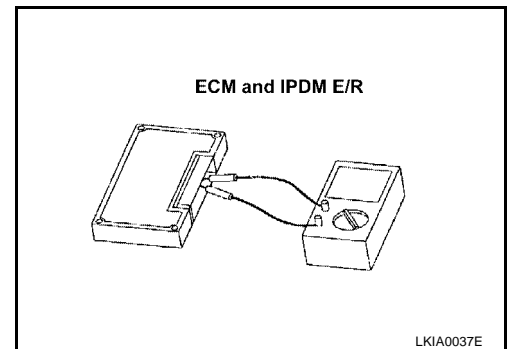
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS005FC

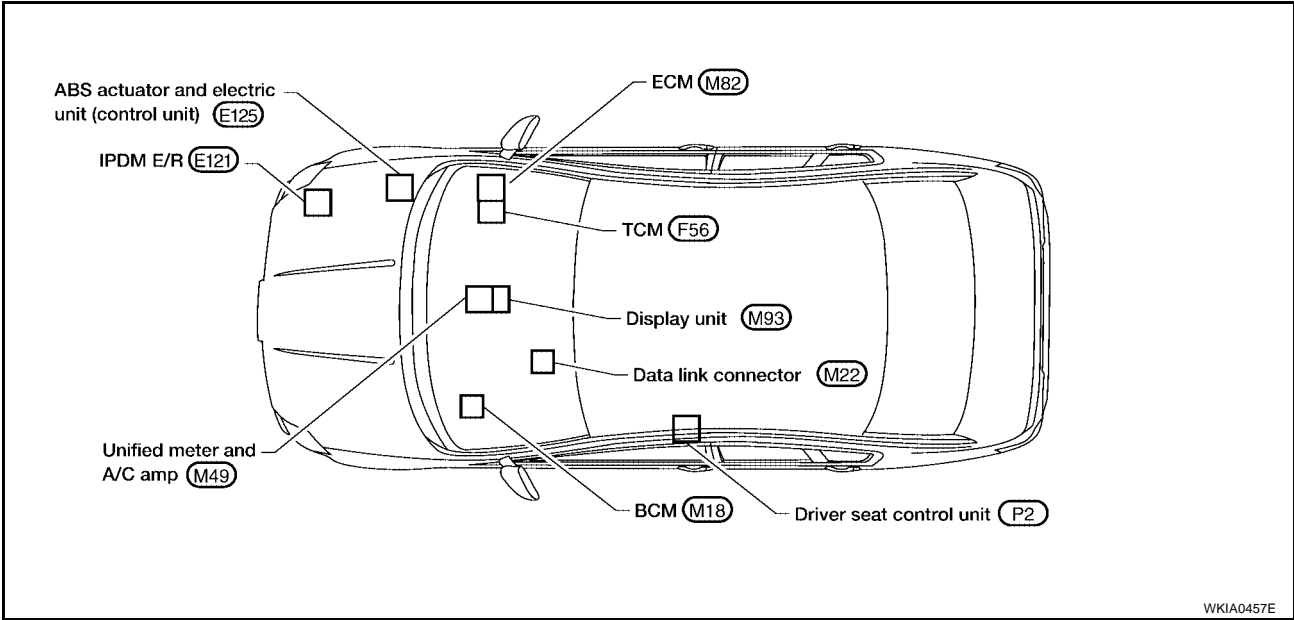


## CAN SYSTEM (TYPE 15)

### System Description

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

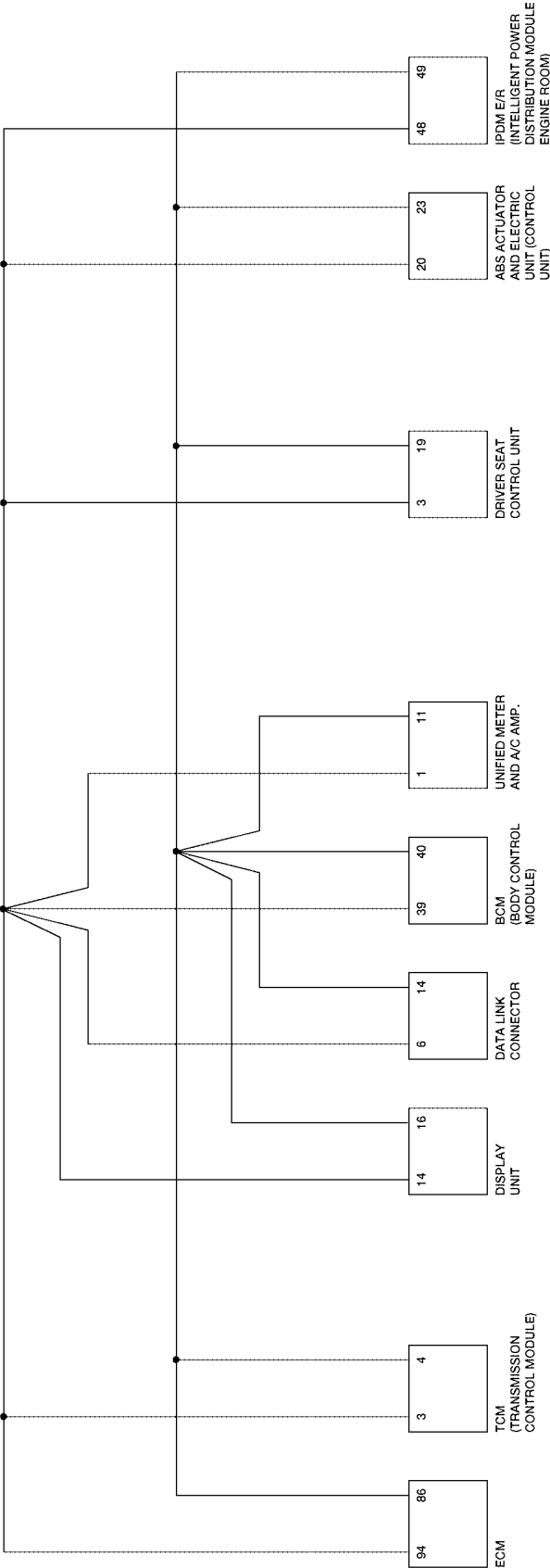
### Component Parts and Harness Connector Location



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

Schematic

EKS005FF



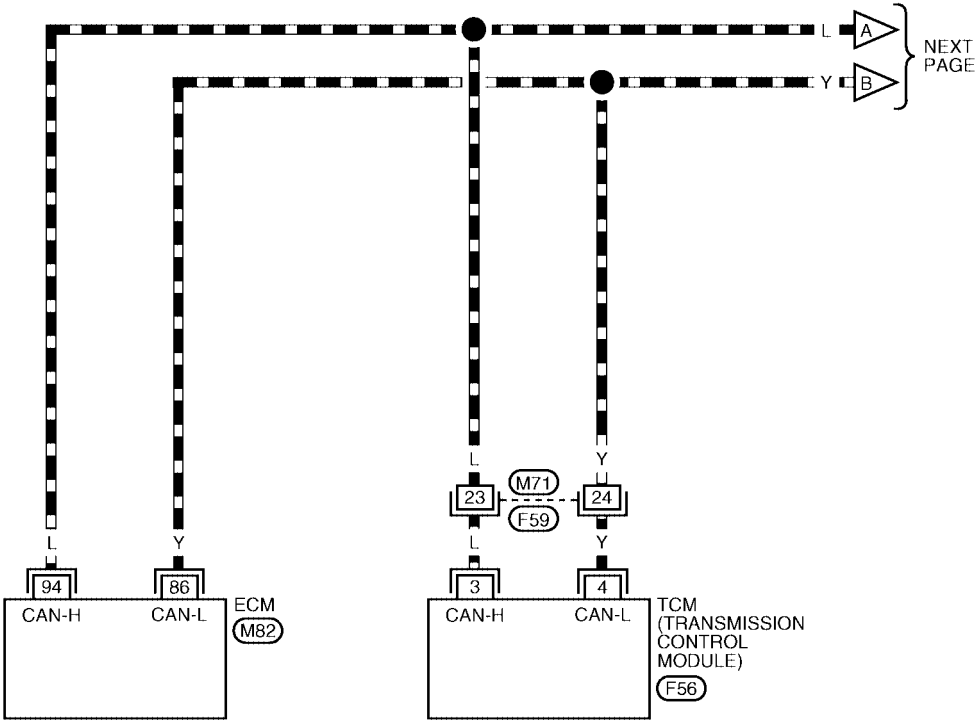
WKWA0469E


Wiring Diagram - CAN -

EKS005FG

LAN-CAN-43

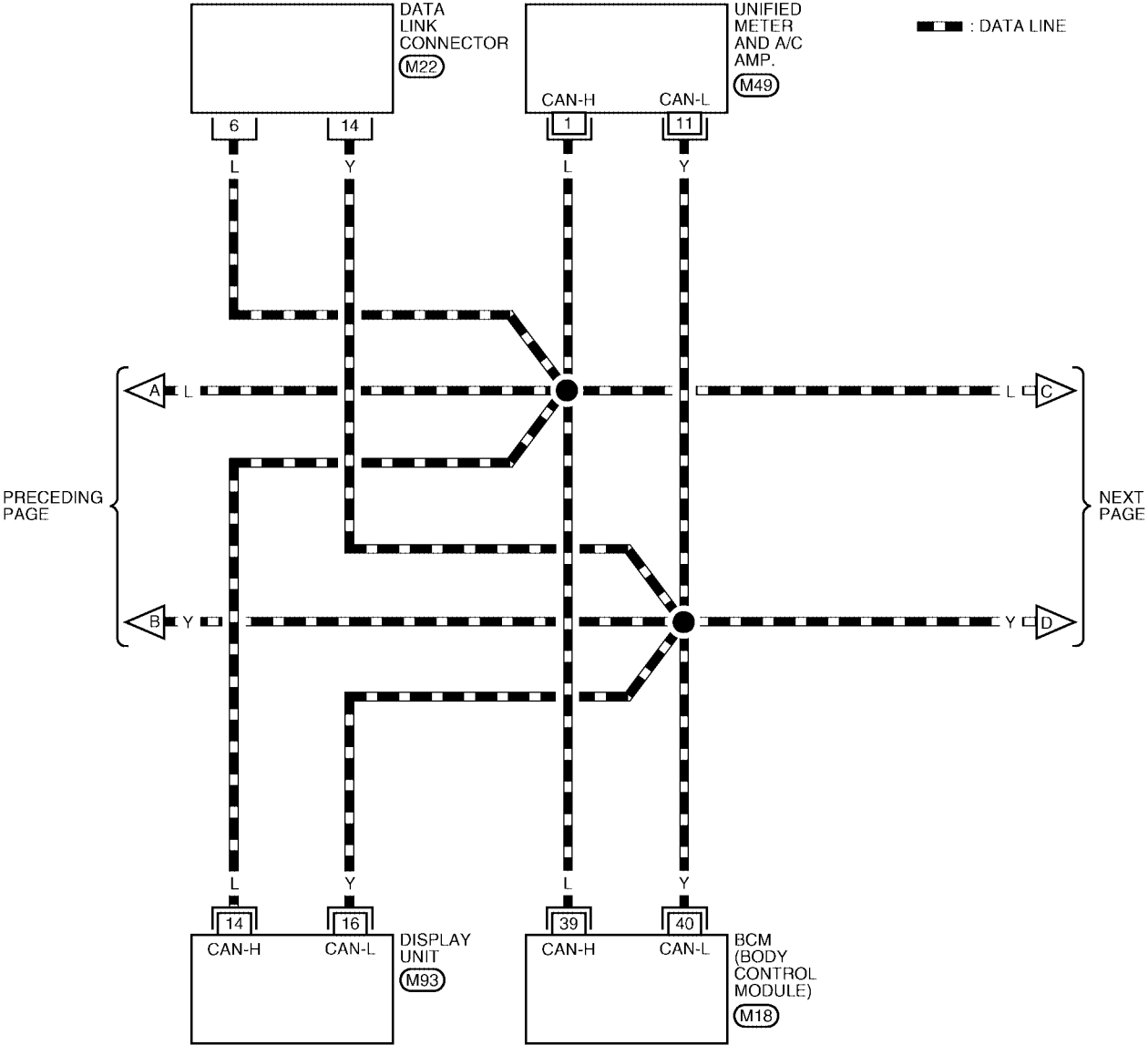
▬ : DATA LINE



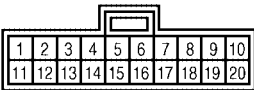
1	2	3	4	5	6			7	8	9	10	11	F59 W
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
(M82), (F56) - ELECTRICAL  
UNITS

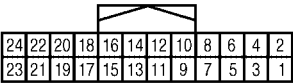
LAN-CAN-44



(M22)  
W



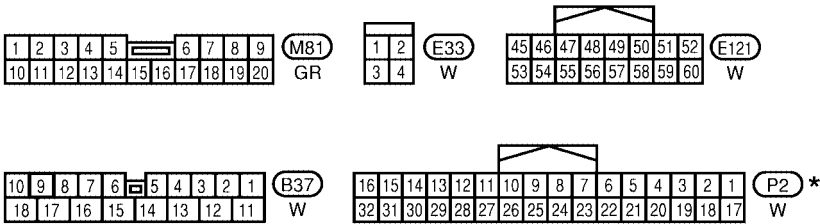
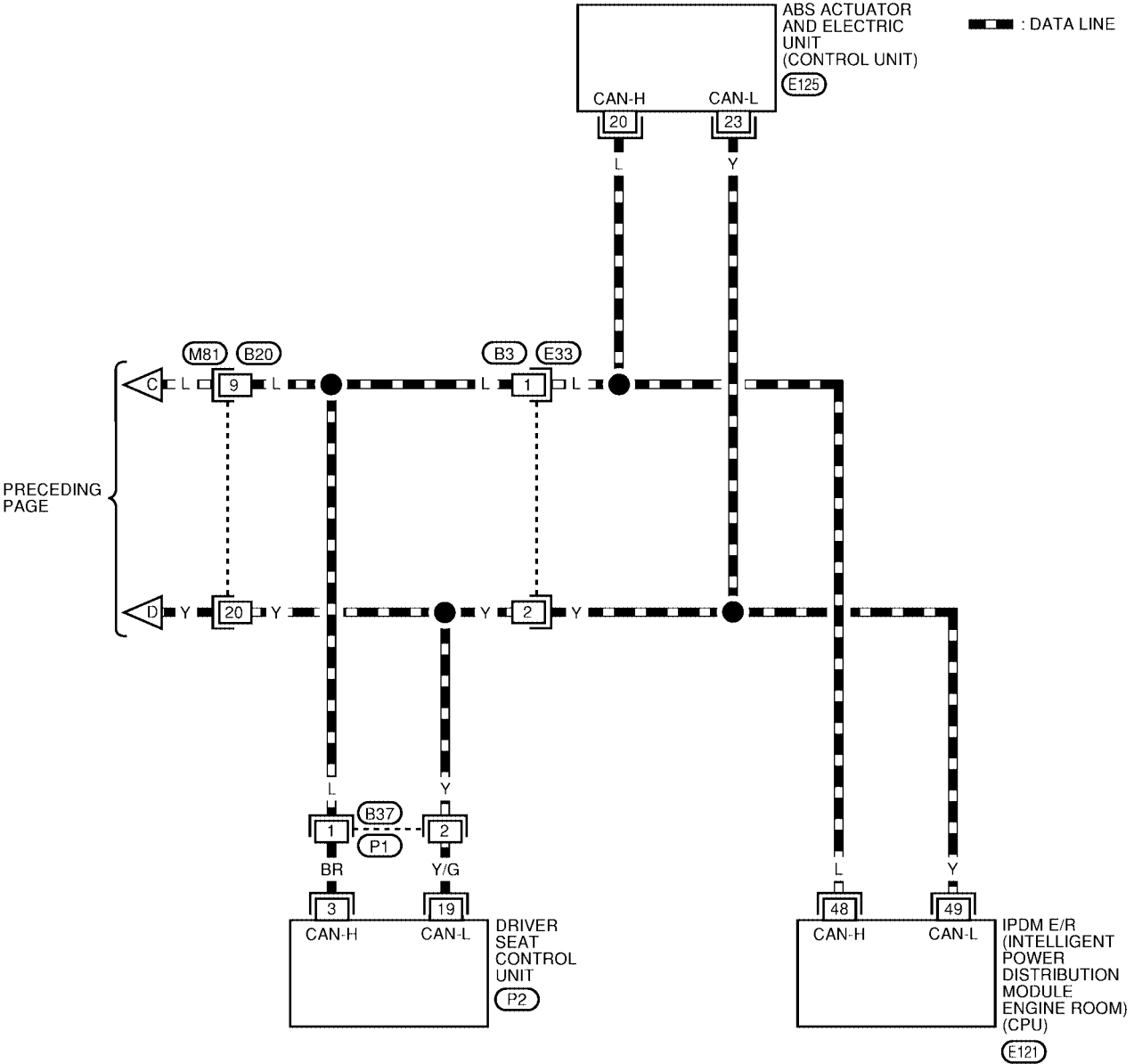
(M49)  
GR



(M93)  
W

REFER TO THE FOLLOWING.  
(M18) - ELECTRICAL UNITS



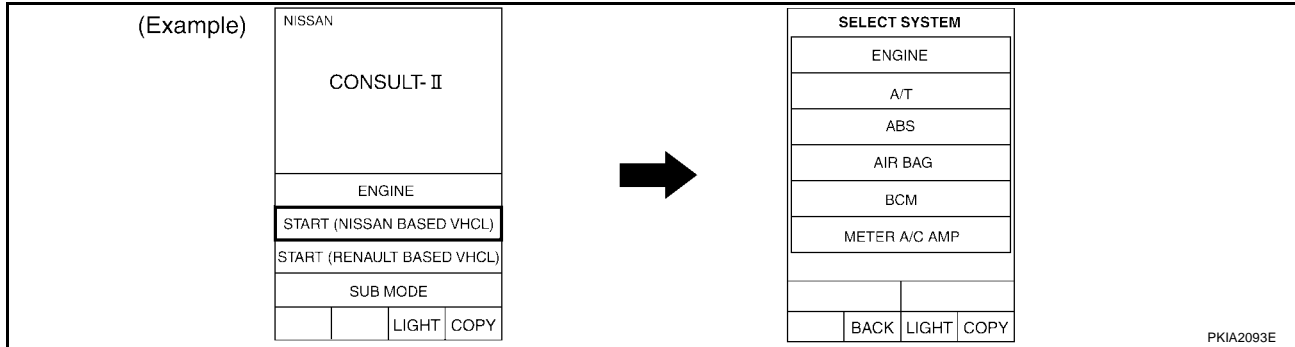


REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

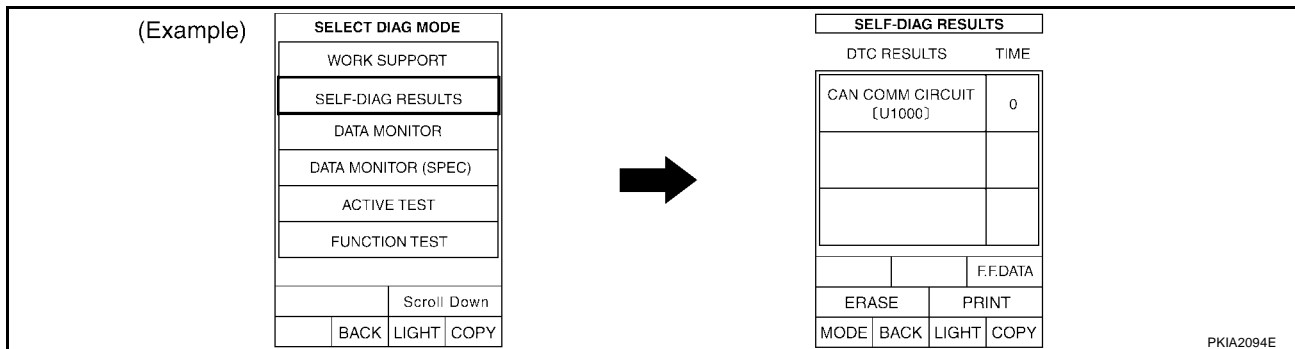
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

## Work Flow

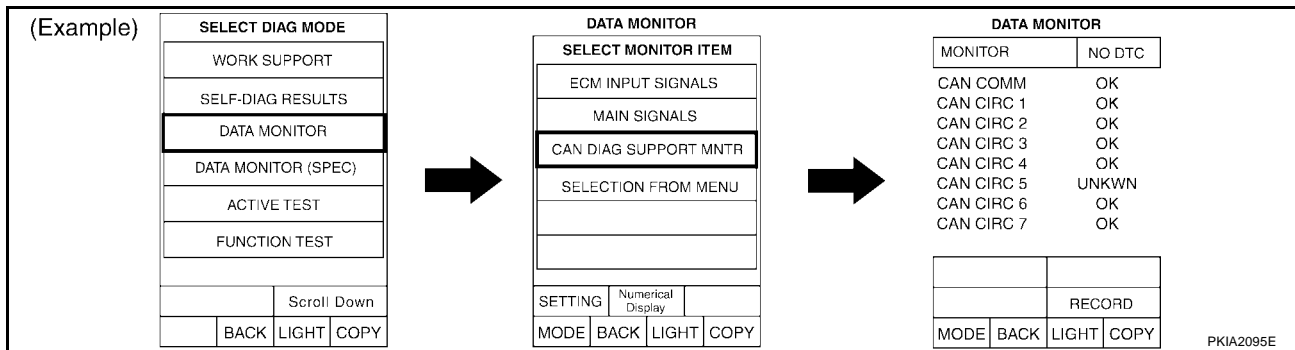
- When there are no indications of "TRANSMISSION", "METER A/C AMP", "BCM", "IPDM E/R" or "AUTO DRIVE POS." on "SELECT SYSTEM" display of CONSULT-II, print the "SELECT SYSTEM".



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



- Print all the data of "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for "ENGINE", "TRANSMISSION", "BCM", "METER A/C AMP", "AUTO DRIVE POS.", "IPDM E/R" and "ABS" displayed on CONSULT-II.



- Based on the indications of "SELECT SYSTEM" and the results of "DATA MONITOR (CAN DIAG SUPPORT MNTR)", put marks onto the items with "No indication", "NG", or "UNKWN" in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0451E

## NOTE:

- If "NG" is displayed on "CAN COMM" as "DATA MONITOR (CAN DIAG SUPPORT MNTR)" for the diagnosed control unit, replace the control unit.

- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- 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.

- According to the Check Sheet Results, start inspection.

**CHECK SHEET RESULTS****Case 1**

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0573E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0574E

# CAN SYSTEM (TYPE 15)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0575E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0576E

## Case 3

Replace display unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0577E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0578E

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	<b>CAN COMM</b>	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0579E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	<b>CAN CIRC 2</b>	-	-	<b>CAN CIRC 4</b>	-	-	-	<b>CAN CIRC 3</b>
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0580E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	<b>CAN CIRC 2</b>	<b>CAN CIRC 3</b>	<b>CAN CIRC 7</b>	-	<b>CAN CIRC 4</b>	-	<b>CAN CIRC 5</b>	<b>CAN CIRC 6</b>
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0581E

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0582E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0583E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0584E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0585E

# CAN SYSTEM (TYPE 15)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0586E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-335](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0587E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-335](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0588E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-336](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0589E

# CAN SYSTEM (TYPE 15)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-336](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0590E

## Case 13

Check TCM circuit. Refer to [LAN-337](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0591E

## Case 14

Check display unit circuit. Refer to [LAN-337](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0592E

## Case 15

Check data link connector circuit. Refer to [LAN-338](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0593E



# CAN SYSTEM (TYPE 15)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-338](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0594E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-339](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0595E

## Case 18

Check driver seat control unit circuit. Refer to [LAN-339](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0596E

## Case 19

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-340](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0597E

**Case 20**Check IPDM E/R circuit. Refer to [LAN-340](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0598E

**Case 21**Check CAN communication circuit. Refer to [LAN-341](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0599E

**Case 22**Check IPDM E/R Ignition relay circuit. Refer to [LAN-342](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0600E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display unit	Unified meter and A/C amp	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY UNIT	-	CAN COMM	CIRC 1	CIRC 3	-	-	CIRC 5	CIRC 2	-	-	CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0601E

**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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

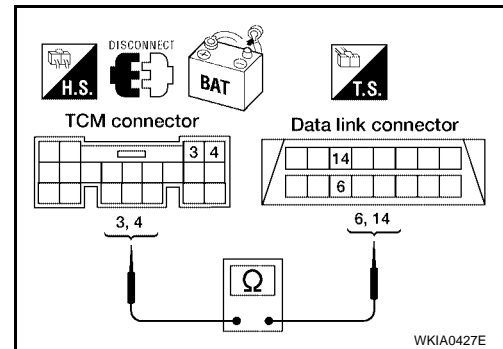
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector F56 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-326, "Work Flow"](#)  
 NG >> Repair harness.

**Circuit Check Between Driver Seat Control Unit and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

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

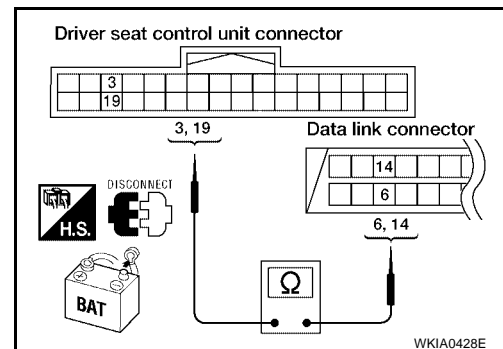
**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

- 3 (BR) - 6 (L) : Continuity should exist.**  
**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-326](#).  
 NG >> Repair harness.



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

EKS005FK

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
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

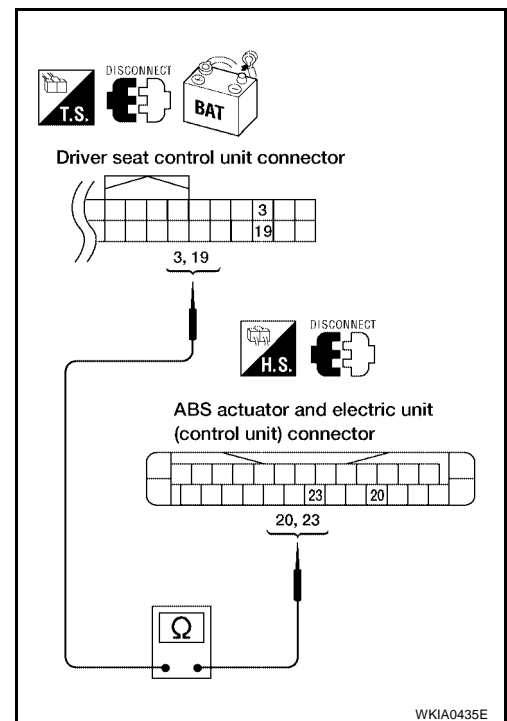
Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**3 (BR) - 20 (L) : Continuity should exist.**

**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-326](#).  
NG >> Repair harness.



EKS005FL

## ECM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

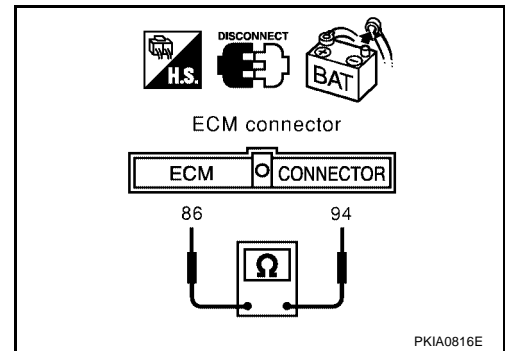
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS005FM

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

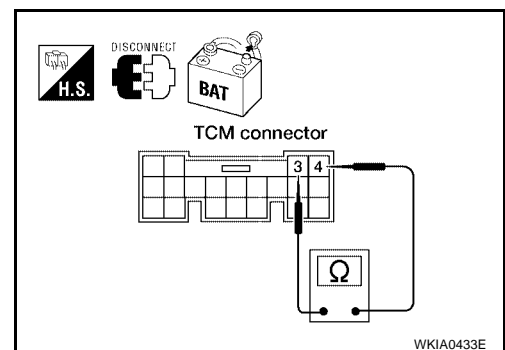
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS005FN

## 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 25 (L) and terminal 26 (Y).

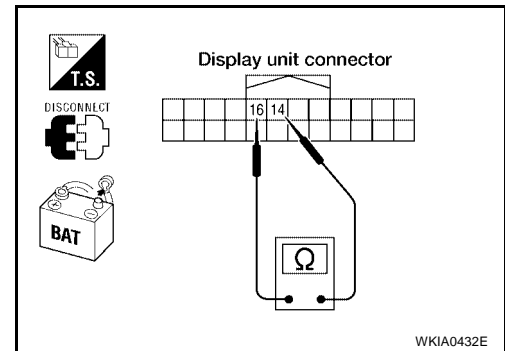
14 (L) - 16 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Replace display unit.

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



EKS005FO

## 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).

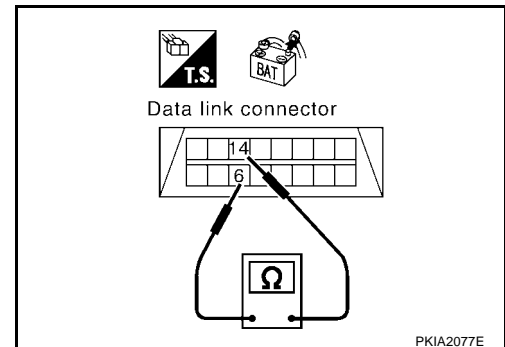
6 (L) - 14 (Y)

: Approx. 54 - 66Ω

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-326](#).

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



EKS005FP

## 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

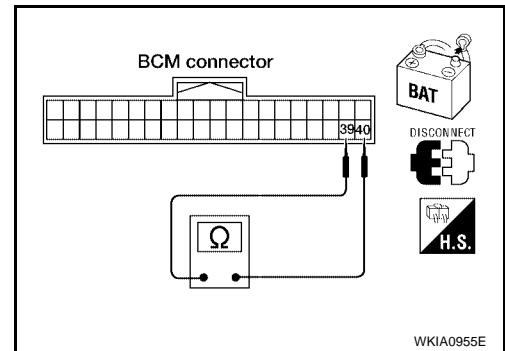
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS005FQ

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

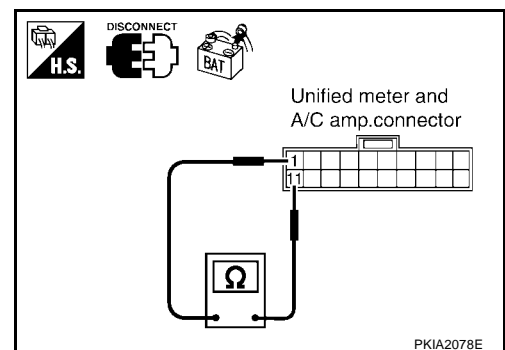
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS005FR

## 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.

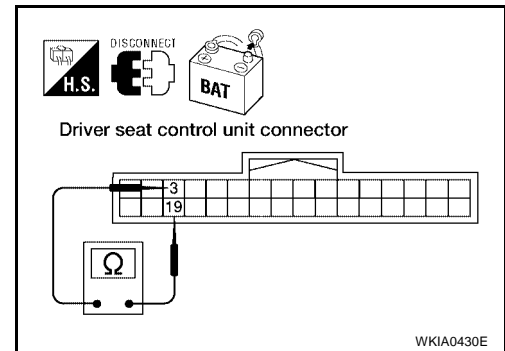
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS005FS

### 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.

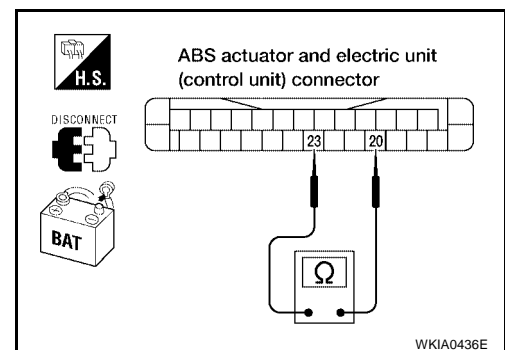
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



## IPDM E/R Circuit Check

EKS005FT

### 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

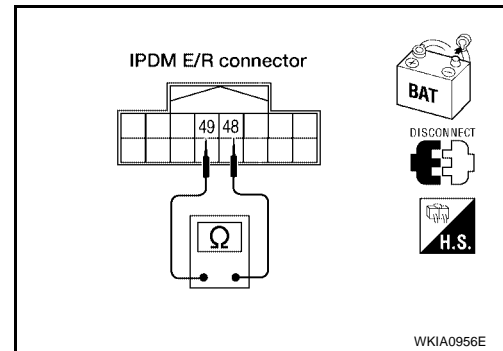
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS005FU

## 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)
  - Display unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

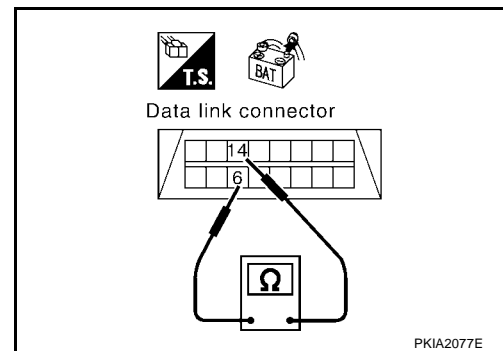
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

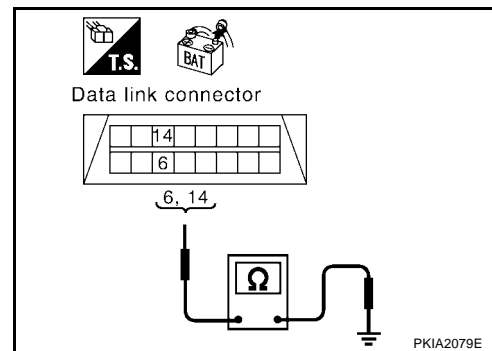
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-342, "Component Inspection"](#).

NG >> Repair the harness.



EKS005FV

### IPDM E/R Ignition Relay Circuit Check

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

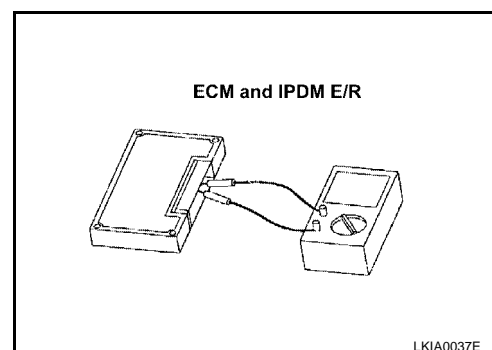
- IPDM E/R power supply circuit. Refer to [PG-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

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

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS005FW



CAN SYSTEM (TYPE 16)

PFP:23710

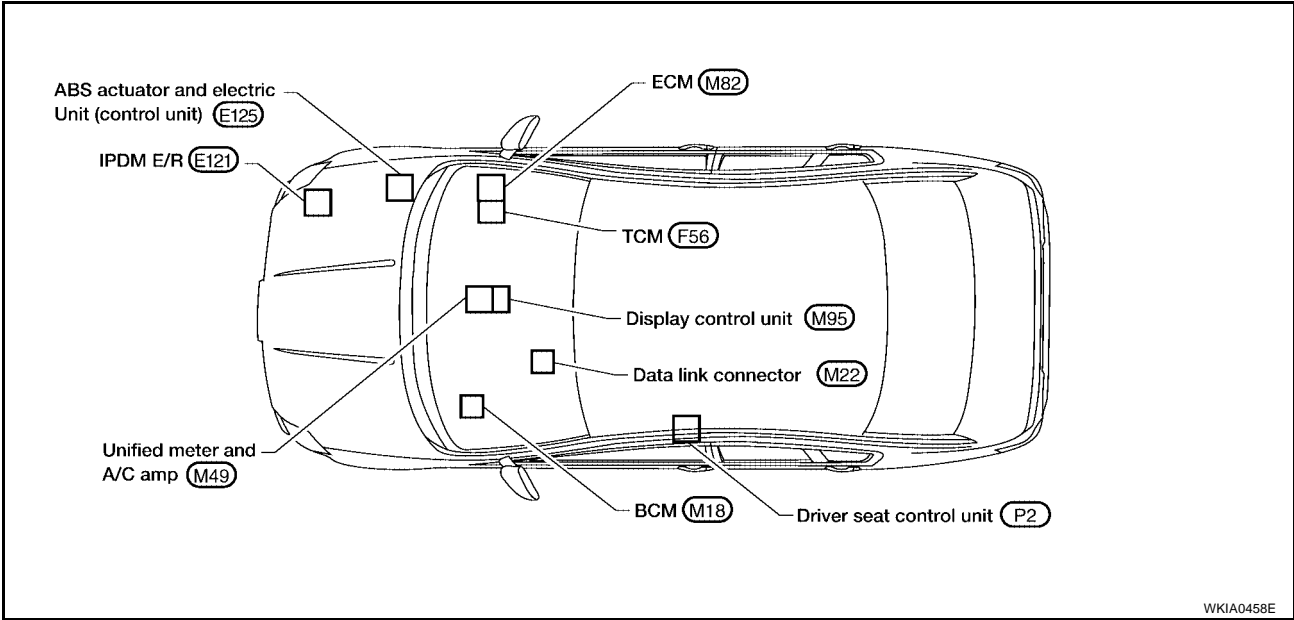
System Description

EKS005FX

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

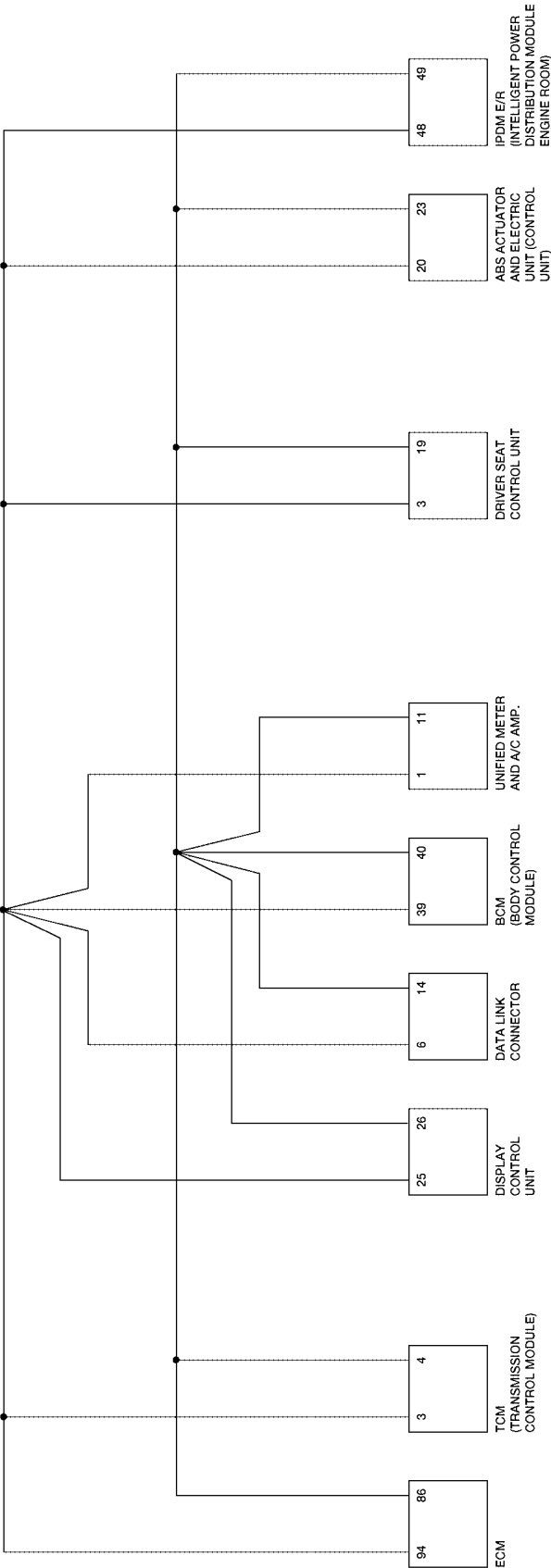
EKS005FY



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

Schematic

EKS005FZ



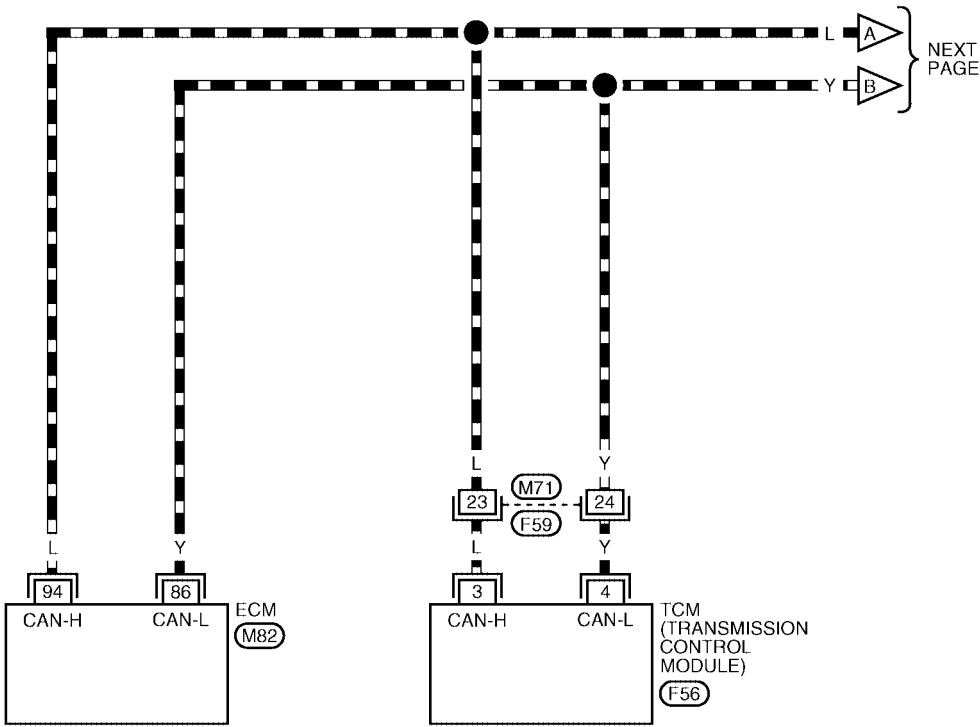
WKWA0470E


Wiring Diagram - CAN -

EKS005G0

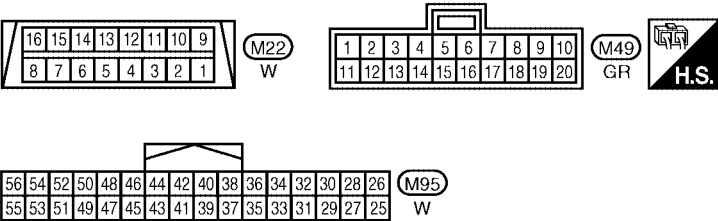
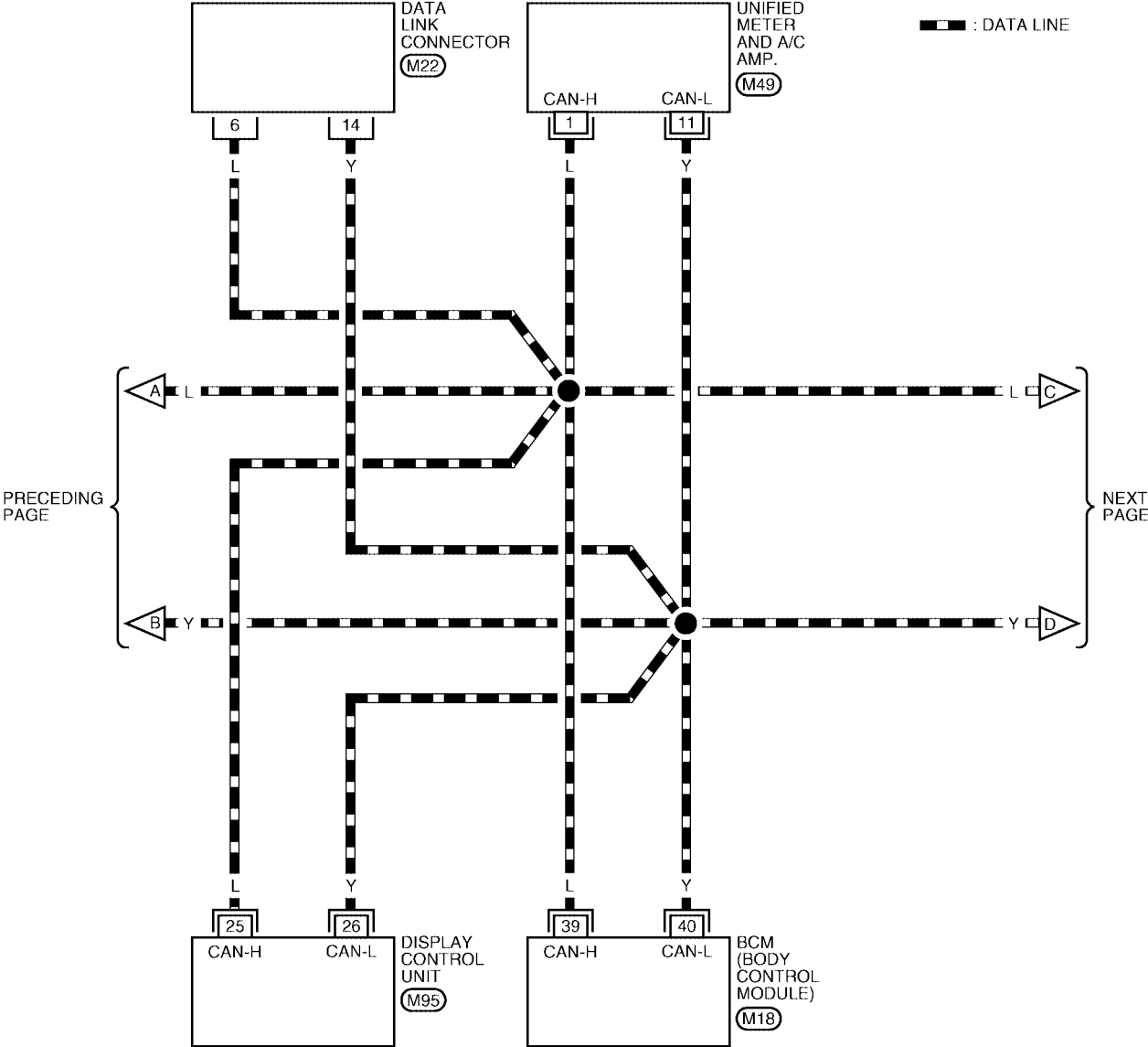
LAN-CAN-46

: DATA LINE

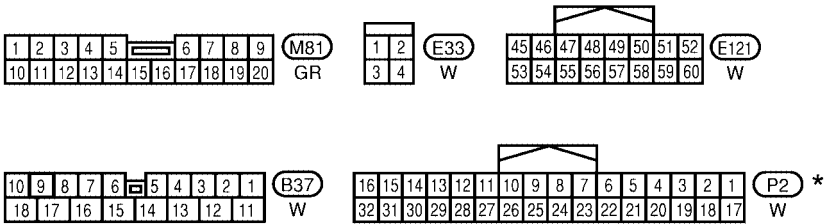
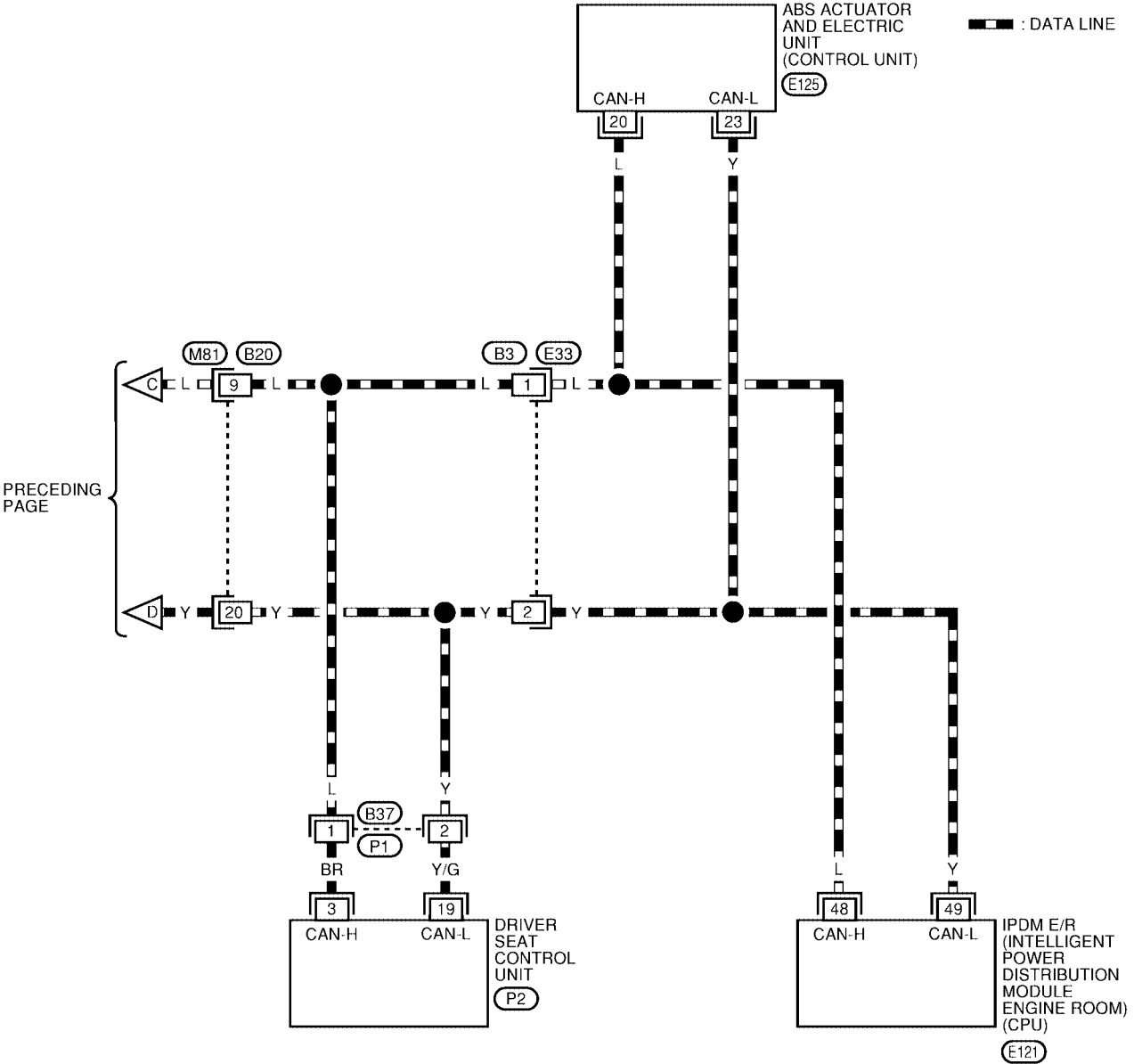


1	2	3	4	5	6			7	8	9	10	11	<div>F59</div> <div>W</div>
12	13	14	15	16	17	18	19	20	21	22	23	24	

REFER TO THE FOLLOWING.  
M82 , F56 - ELECTRICAL  
UNITS



REFER TO THE FOLLOWING.  
(M18) - ELECTRICAL UNITS



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

REFER TO THE FOLLOWING.  
E125 - ELECTRICAL UNITS

## Work Flow

- When there are no indications of “AT”, “METER A/C AMP”, “BCM”, “IPDM E/R” or “AUTO DRIVE POS.” on “SELECT SYSTEM” display of CONSULT-II, print the “SELECT SYSTEM”.

(Example)

NISSAN				SELECT SYSTEM	
CONSULT-II				ENGINE	
ENGINE				A/T	
START (NISSAN BASED VHCL)				ABS	
START (RENAULT BASED VHCL)				AIR BAG	
SUB MODE				BCM	
				METER A/C AMP	
LIGHT COPY				BACK LIGHT COPY	

PKIA2093E

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

(Example)

SELECT DIAG MODE		SELF-DIAG RESULTS	
WORK SUPPORT		DTC RESULTS TIME	
SELF-DIAG RESULTS		CAN COMM CIRCUIT [U1000] 0	
DATA MONITOR			
DATA MONITOR (SPEC)			
ACTIVE TEST			
FUNCTION TEST			
Scroll Down		F.F.DATA	
BACK LIGHT COPY		ERASE PRINT	
		MODE BACK LIGHT COPY	

PKIA2094E

- Print all the data of “DATA MONITOR (CAN DIAG SUPPORT MNTR)” for “ENGINE”, “TRANSMISSION”, “BCM”, “METER A/C AMP”, “AUTO DRIVE POS.”, “IPDM E/R” and “ABS” displayed on CONSULT-II.

(Example)

SELECT DIAG MODE		DATA MONITOR		DATA MONITOR	
WORK SUPPORT		SELECT MONITOR ITEM		MONITOR NO DTC	
SELF-DIAG RESULTS		ECM INPUT SIGNALS		CAN COMM OK	
DATA MONITOR		MAIN SIGNALS		CAN CIRC 1 OK	
DATA MONITOR (SPEC)		CAN DIAG SUPPORT MNTR		CAN CIRC 2 OK	
ACTIVE TEST		SELECTION FROM MENU		CAN CIRC 3 OK	
FUNCTION TEST				CAN CIRC 4 OK	
Scroll Down		SETTING Numerical Display		CAN CIRC 5 UNKWN	
BACK LIGHT COPY		MODE BACK LIGHT COPY		CAN CIRC 6 OK	
				CAN CIRC 7 OK	
				RECORD	
				MODE BACK LIGHT COPY	

PKIA2095E

- Based on the indications of “SELECT SYSTEM” and the results of “DATA MONITOR (CAN DIAG SUPPORT MNTR)”, put marks onto the items with “No indication”, “NG”, or “UNKWN” in the check sheet table.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 3	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0452E

## NOTE:

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



- The “DATA MONITOR (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 “DATA MONITOR (CAN DIAG SUPPORT MNTR)” items not in check sheet table.

- Check CAN communication line of the navigation system.
- 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.

- According to the Check Sheet Results, start inspection.

**CHECK SHEET RESULTS****Case 1**

Replace ECM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0602E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0603E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 2

Replace TCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 3	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0604E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0605E

## Case 3

Replace display control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0606E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0607E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 4

Replace BCM.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0608E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0609E

## Case 5

Replace unified meter and A/C amp.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	CAN CIRC 4	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0610E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 6

Replace driver seat control unit.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0611E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0612E

## Case 7

Replace ABS actuator and electric unit (control unit).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0613E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0614E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 8

Replace IPDM E/R.

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0615E

## Case 9

Check harness between TCM and data link connector. Refer to [LAN-357](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0616E

## Case 10

Check harness between data link connector and driver seat control unit. Refer to [LAN-357](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0617E

## Case 11

Check harness between driver seat control unit and ABS actuator and electric unit (control unit). Refer to [LAN-358](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	-	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0618E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 12

Check ECM circuit. Refer to [LAN-358](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0619E

## Case 13

Check TCM circuit. Refer to [LAN-359](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0620E

## Case 14

Check display control unit circuit. Refer to [LAN-359](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0621E

## Case 15

Check data link connector circuit. Refer to [LAN-360](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0622E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 16

Check BCM circuit. Refer to [LAN-360](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP*	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0623E

## Case 17

Check unified meter and A/C amp. circuit. Refer to [LAN-361](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP*	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0624E

## Case 18

Check driver seat control unit circuit. Refer to [LAN-361](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP*	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0625E

## Case 19

Check ABS actuator and electric unit (control unit) circuit. Refer to [LAN-362](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP*	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0626E

# CAN SYSTEM (TYPE 16)

[CAN]

## Case 20

Check IPDM E/R circuit. Refer to [LAN-362](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM F/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM F/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0627E

## Case 21

Check CAN communication circuit. Refer to [LAN-363](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0628E

## Case 22

Check IPDM E/R Ignition relay circuit. Refer to [LAN-364](#).

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	-	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CAN CIRC 1	CAN CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0629E

	CONSULT Indication	CAN System	Tx	Rx							
				ECM	TCM	Display control unit	Unified meter and A/C amp.	BCM	Driver seat control unit	ABS actuator and electric unit (control unit)	IPDM E/R
ENGINE	-	CAN COMM	CAN CIRC 1	-	CAN CIRC 2	-	CAN CIRC 4	CAN CIRC 6	-	CAN CIRC 3	CAN CIRC 7
TRANSMISSION	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	CAN CIRC 3	-
DISPLAY CONTROL UNIT	-	CAN COMM	CAN CIRC 1	CAN CIRC 3	-	-	CAN CIRC 5	CAN CIRC 2	-	-	CAN CIRC 7
METER A/C AMP	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	CAN CIRC 7	-	CAN CIRC 4	-	CAN CIRC 5	CAN CIRC 6
BCM	No Disp	CAN COMM	CAN CIRC 1	CAN CIRC 2	-	-	CAN CIRC 4	-	-	-	CAN CIRC 3
AUTO DRIVE POS.	No Disp	CAN COMM	CAN CIRC 1	-	CAN CIRC 4	-	CAN CIRC 3	CAN CIRC 2	-	-	-
ABS	-	CAN COMM	CAN CIRC 1	CAN CIRC 2	CAN CIRC 3	-	-	-	-	-	-
IPDM E/R	No Disp	-	CIRC 1	CIRC 3	-	-	-	CAN CIRC 2	-	-	-

WKIA0630E



**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 F56 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between TCM connector F56 terminals 3 (L), 4 (Y) and data link connector M22 terminals 6 (L), 14 (Y).

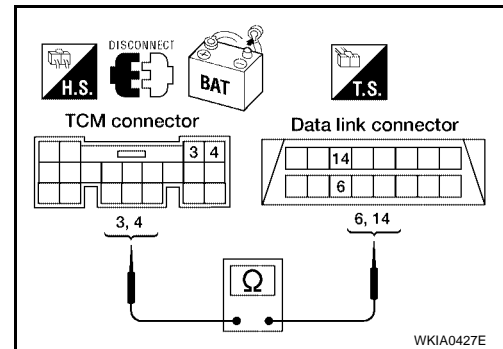
**3 (L) - 6 (L) : Continuity should exist.**

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

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-348, "Work Flow"](#).

NG >> Repair harness.



WKIA0427E

**Circuit Check Between Driver Seat Control Unit and Data Link Connector****1. CONNECTOR INSPECTION**

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2 and ECM connector M82.
4. Check the terminals for deformation, disconnection, looseness or damage.

OK or NG

OK &gt;&gt; GO TO 2.

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

**2. CHECK HARNESS FOR OPEN CIRCUIT**

Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and data link connector M22 terminals 6 (L), 14 (Y).

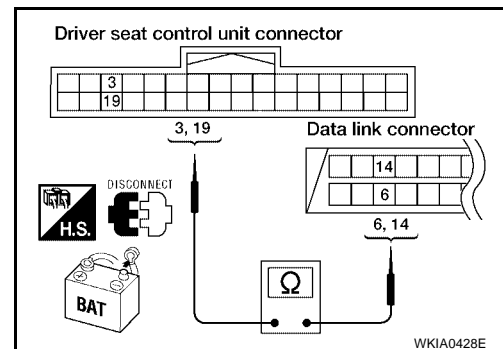
**3 (BR) - 6 (L) : Continuity should exist.**

**19 (Y/G) - 14 (Y) : Continuity should exist.**

OK or NG

OK >> Connect all connectors and diagnose again. Refer to [LAN-348](#).

NG >> Repair harness.



WKIA0428E

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

EKS005G4

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect driver seat control unit connector P2, ABS actuator and electric unit (control unit) connector E125 and ECM connector M82.
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

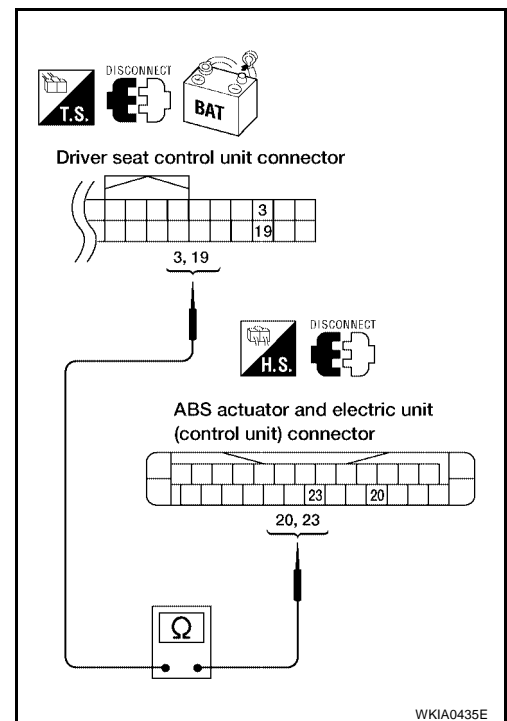
Check continuity between driver seat control unit connector P2 terminals 3 (BR), 19 (Y/G) and ABS actuator and electric unit (control unit) connector E125 terminals 20 (L), 23 (Y).

**3 (BR) - 20 (L) : Continuity should exist.**

**19 (Y/G) - 23 (Y) : Continuity should exist.**

#### OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-348](#).  
 NG >> Repair harness.



## ECM Circuit Check

EKS005G5

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect ECM connector M82.
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

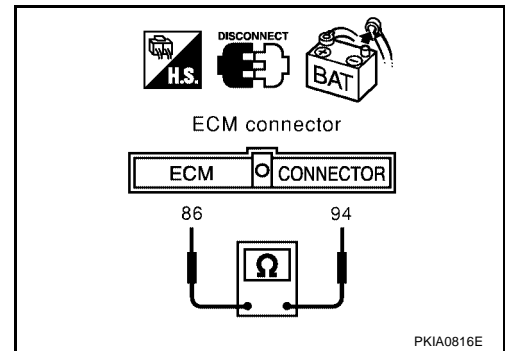
Check resistance between ECM connector M82 terminal 94 (L) and terminal 86 (Y).

**94 (L) - 86 (Y)**

**: Approx. 108 - 132Ω**

OK or NG

- OK >> Replace ECM.  
 NG >> Repair harness between ECM connector M82 and TCM connector F56.



EKS005G6

## TCM Circuit Check

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect TCM connector F56.
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

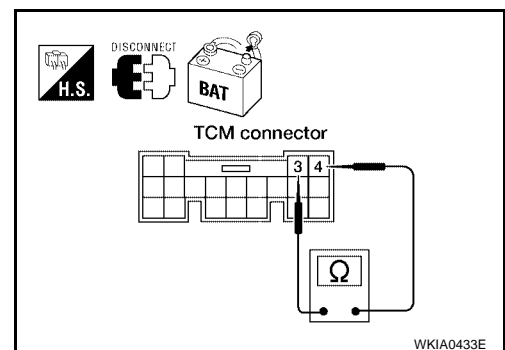
Check resistance between TCM connector F56 terminal 3 (L) and terminal 4 (Y).

**3 (L) - 4 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace TCM.  
 NG >> Repair harness between TCM connector F56 and ECM connector M82.



EKS005G7

## 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

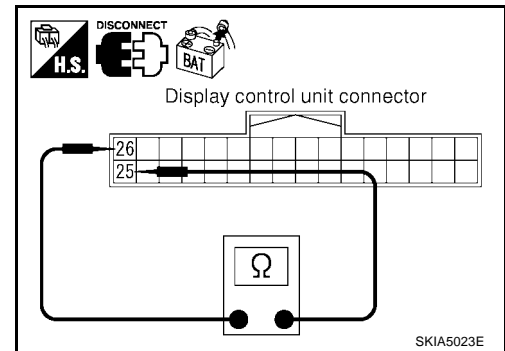
Check resistance between display control unit connector M95 terminal 25 (L) and terminal 26 (Y).

**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.



EKS005G8

## 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

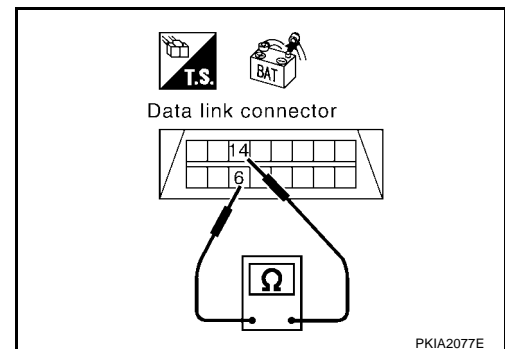
Check resistance between data link connector M22 terminal 6 (L) and terminal 14 (Y).

**6 (L) - 14 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Connect all connectors and diagnose again. Refer to [LAN-348](#).  
 NG >> Repair harness between data link connector M22 and BCM connector M18.



EKS005G9

## 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

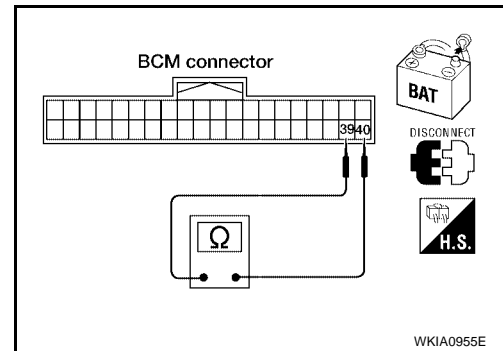
Check resistance between BCM connector M18 terminal 39 (L) and terminal 40 (Y).

**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.



EKS005GA

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

### 1. CONNECTOR INSPECTION

1. Turn ignition switch OFF.
2. Disconnect the negative battery terminal.
3. Disconnect unified meter and A/C amp. connector M49.
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

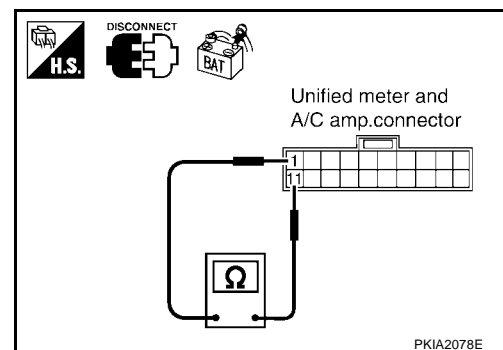
Check resistance between unified meter and A/C amp. connector M49 terminal 1 (L) and terminal 11 (Y).

**1 (L) - 11 (Y)**

**: Approx. 54 - 66Ω**

OK or NG

- OK >> Replace unified meter and A/C amp.  
 NG >> Repair harness between unified meter and A/C amp. connector M49 and data link connector M22.



EKS005GB

## 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.

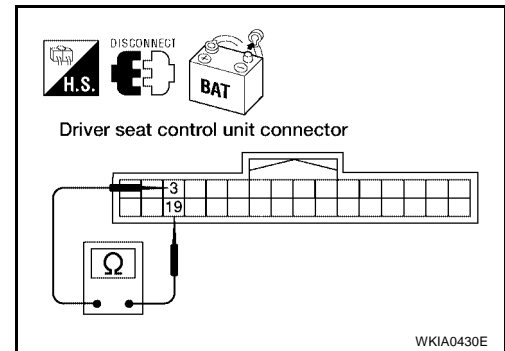
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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

**3 (BR) - 19 (Y/G) : 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.



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

EKS005GC

### 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.

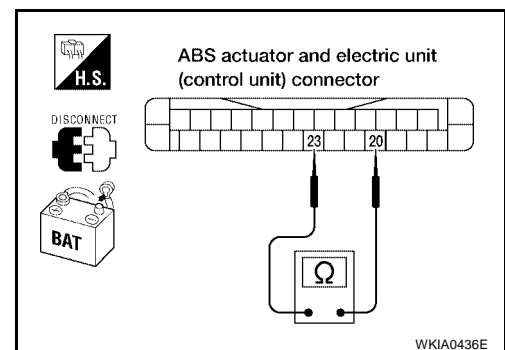
## 2. CHECK HARNESS FOR OPEN CIRCUIT

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 IPDM E/R connector E121.



EKS005GD

## 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

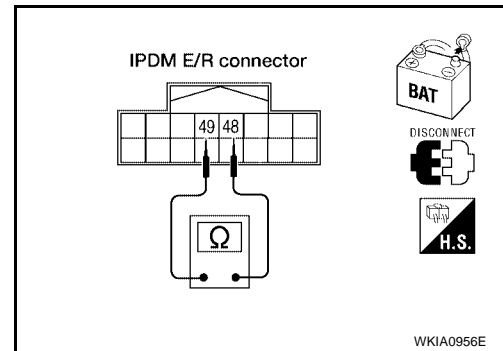
Check resistance between IPDM E/R connector E121 terminal 48 (L) and terminal 49 (Y).

**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 ABS actuator and electric unit (control unit) connector E125.



EKS005GE

## 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)
  - Display control unit
  - BCM (Body control module)
  - Unified meter and A/C amp.
  - Driver seat control unit
  - ABS actuator and electric unit (control unit)
  - 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

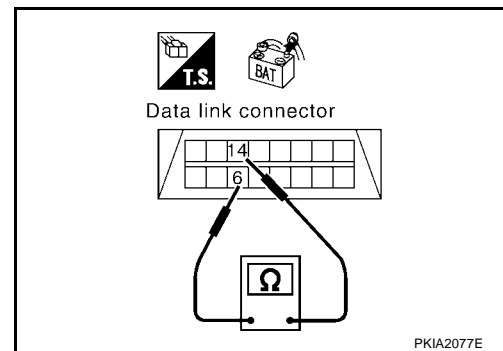
With all module and control unit connectors disconnected, check continuity between data link connector M22 terminals 6 (L) and 14 (Y).

**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.

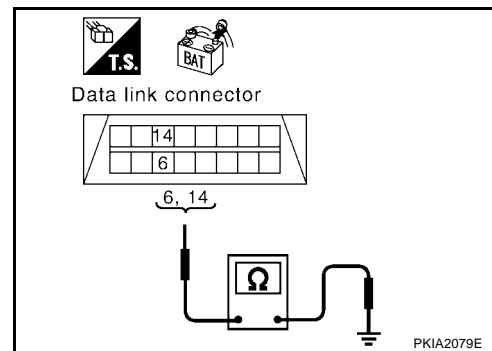
**6 (L) - Ground : Continuity should not exist.**

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

OK or NG

OK >> Check ECM and IPDM E/R. Refer to [LAN-364, "Component Inspection"](#).

NG >> Repair the harness.



EKS005GF

### 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-24, "IPDM E/R Power/Ground Circuit Inspection"](#).
- Ignition power supply circuit. Refer to [PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN ON AND/OR START"](#).

### Component Inspection

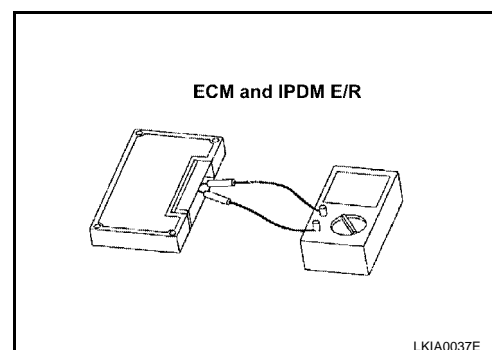
#### ECM/IPDM E/R INTERNAL CIRCUIT INSPECTION

- Remove ECM and IPDM E/R from vehicle.
- 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**

EKS005GG



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