SECTION LAN

LAN SYSTEM

CONTENTS

MODIFICATION NOTICE

PFP:00000

Information

AKS00GNV

Both “AWD” and “4WD” are used in this manual. These indicate the same system.

Major Modification Item

AKS00HKO

The following descriptions are about the change of CAN communication units.

PRECAUTIONS

PFP:00001

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

AKS008ZY

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

WARNING:

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

Precautions When Using CONSULT-II

AKS008B6

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

CAUTION:

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

CHECK POINTS FOR USING CONSULT-II

1. Has CONSULT-II been used without connecting CONSULT-II CONVERTER on this vehicle?

– If YES, GO TO 2.

– If NO, GO TO 5.

2. Is there any indication other than indications relating to CAN communication system in the self-diagnosis results?

– If YES, GO TO 3.

– If NO, GO TO 4.

3. Based on self-diagnosis results unrelated to CAN communication, carry out the inspection.
4. Malfunctions may be detected in self-diagnosis depending on control units carrying out CAN communication. Therefore, erase the self-diagnosis results.
5. Diagnose CAN communication system. Refer to LAN-5, "TROUBLE DIAGNOSES WORK FLOW" .

Precautions for Trouble Diagnosis

AKS008B7

CAN SYSTEM

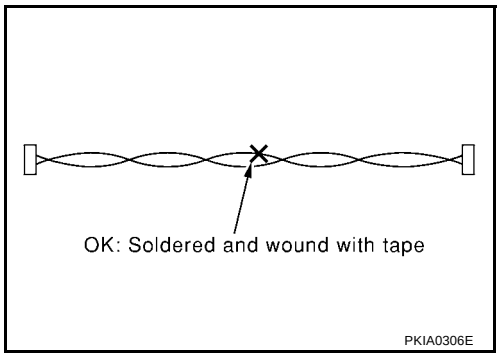
- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

Precautions for Harness Repair

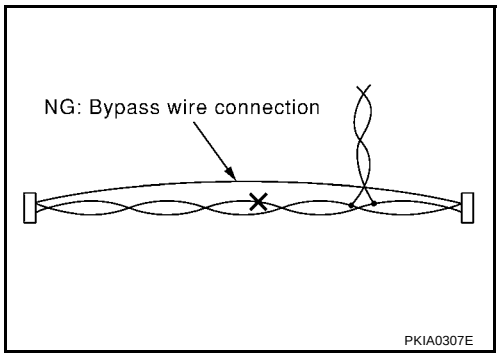
AKS008B8

CAN SYSTEM

- Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



- Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



TROUBLE DIAGNOSES WORK FLOW

PFP:00004

When Displaying CAN Communication System Errors

AKS00FI7

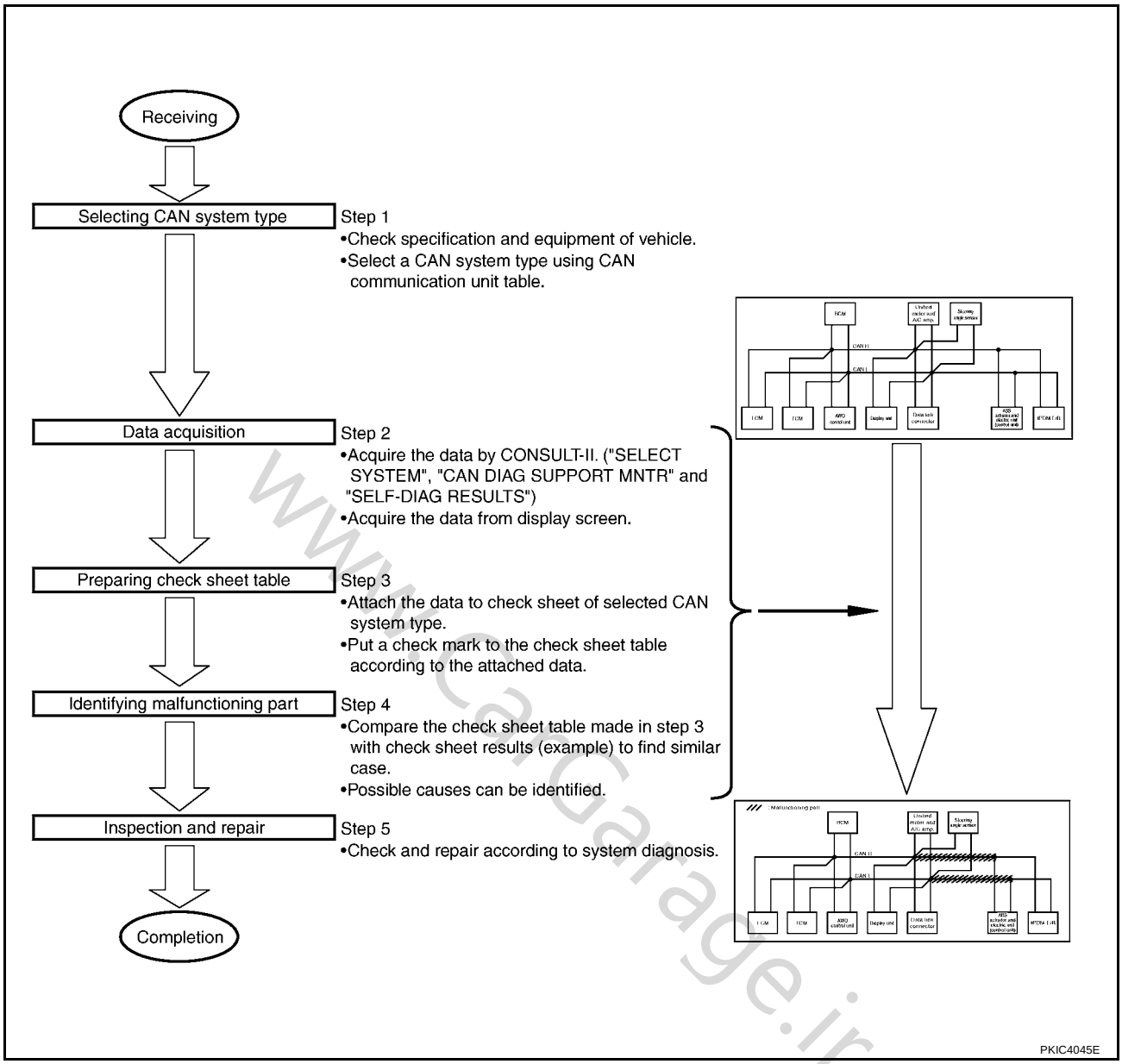
WHEN A MALFUNCTION IS DETECTED BY CAN COMMUNICATION SYSTEM

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

WHEN A MALFUNCTION IS DETECTED EXCEPT CAN COMMUNICATION SYSTEM

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

TROUBLE DIAGNOSIS FLOW CHART



- Step 1: Refer to LAN-7, "SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)" .
- Step 2: Refer to LAN-8, "ACQUISITION OF DATA BY CONSULT-II" .
- Step 3: Refer to LAN-9, "HOW TO USE CHECK SHEET TABLE" .
- Step 4: Refer to LAN-10, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced" .
- Step 5: Refer to LAN-84, "TROUBLE DIAGNOSIS FOR SYSTEM" .

Diagnosis Procedure

AKS00FI8

SELECTING CAN SYSTEM TYPE (HOW TO USE SPECIFICATION TABLE)

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

(Example) Wagon/AWD/VQ35DE/CVT/VDC/For South Africa/Without automatic drive positioner

CAN Communication Unit

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

Body type	Wagon			Check basic specification of the vehicle.
Axle	AWD			
Engine	VQ35DE			
Transmission	CVT			
Brake control	VDC			
Destination	Except for South Africa	For South Africa	Except for South Africa	Select destination.
Automatic drive positioner			×	Select "×" if it is model with automatic drive positioner.
CAN system type	1	2	3	Which number is selected when sequentially selecting from the top of the specification table? The number is "CAN system type" of the applicable vehicle.
CAN system trouble diagnosis	XX.XX	XX.XX	XX.XX	

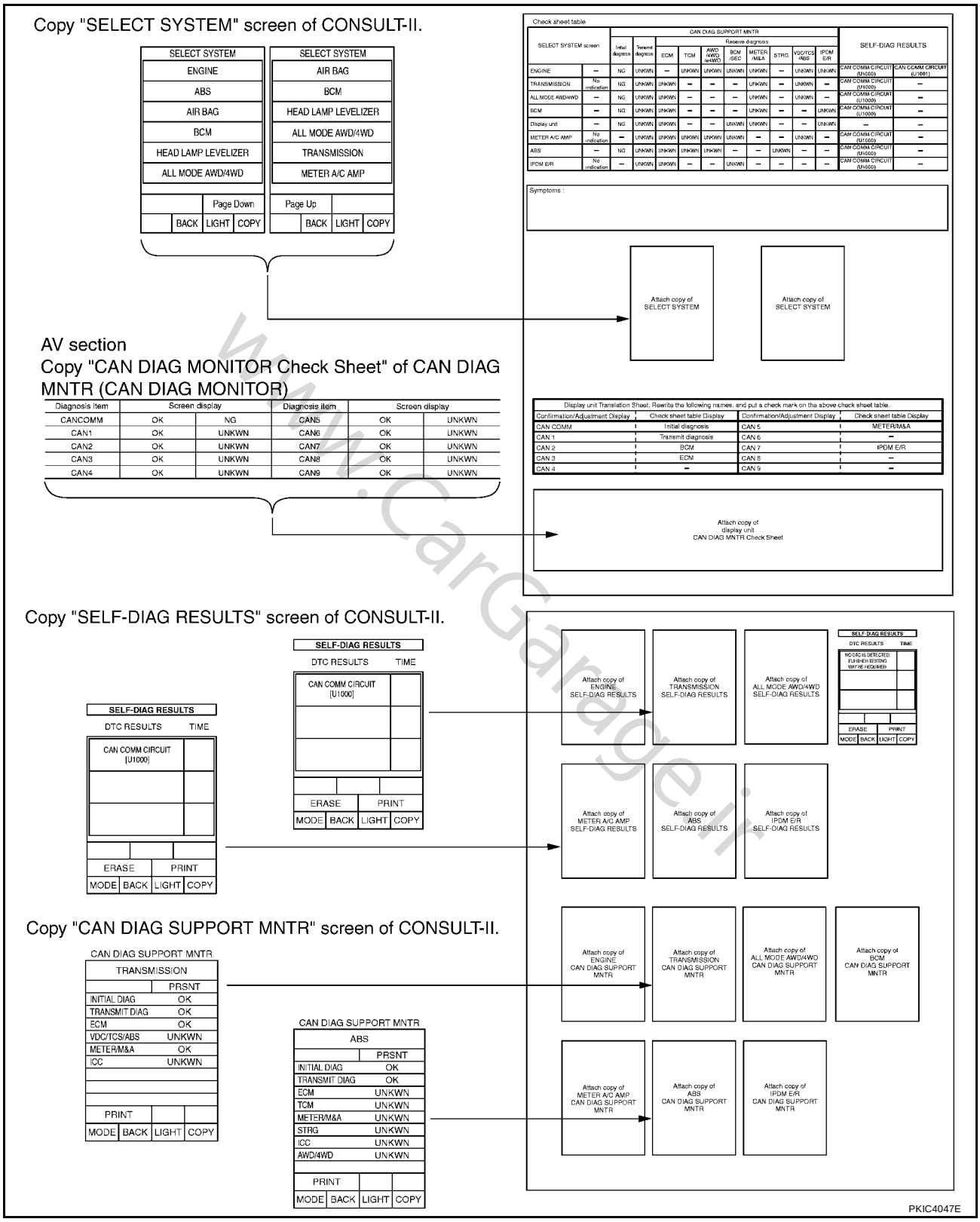
×: Applicable

In the case of this example:
It corresponds to type 2.

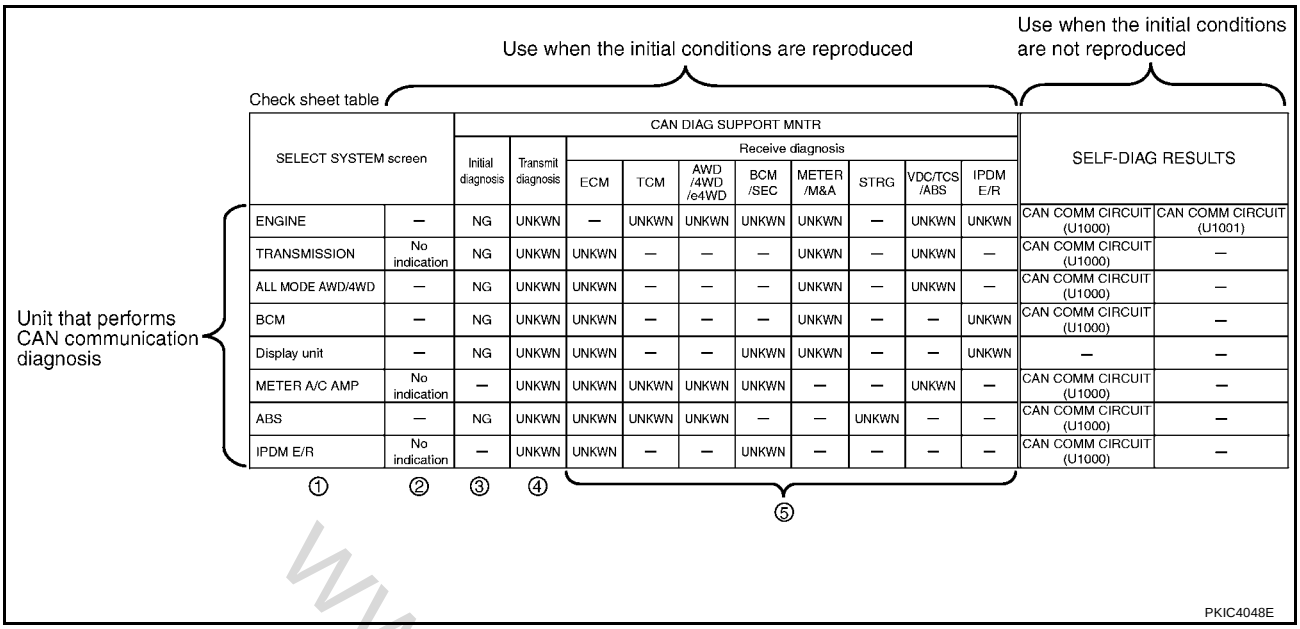
PKIC9424E

ACQUISITION OF DATA BY CONSULT-II

Attach the data acquired by CONSULT-II on the check sheet determined according to CAN system type.(For display control unit, transfer the data from the display screen of the vehicle to “CAN DIAG MONITOR Check Sheet”. Refer to AV-49, "CAN DIAG MNTR (CAN DIAG MONITOR)" .)



HOW TO USE CHECK SHEET TABLE



SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000)	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	UNKWN	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000)	–

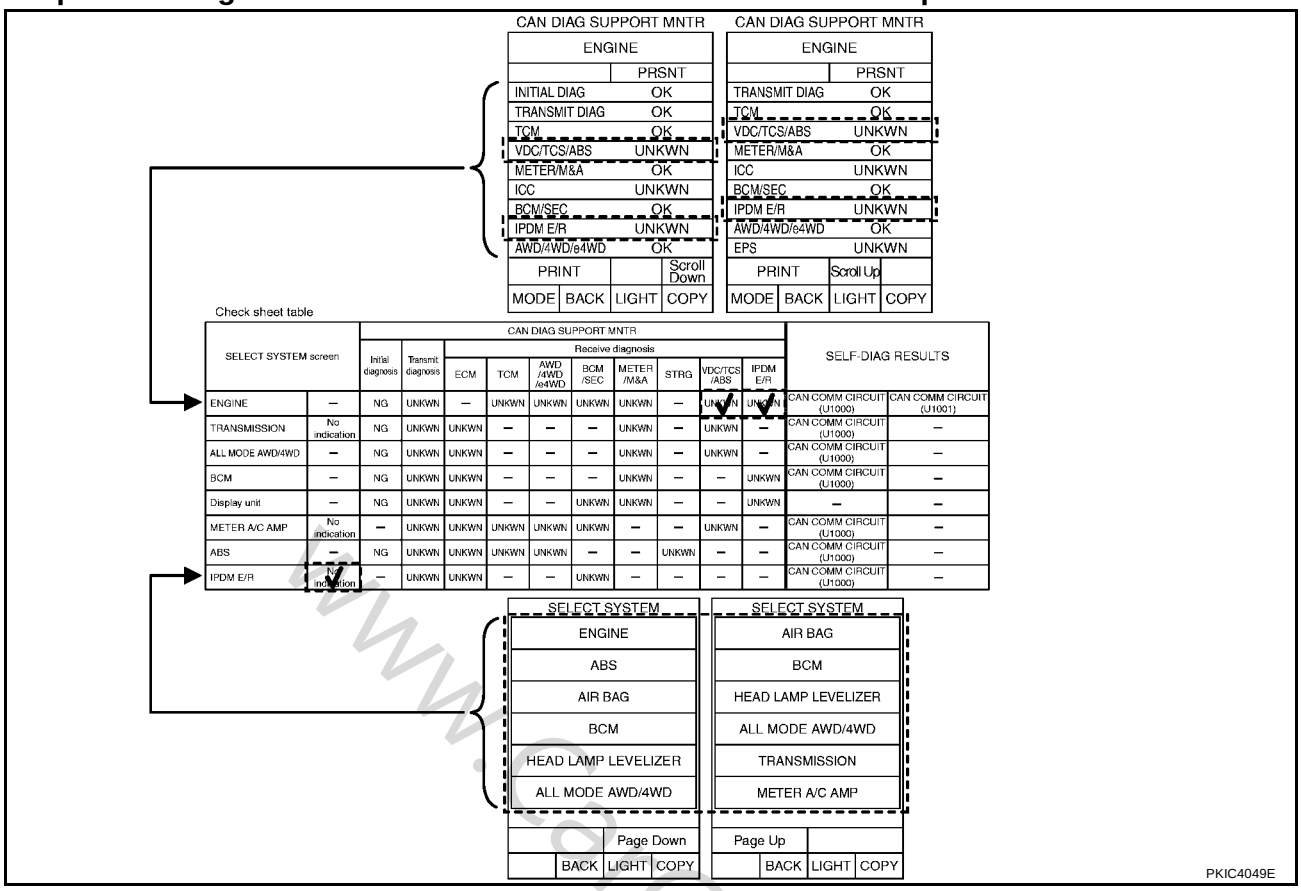
1. Unit names displayed on CONSULT-II.
2. “No indication”: Put a check mark to it if the unit name described in step 1 is not displayed on “SELECT SYSTEM” screen of CONSULT-II. (Unit communicating with CONSULT-II via CAN communication line)
   “–”: Column not used (Unit communicating with CONSULT-II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

   NOTE:
   It is unnecessary to replace ABS actuator and electric unit (control unit) whenever “NG” on “INITIAL DIAG” of “ABS” is indicated. “NG” is indicated not only when malfunctioning ABS actuator and electric unit (control unit) but also other parts. See check sheet results for the system diagnosis.
4. “UNKWN”: Display “UNKWN” when the diagnosed unit does not transmit the data normally. Put a check mark to it if “UNKWN” is displayed on CONSULT-II.
5. “UNKWN”: Display “UNKWN” when the diagnosed unit does not receive the data normally. Put a check mark to it if “UNKWN” is displayed on CONSULT-II.
   “–”: Column not used (It is not necessary for CAN communication trouble diagnosis.)

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

- When the initial conditions are reproduced, refer to LAN-10, "Example of Filling in Check Sheet When Initial Conditions Are Reproduced" .
- When the initial conditions are not reproduced, refer to LAN-14, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced" .

Example of Filling in Check Sheet When Initial Conditions Are Reproduced

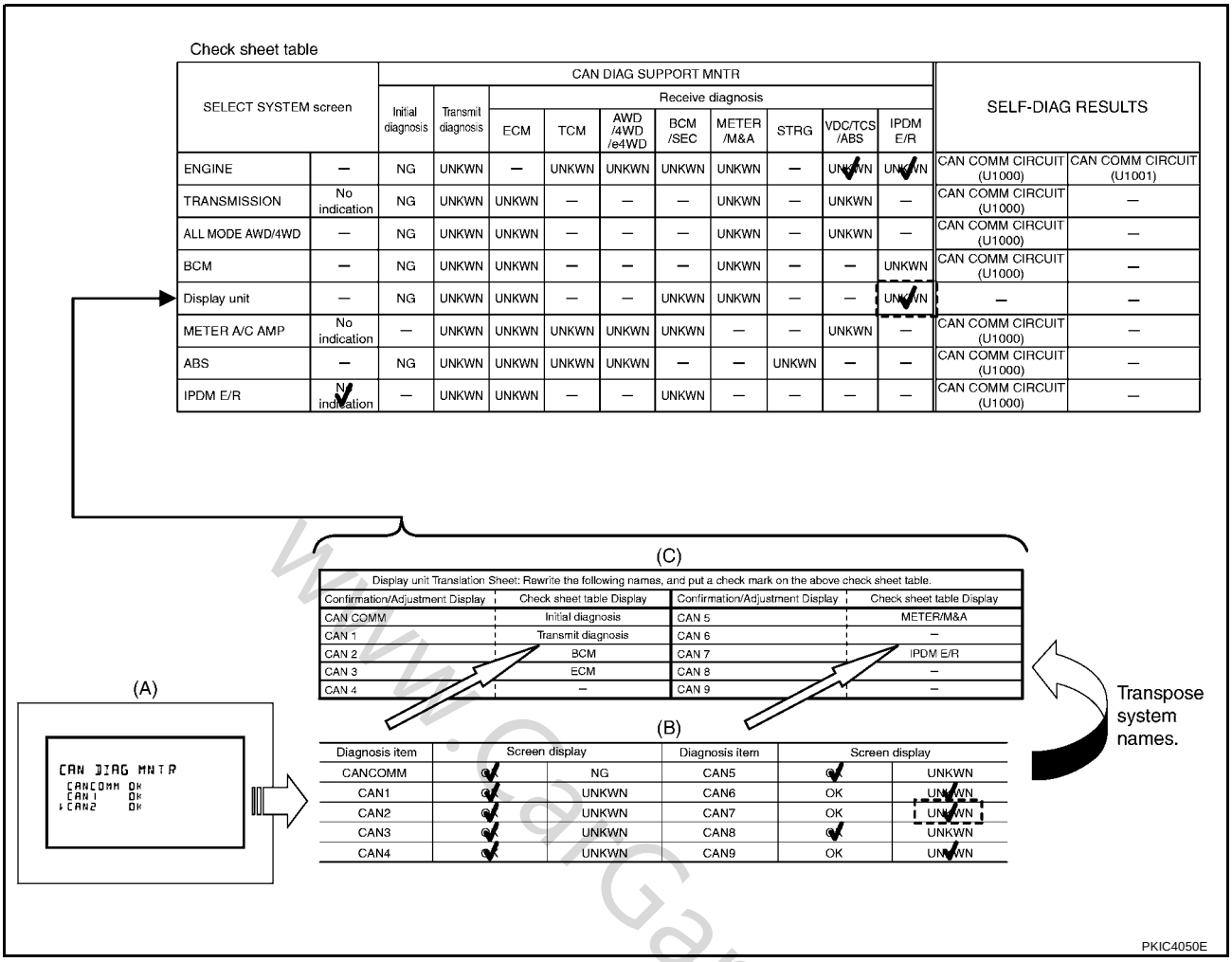


1. Put a check mark to “No indication” if some of unit names listed on the column of diagnosis system selection screen of a check sheet table are not displayed on “SELECT SYSTEM” screen attached to the check sheet.

   NOTE:
   Put a check mark to “No indication” of IPDM E/R because IPDM E/R is not displayed on “SELECT SYSTEM” screen.

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

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



3. For display unit, put a check mark in the following procedure.

NOTE:

- Display unit cannot acquire data with CONSULT-II.
- Display unit uses on board self-diagnosis function with display unit of vehicle and acquires data.

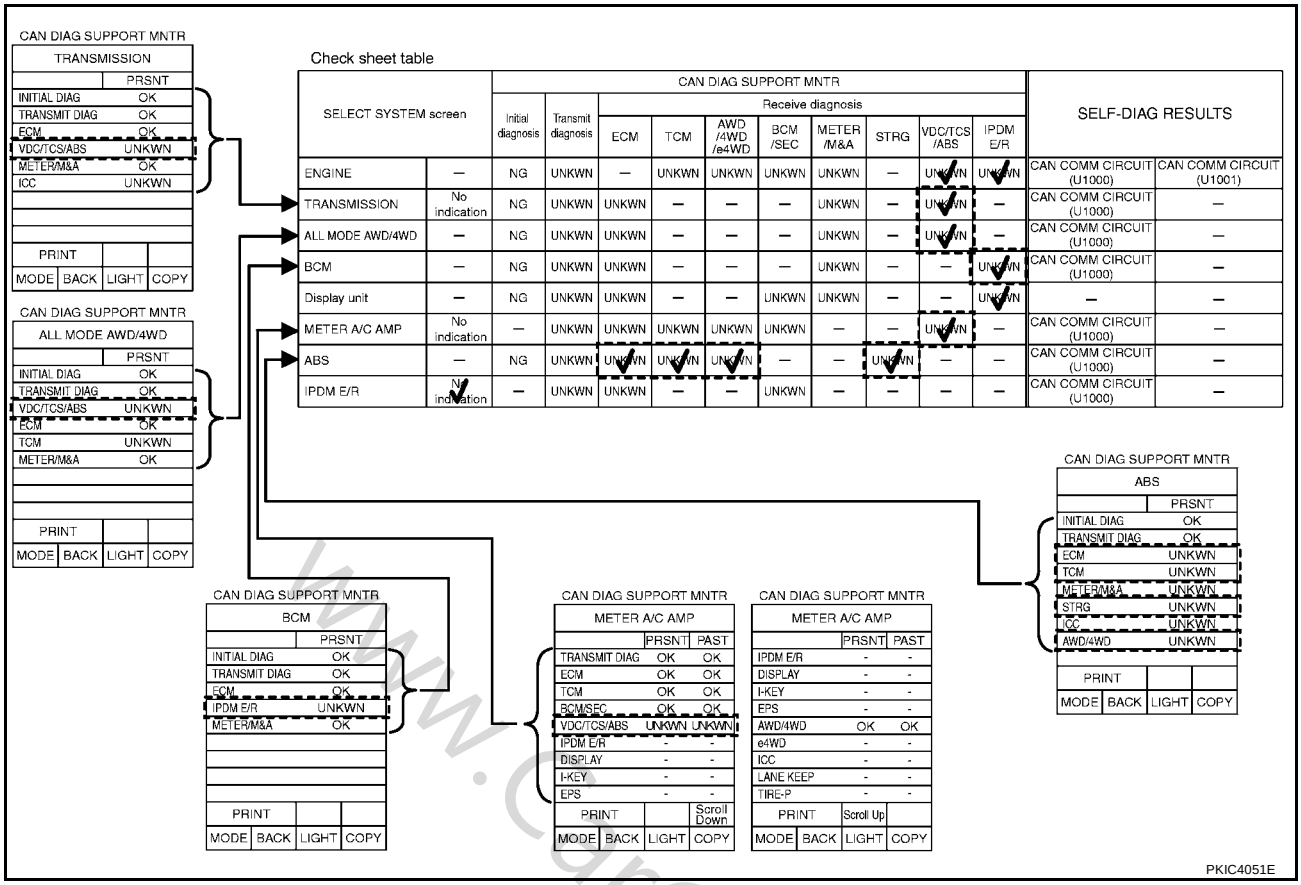
a. Copy to “CAN DIAG MONITOR Check Sheet” (B) from the display screen (A). Refer to AV-49, "CAN DIAG MNTR (CAN DIAG MONITOR)" .

b. Read “CAN DIAG MONITOR Check Sheet” (B) with “Display unit Translation Sheet” (C).

c. Check “UNKWN” with a check mark. Put a check mark to the check sheet table.

NOTE:

In “CAN DIAG MONITOR Check Sheet” (B), check marks are put to “CAN6”, “CAN7” and “CAN9”. But, in the column of the check sheet table indication in “Display unit Translation Sheet” (C), “IPDM E/R” is listed only for “CAN7”. Therefore, put a check mark to “IPDM E/R” because “UNKWN” is listed on the column of reception diagnosis of the check sheet table.



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

NOTE:

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

The arranged results of CAN diagnosis support monitor

Check sheet table

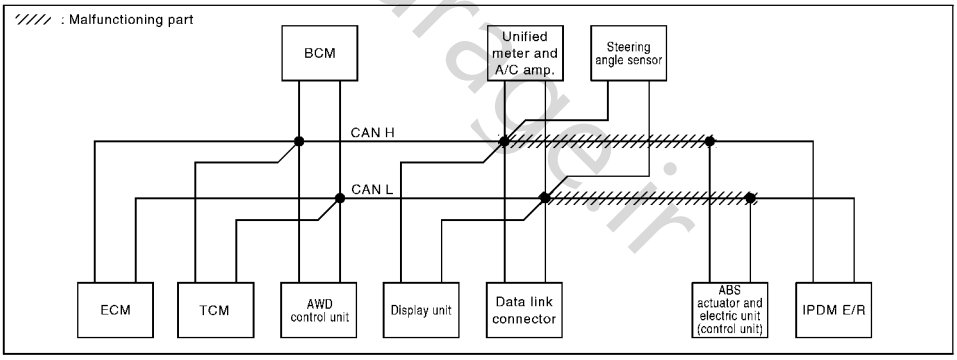
SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	✓	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	✓	–	CAN COMM CIRCUIT (U1000)	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	✓	CAN COMM CIRCUIT (U1000)	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	✓	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	✓	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	✓	✓	✓	–	–	✓	–	–	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	✓ No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000)	–

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

Case 2
Check harness between data link connector and ABS actuator and electric unit (control unit).

Check sheet results (example)

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	✓	✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	✓	–	CAN COMM CIRCUIT (U1000)	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	✓	–	CAN COMM CIRCUIT (U1000)	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	✓	CAN COMM CIRCUIT (U1000)	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	✓	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	✓	–	CAN COMM CIRCUIT (U1000)	–
ABS	–	NG	UNKWN	✓	✓	✓	–	–	✓	–	–	CAN COMM CIRCUIT (U1000)	–
IPDM E/R	✓ No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000)	–



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

5. Perform system diagnosis for possible causes identified.
6. Perform diagnosis again after inspection and repair. Make sure that repair is completely performed, and then end the procedure.

Start CAN system trouble diagnosis if this procedure can be confirmed. Refer to LAN-28, "CAN Communication Unit" .

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

SYSTEM ENGINE

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1001]	1t

SYSTEM TRANSMISSION

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1000]	PAST

SYSTEM ALL MODE AWD/4WD

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1000]	1

SYSTEM BCM

SELF-DIAG RESULTS

DTC RESULTS	TIME
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	

SYSTEM METER A/C AMP

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1000]	1

SYSTEM ABS

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1000]	1

SYSTEM IPDM E/R

SELF-DIAG RESULTS

DTC RESULTS	TIME
CAN COMM CIRCUIT [U1000]	PAST

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1. See “SELF-DIAG RESULTS” of all units attached to the check sheet. If “CAN COMM CIRCUIT”, “CAN COMM CIRCUIT [U1000]” or “CAN COMM CIRCUIT [U1001]” is displayed, put a check mark to the applicable column of self-diagnostic results of the check sheet table.

NOTE:

- For “ENGINE”, “CAN COMM CIRCUIT [U1001]” is displayed. Put a check mark to it.
- For “TRANSMISSION”, “CAN COMM CIRCUIT [U1000]” is displayed. Put a check mark to it.
- For “ALL MODE AWD/4WD”, “CAN COMM CIRCUIT [U1000]” is displayed. Put a check mark to it.
- For “BCM”, “NO DTC IS DETECTED” is displayed. Do not put a check mark to it.
- For “METER A/C AMP”, “CAN COMM CIRCUIT [U1000]” is displayed. Put a check mark to it.
- For “ABS”, “CAN COMM CIRCUIT [U1000]” is displayed. Put a check mark to it.
- For “IPDM E/R”, “CAN COMM CIRCUIT [U1000]” is displayed. Put a check mark to it.

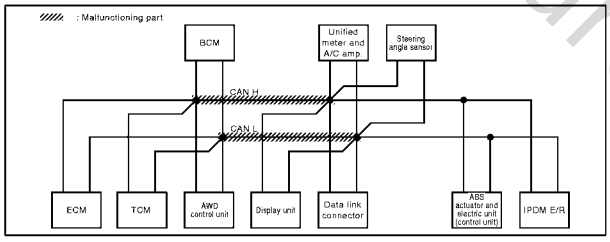
Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR: Initial diagnosis	Transmit diagnosis	Receive diagnosis: ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000) ✓	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	UNKWN	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000) ✓	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000) ✓	–

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

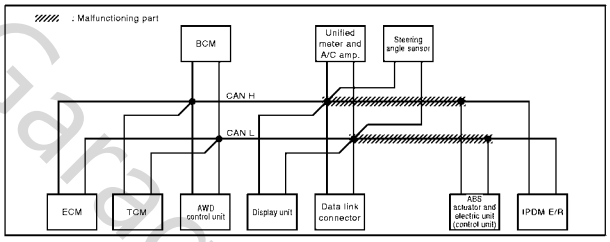
Case 1
Check harness between TCM and data link connector.

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR: Initial diagnosis	Transmit diagnosis	Receive diagnosis: ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000) ✓	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	UNKWN	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000) ✓	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000) ✓	–



Case 2
Check harness between data link connector and ABS actuator and electric unit (control unit).

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR: Initial diagnosis	Transmit diagnosis	Receive diagnosis: ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R	SELF-DIAG RESULTS	
ENGINE	–	NG	UNKWN	–	UNKWN	UNKWN	UNKWN	UNKWN	–	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ALL MODE AWD/4WD	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
BCM	–	NG	UNKWN	UNKWN	–	–	–	UNKWN	–	–	UNKWN	CAN COMM CIRCUIT (U1000) ✓	–
Display unit	–	NG	UNKWN	UNKWN	–	–	UNKWN	UNKWN	–	–	UNKWN	–	–
METER A/C AMP	No indication	–	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	CAN COMM CIRCUIT (U1000) ✓	–
ABS	–	NG	UNKWN	UNKWN	UNKWN	UNKWN	–	–	UNKWN	–	–	CAN COMM CIRCUIT (U1000) ✓	–
IPDM E/R	No indication	–	UNKWN	UNKWN	–	–	UNKWN	–	–	–	–	CAN COMM CIRCUIT (U1000) ✓	–



PKIC4054E

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

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

CAN COMMUNICATION

PFP:23710

System Description

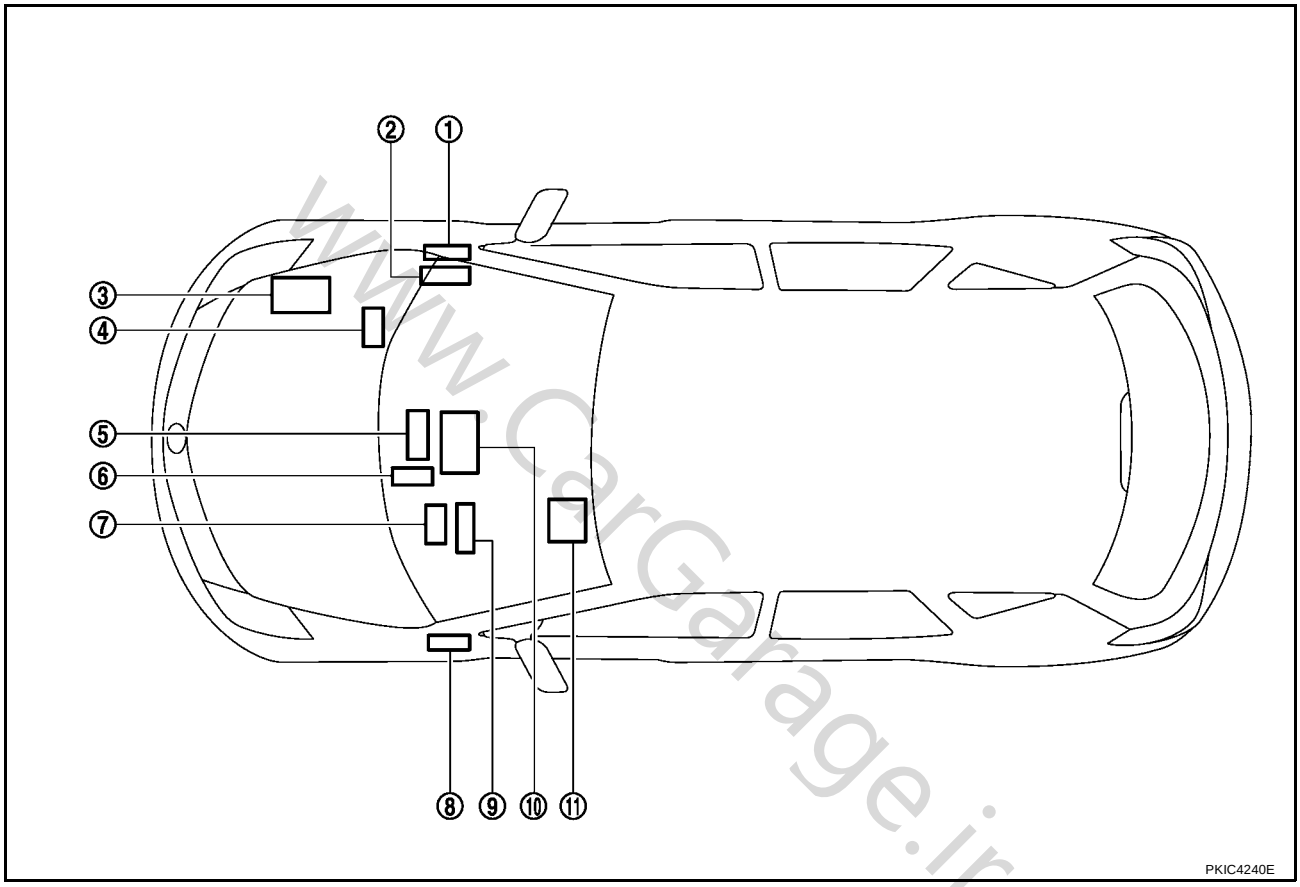
AKS00FI3

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

AKS00FI4

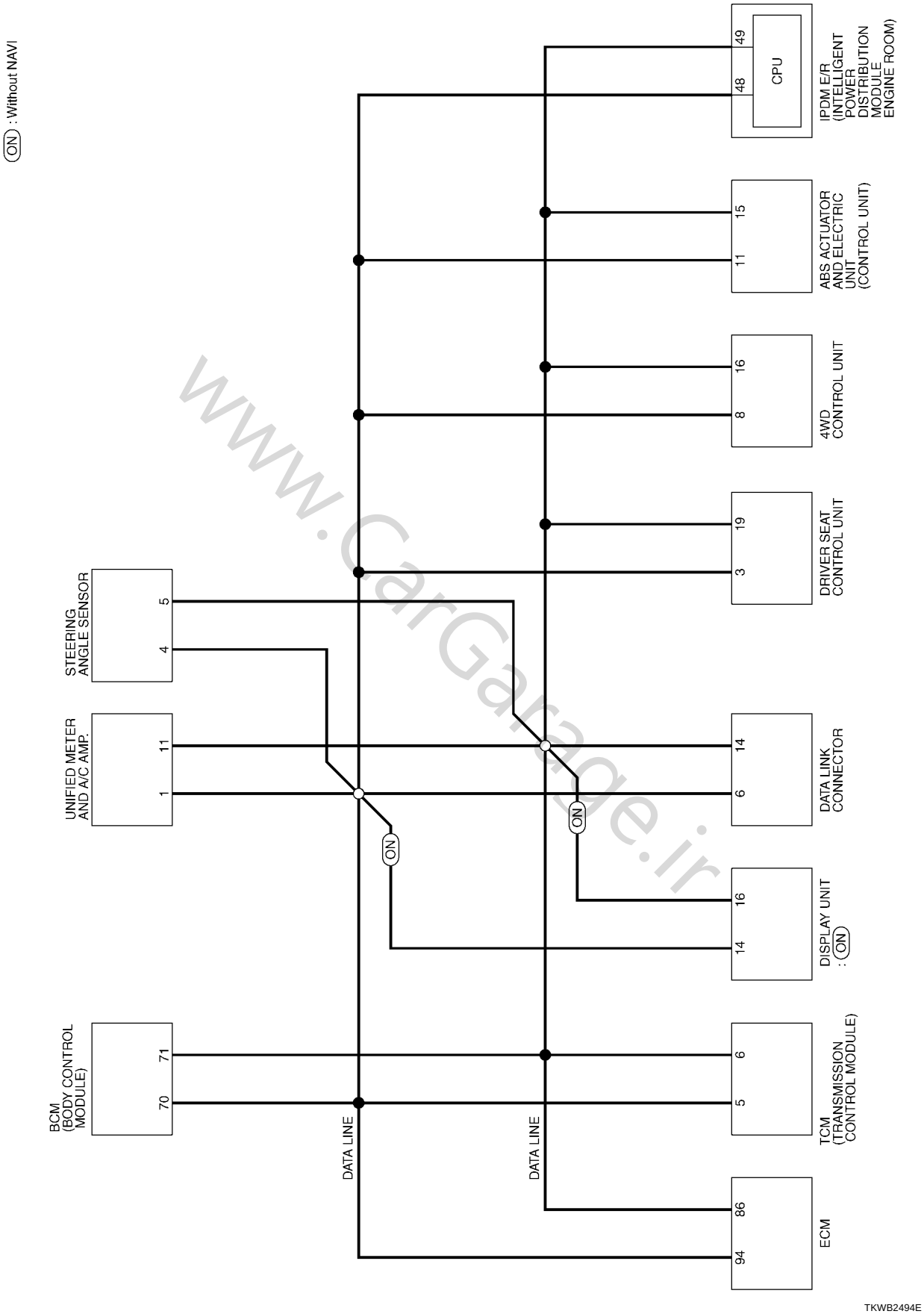
LHD MODEL



1. TCM F103
2. ECM M80
3. IPDM E/R E9
4. ABS actuator and electric unit (control unit) E24
5. Display unit M39
6. BCM M37
7. Data link connector M24
8. AWD control unit E111
9. Steering angle sensor M33
10. Unified meter and A/C amp. M49
11. Driver seat control unit B303

Schematic
LHD MODEL

AKS00FI5

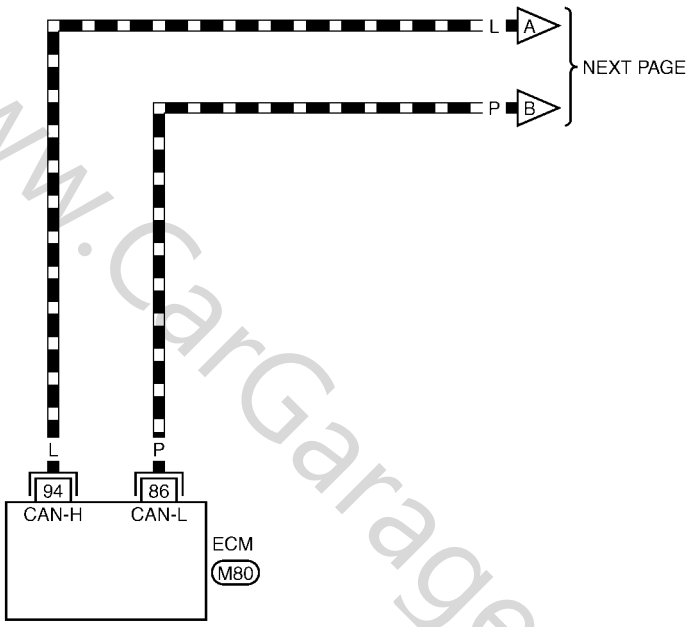


TKWB2494E

Wiring Diagram — CAN —

AKS00FI6

LHD MODEL

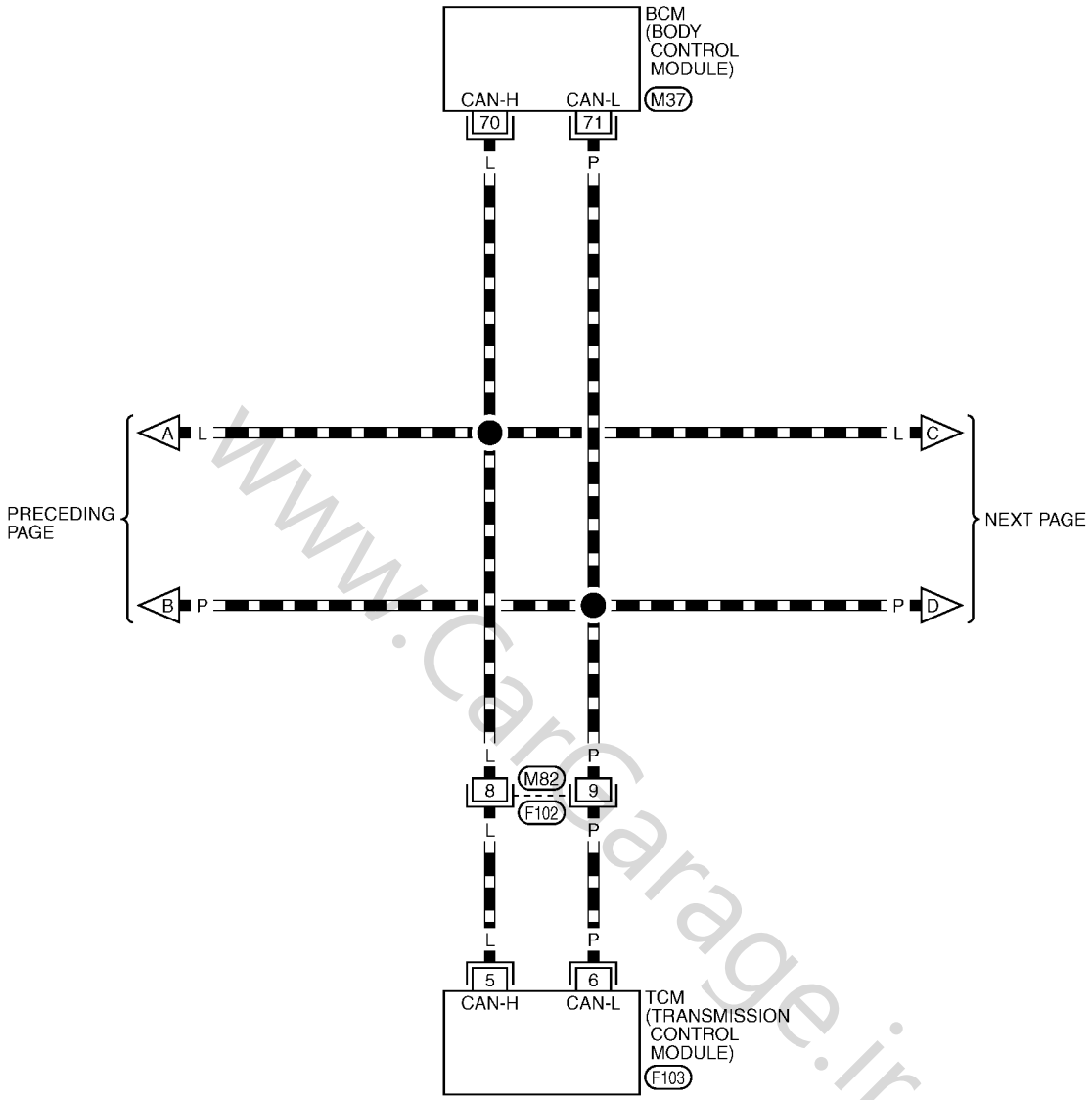


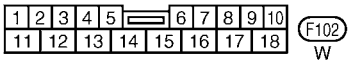
REFER TO THE FOLLOWING.
M80 -ELECTRICAL UNITS

TKWB2743E

LAN-CAN-02

: DATA LINE

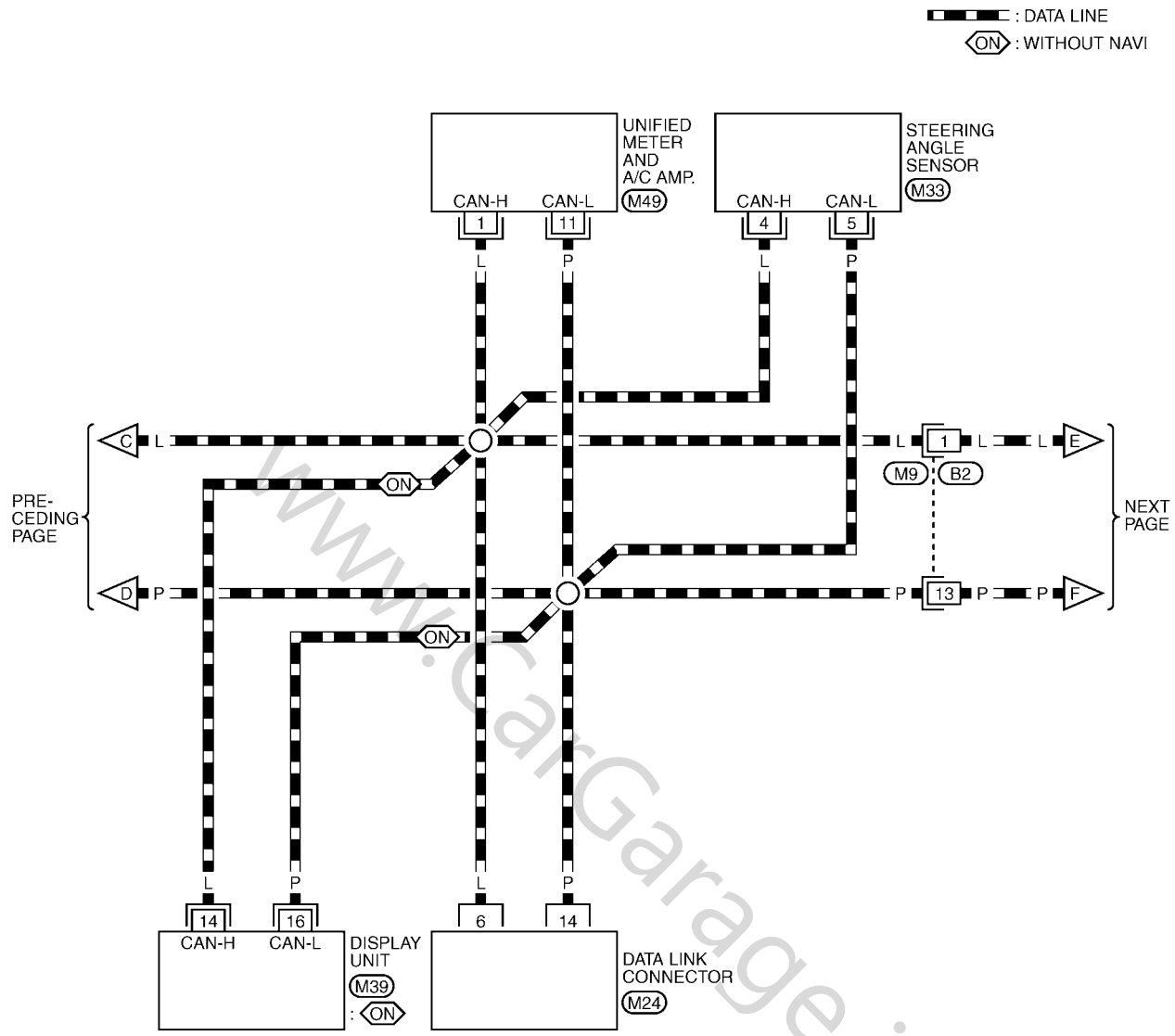


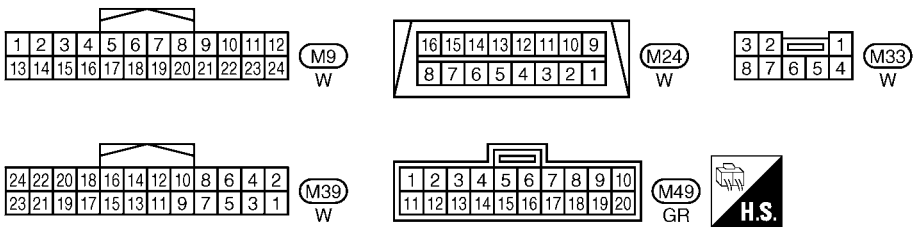


REFER TO THE FOLLOWING.
M37 , F103 -ELECTRICAL
UNITS

TKWB2744E

LAN-CAN-03

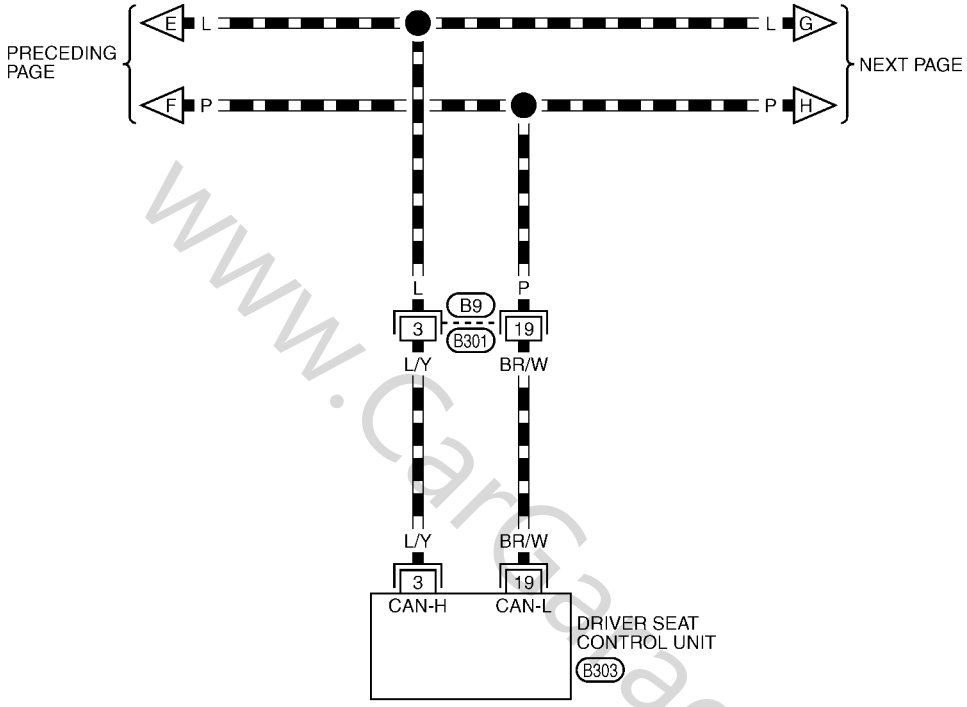


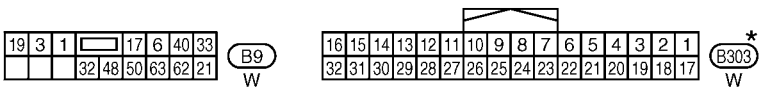


TKWB2495E

LAN-CAN-04

: DATA LINE



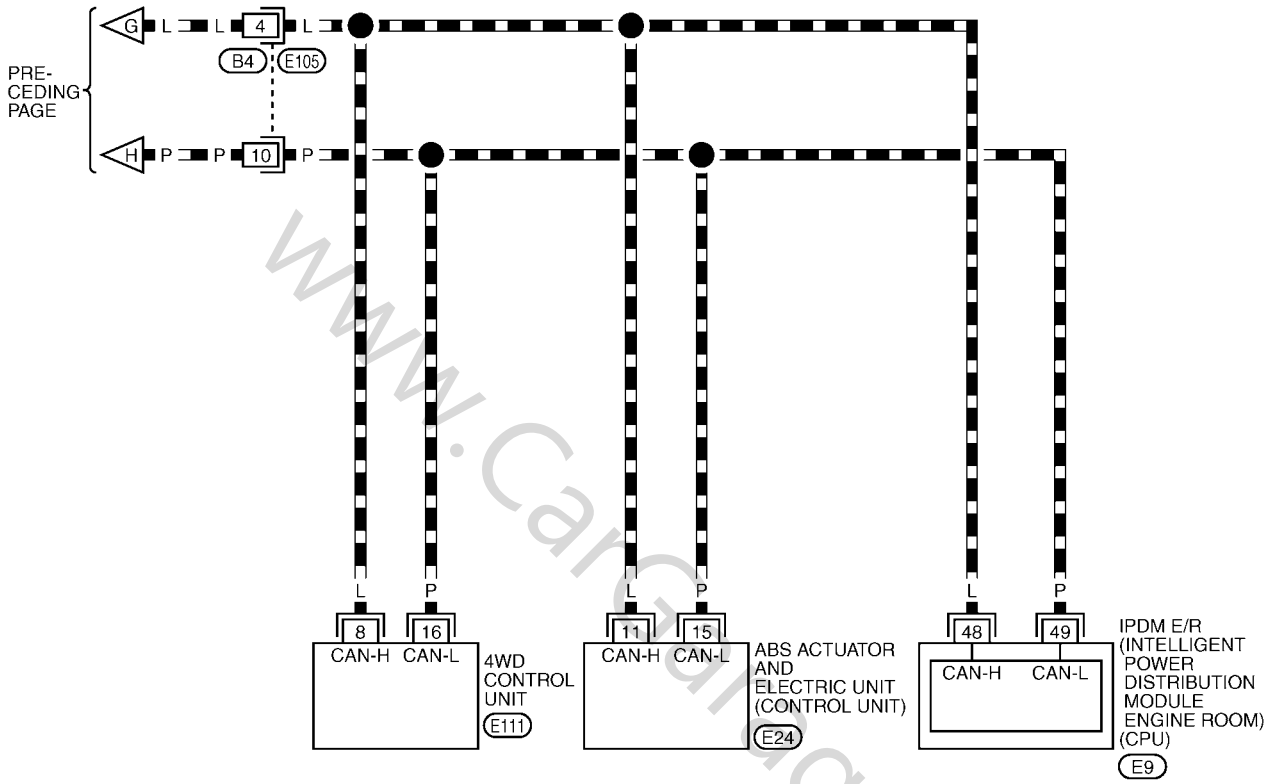


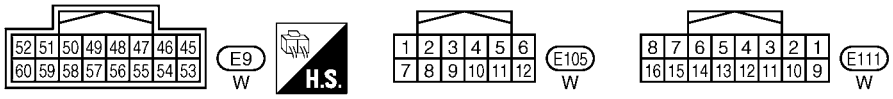
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWB2745E

LAN-CAN-05

: DATA LINE





REFER TO THE FOLLOWING.
E24 -ELECTRICAL UNITS

TKWB2746E

CAN Communication Unit

AKS008ZU

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

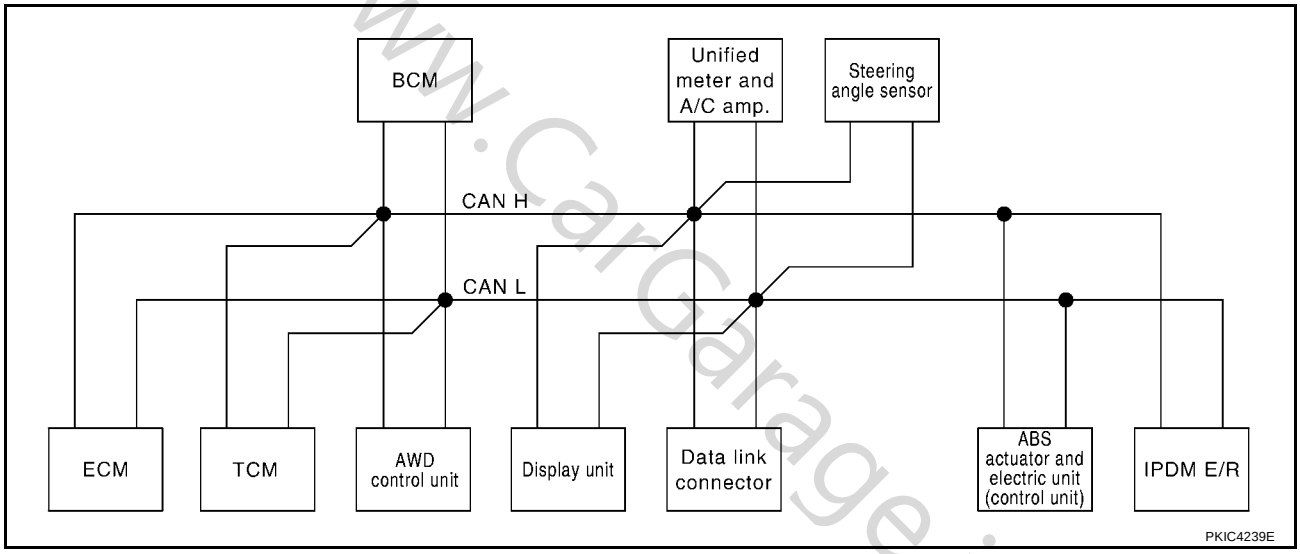
Body type	Wagon		
Axle	AWD		
Engine	VQ35DE		
Transmission	CVT		
Brake control	VDC		
Destination	Except for South Africa	For South Africa	Except for South Africa
Automatic drive positioner			×
CAN system type	1	2	3
CAN system trouble diagnosis	LAN-30	LAN-47	LAN-64

×: Applicable

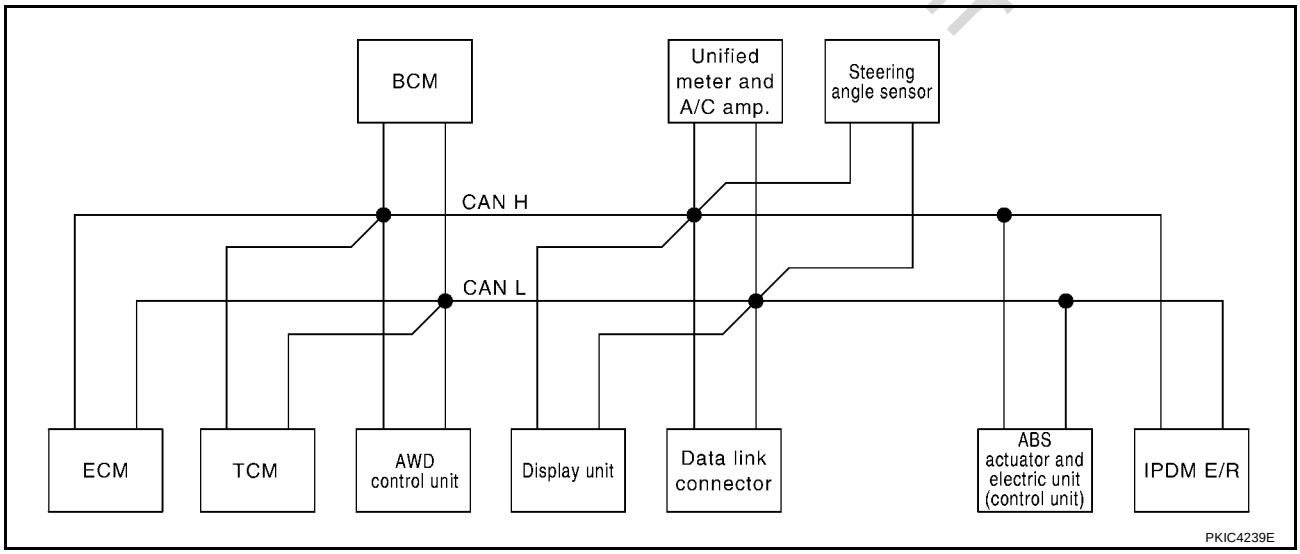
TYPE 1/TYPE 2/TYPE 3

System Diagram

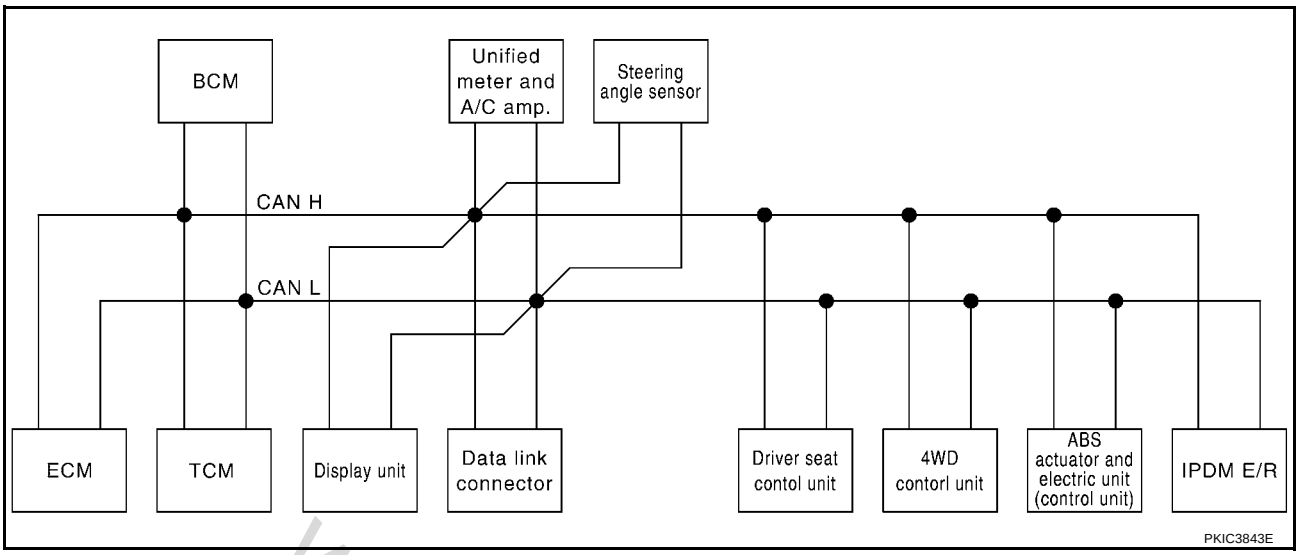
- Type 1



- Type 2



- Type 3



CAN SYSTEM (TYPE 1)

PFP:23710

Component Parts and Harness Connector Location

AKS00FI9

Refer to LAN-16, "Component Parts and Harness Connector Location" .

Schematic

AKS00FIA

Refer to LAN-18, "Schematic" .

Wiring Diagram — CAN —

AKS00FIB

Refer to LAN-20, "Wiring Diagram — CAN —" .

Check Sheet

AKS00HKF

Refer to LAN-31, "Check Sheet" .

Check Sheet

AKS00FIC

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

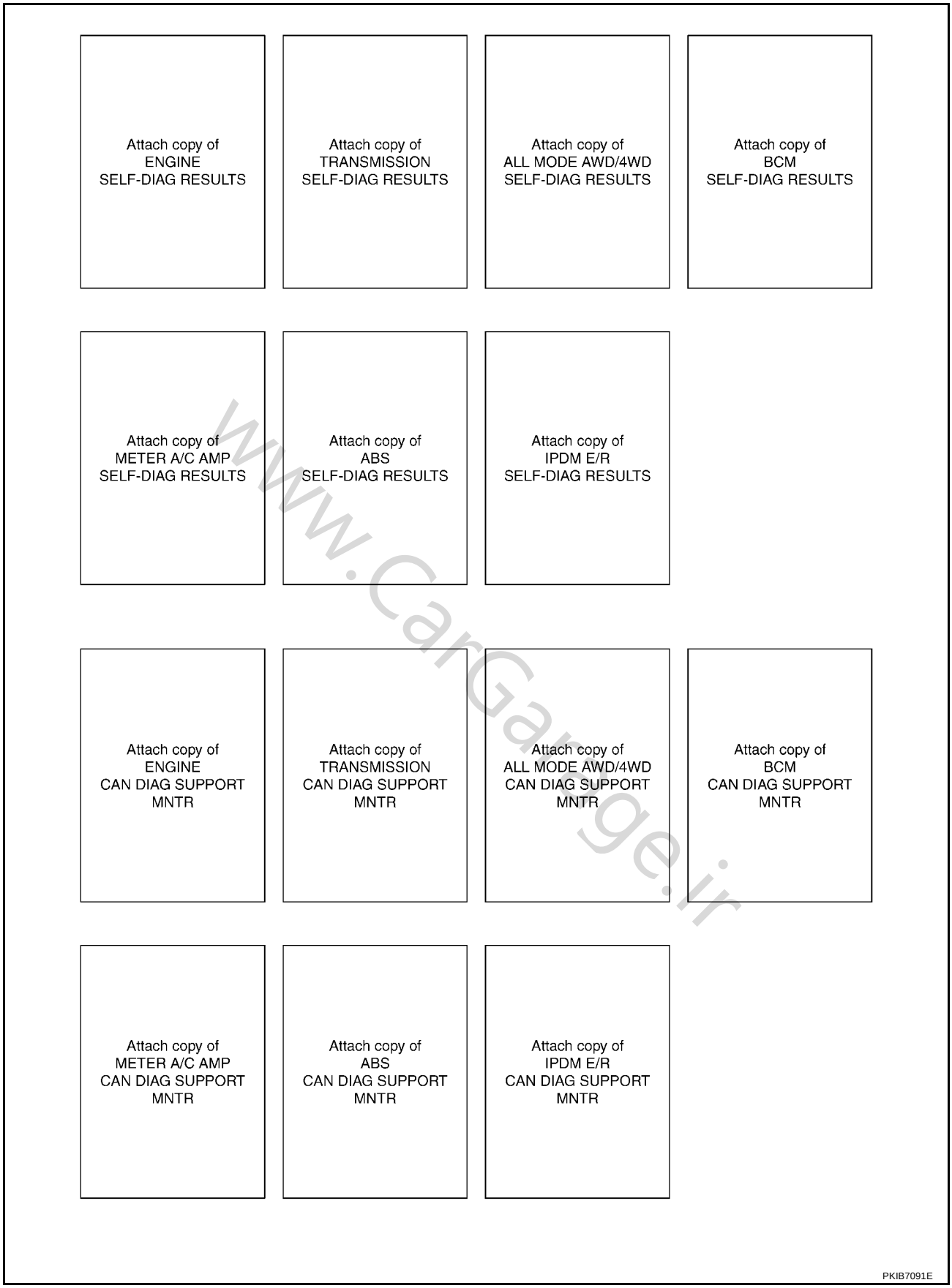
Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

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

Attach copy of
display unit
CAN DIAG MNTR Check Sheet

PKIC3996E



CHECK SHEET RESULTS (EXAMPLE)

NOTE:

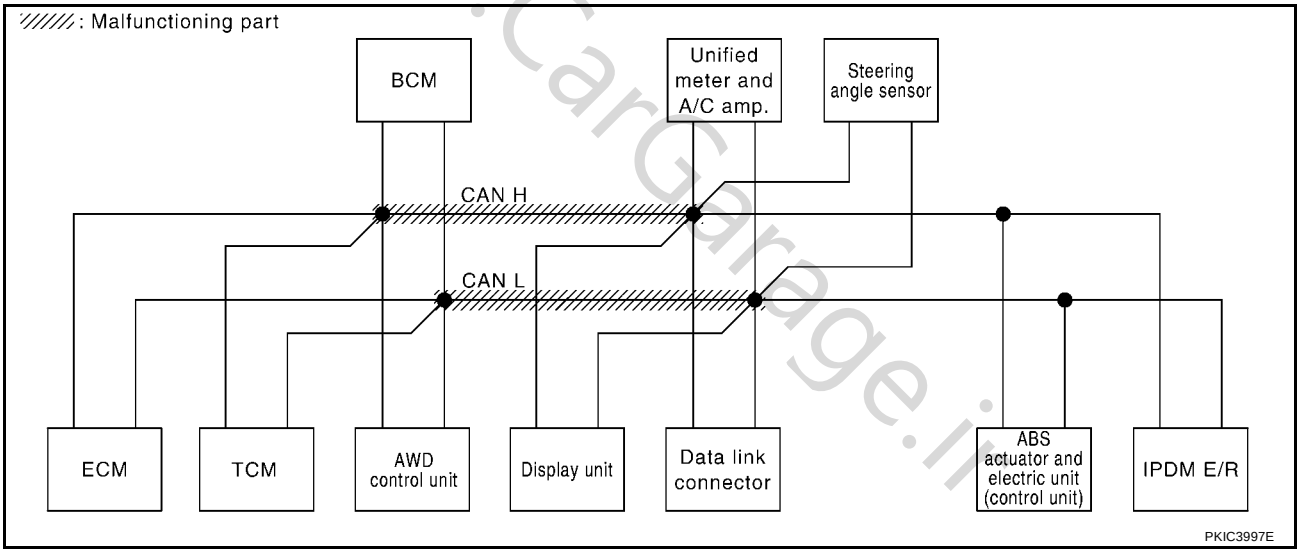
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to LAN-84, "Inspection CAN Main Line Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN ✓	—	UNKWN ✓	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN ✓	—	—	UNKWN ✓	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN ✓	—	—	UNKWN ✓	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4030E



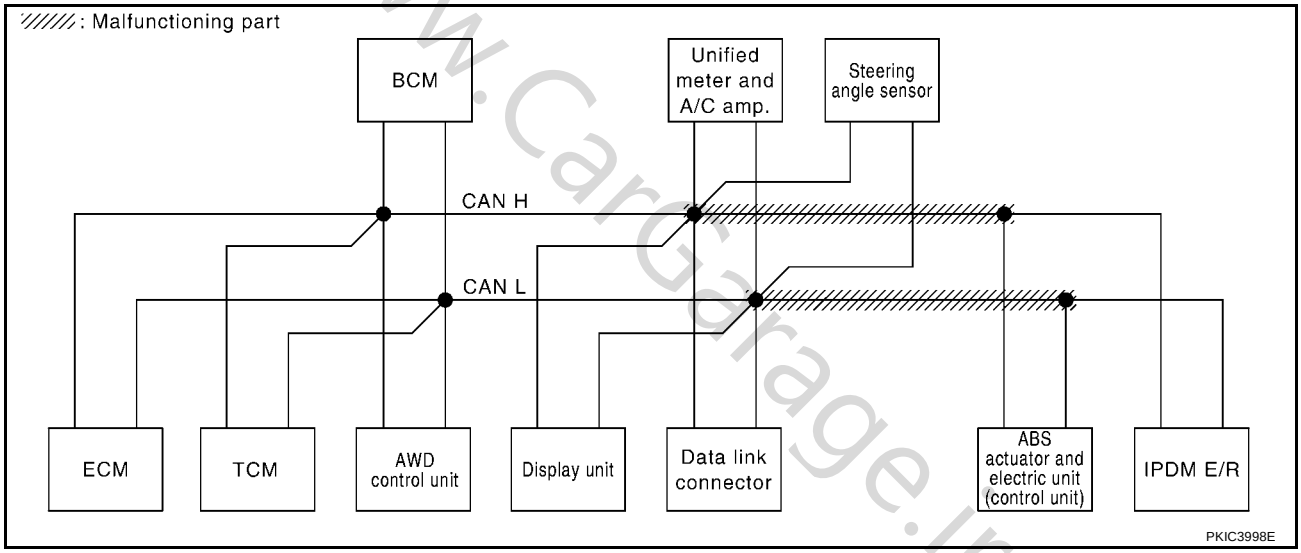
PKIC3997E

Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to LAN-84, "Inspection CAN Main Line Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN ✓	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN ✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN ✓	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN ✓	UNKWN ✓	UNKWN ✓	—	—	UNKWN ✓	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4031E

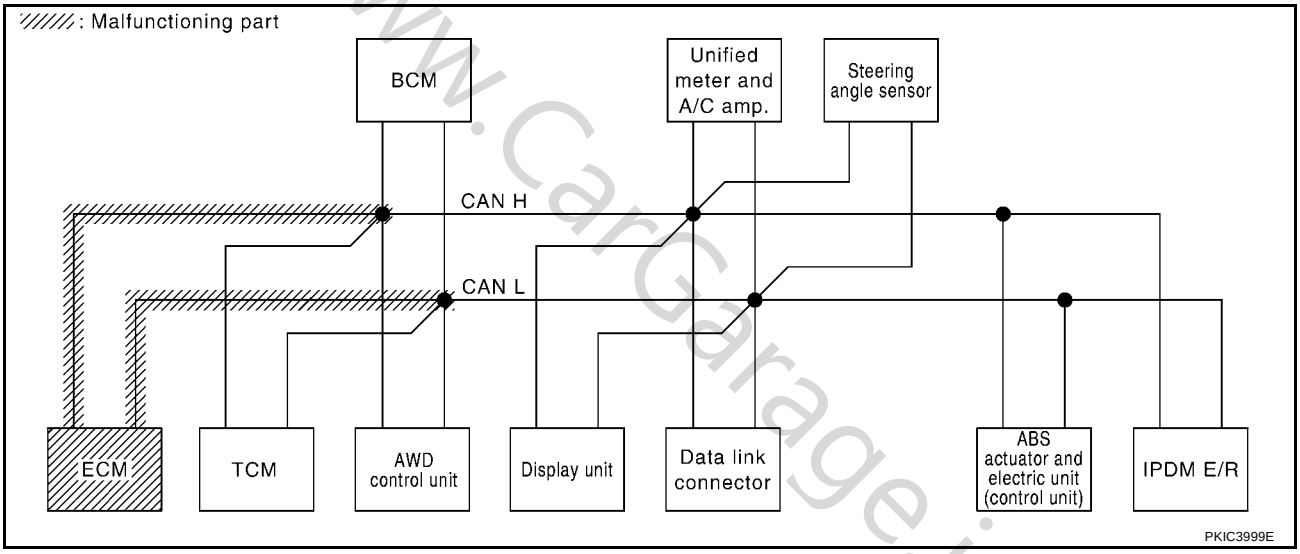


Case 3

Check ECM circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4032E

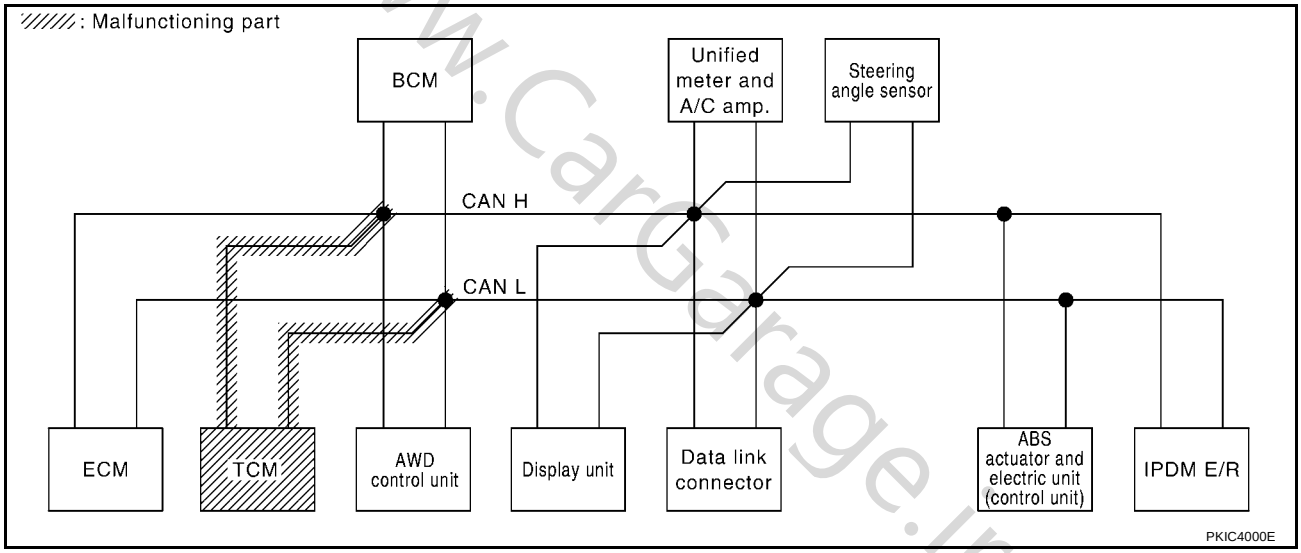


Case 4

Check TCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN ✓	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000) ✓	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN ✓	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN ✓	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4033E

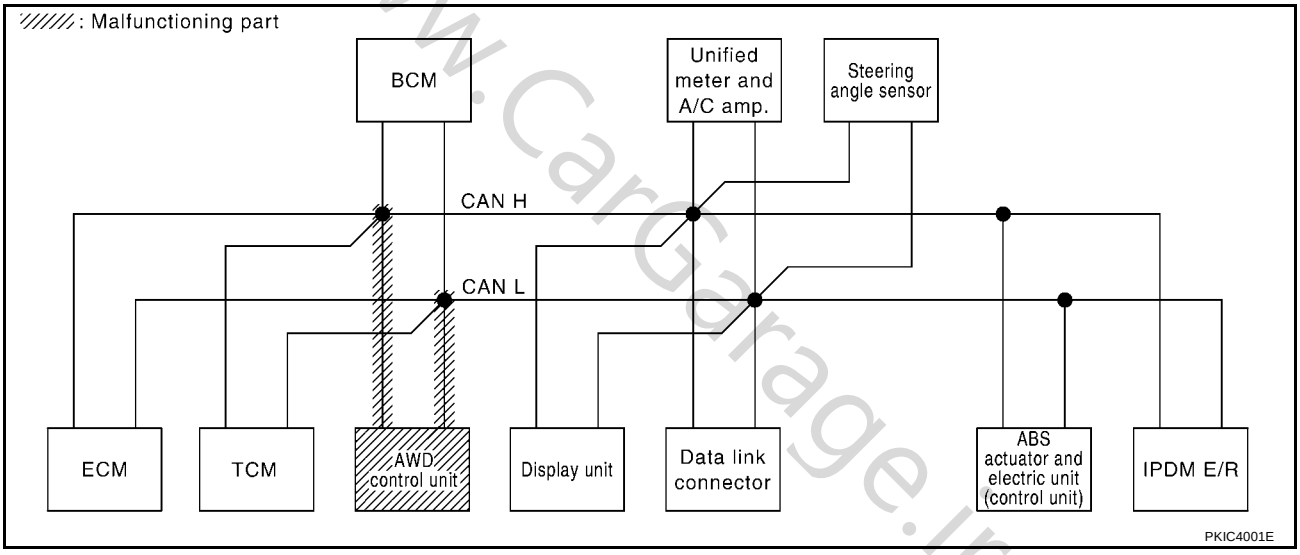


Case 5

Check AWD control unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR									SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis								
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R	
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4034E

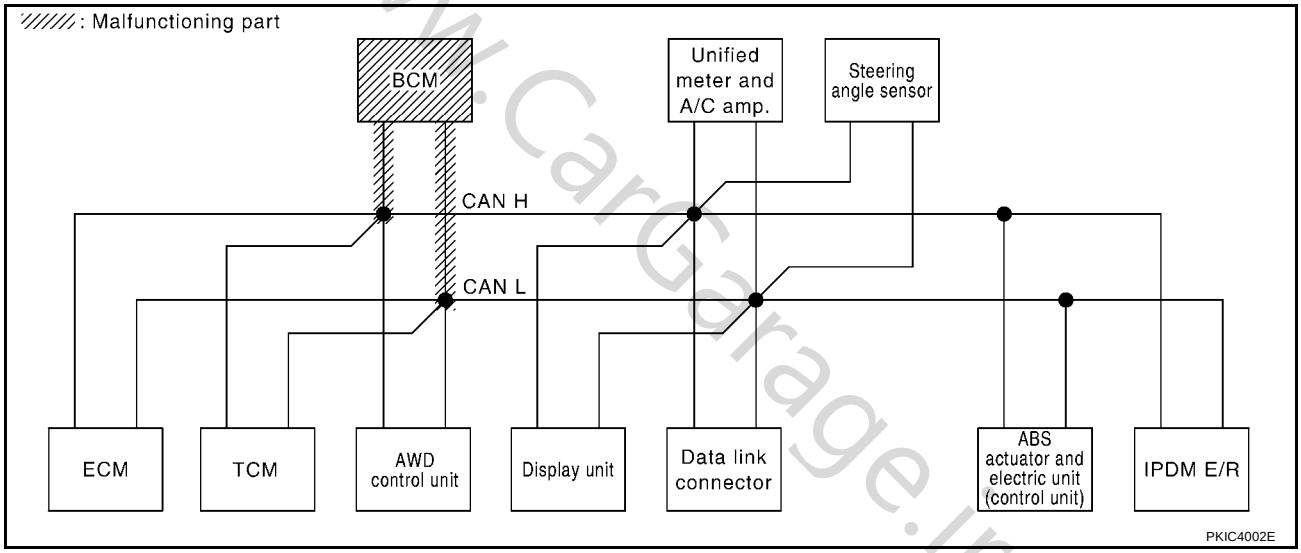


Case 6

Check BCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN ✓	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN ✓	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN ✓	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN ✓	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4035E

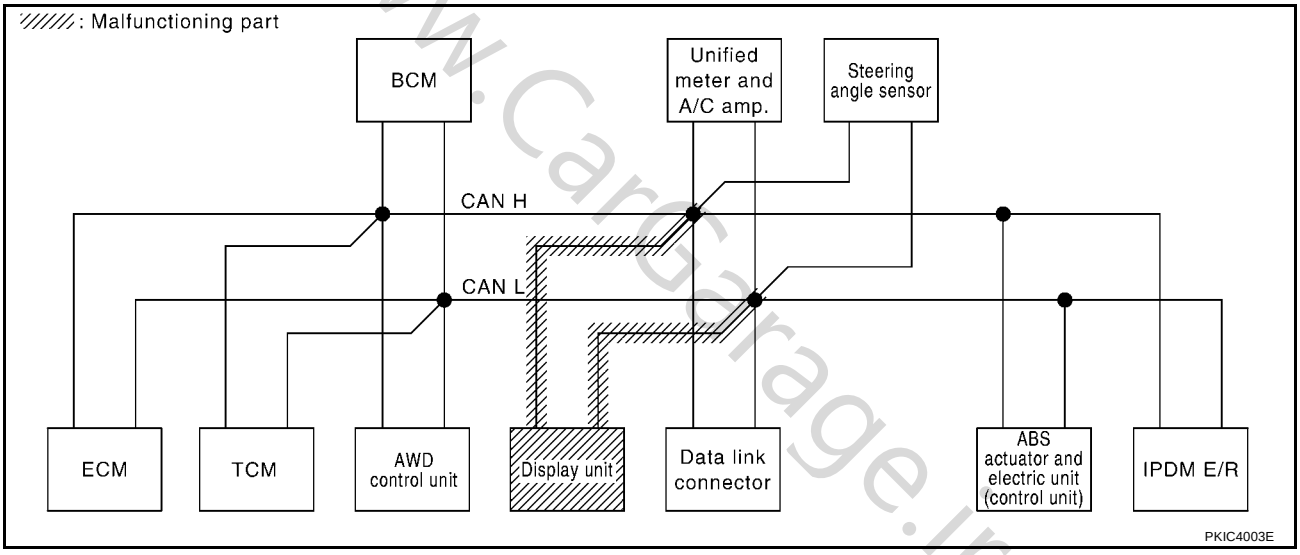


Case 7

Check display unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN ✓	UNKWN ✓	—	—	UNKWN ✓	UNKWN ✓	—	—	UNKWN ✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4036E

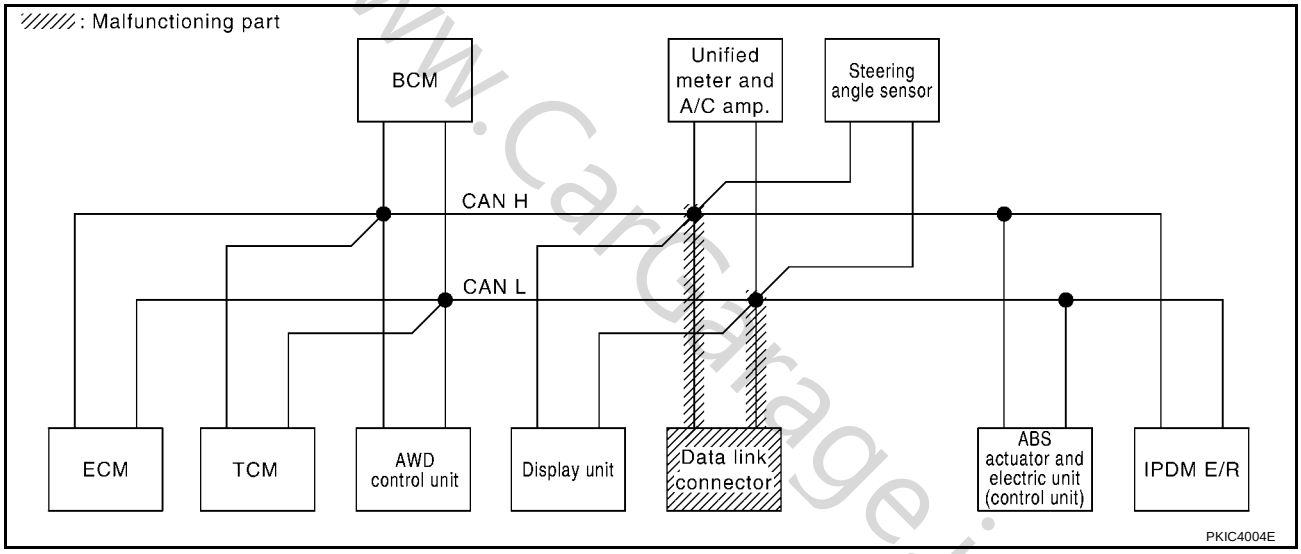


Case 8

Check data link connector circuit. Refer to LAN-85, "Inspection Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication ✓	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication ✓	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4037E



Case 9

Check unified meter and A/C amp. circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN ✓	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

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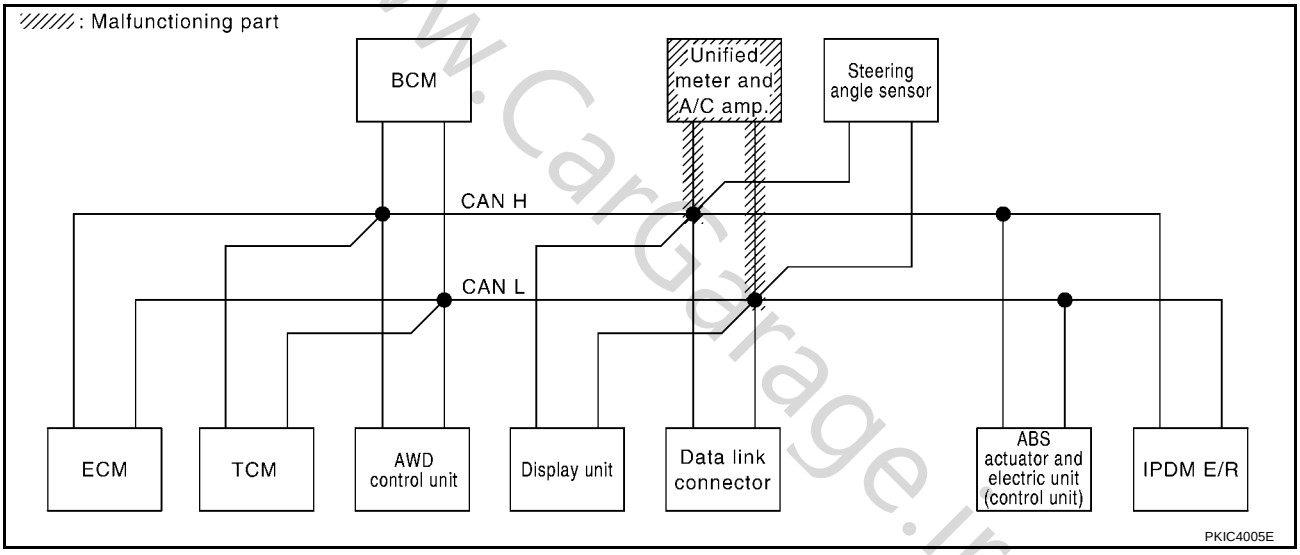
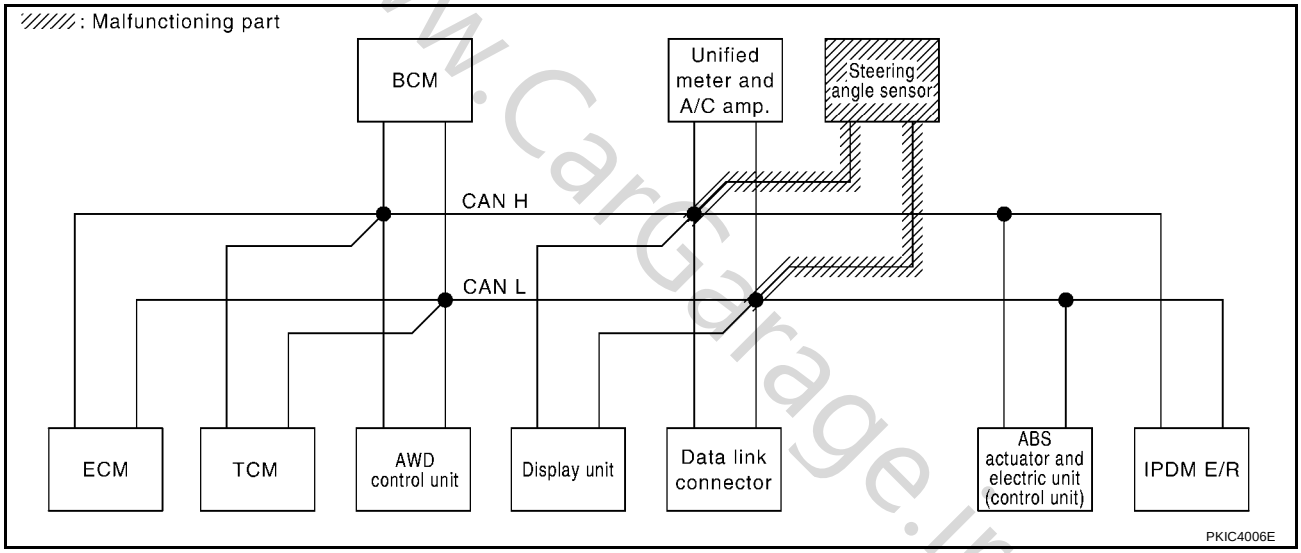


Case 10

Check steering angle sensor circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4039E



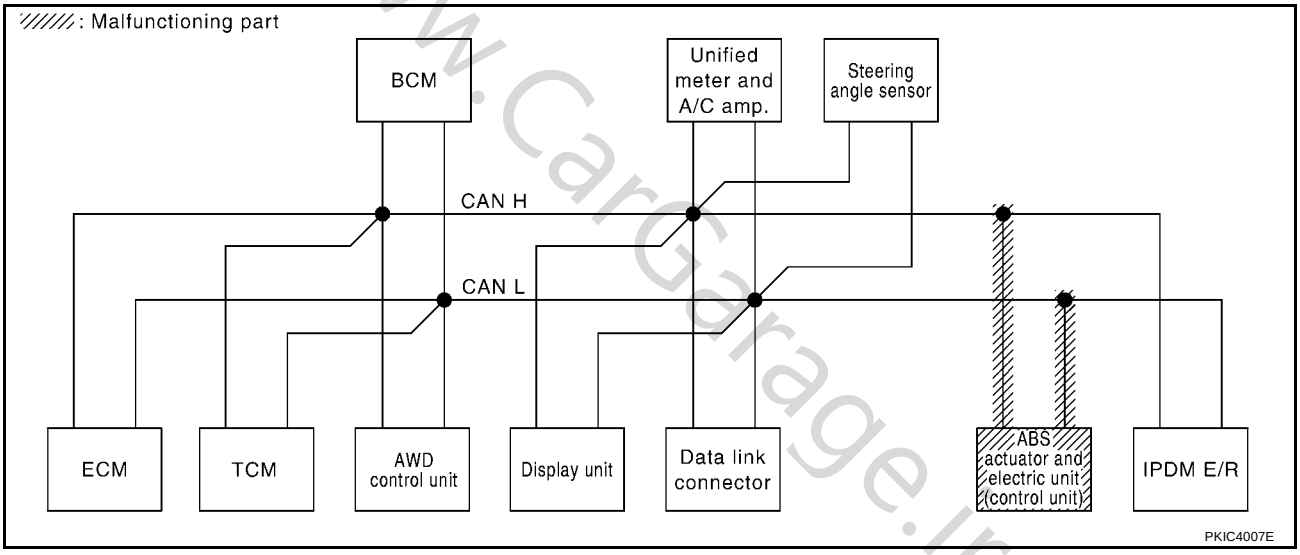
PKIC4006E

Case 11

Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4040E

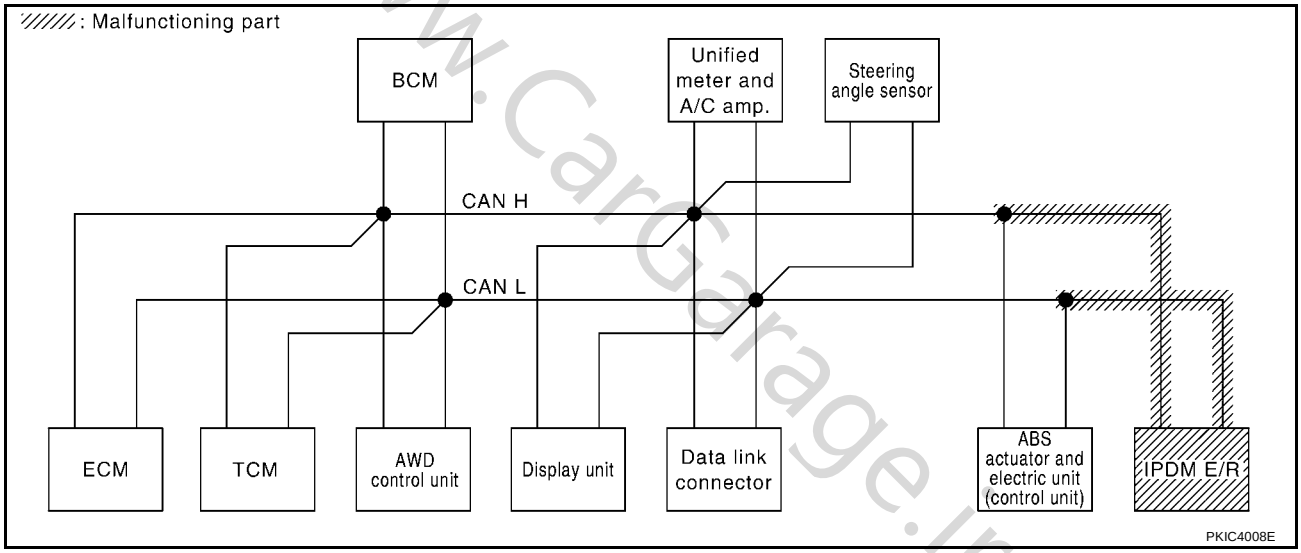


Case 12

Check IPDM E/R circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4041E



Case 13

Check CAN communication circuit. Refer to LAN-85, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4042E

Case 14

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4043E

Case 15

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	No indication	NG	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	UNKWN	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4044E

CAN SYSTEM (TYPE 2)

PFP:23710

Component Parts and Harness Connector Location

AKS00FIJ

Refer to LAN-16, "Component Parts and Harness Connector Location" .

Schematic

AKS00FIK

Refer to LAN-18, "Schematic" .

Wiring Diagram — CAN —

AKS00FIL

Refer to LAN-20, "Wiring Diagram — CAN —" .

Check Sheet

AKS00HKE

Refer to LAN-48, "Check Sheet" .

Check Sheet

AKS00FIM

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

Check sheet table

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

Symptoms :

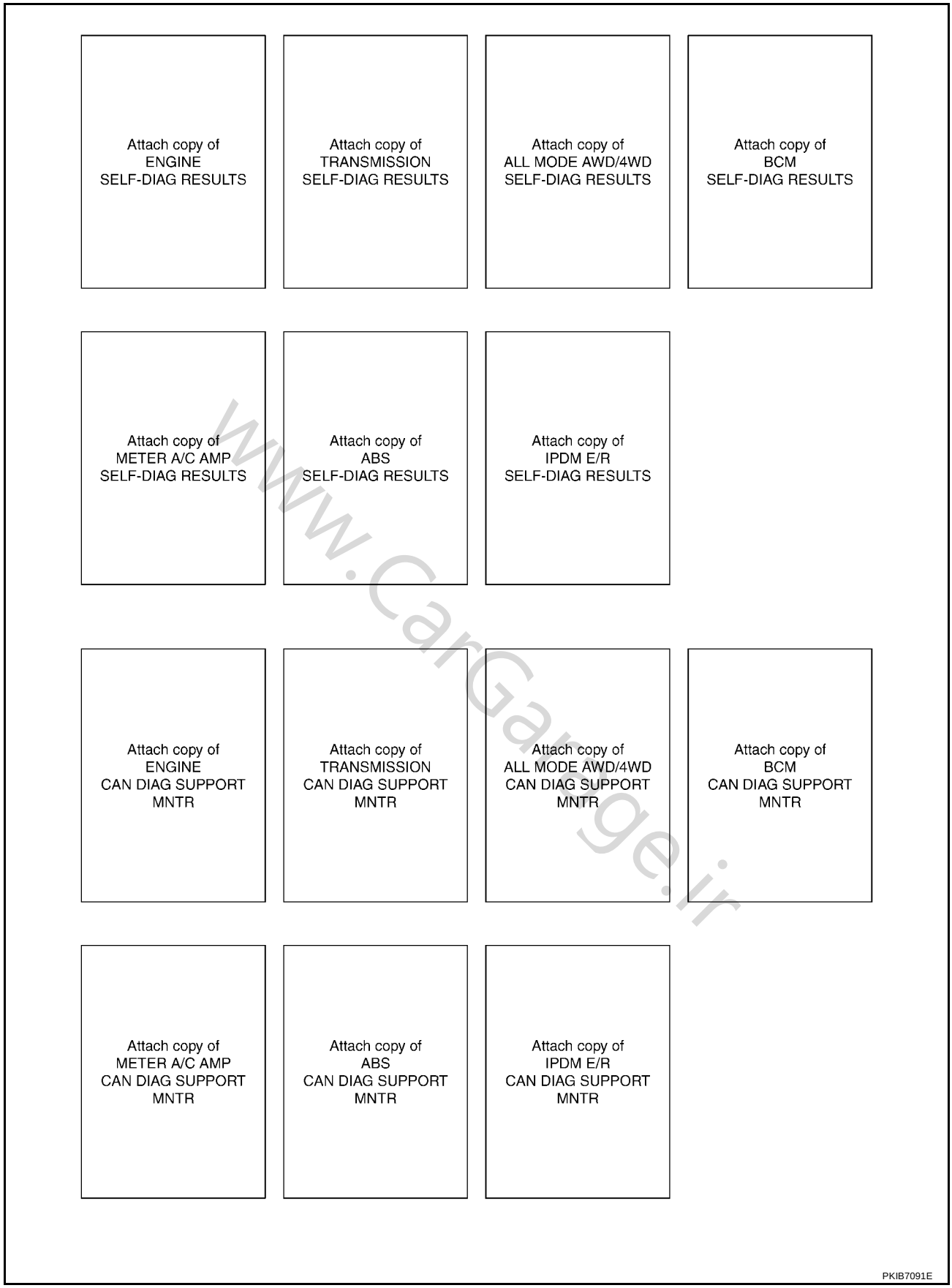
Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

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

Attach copy of
display unit
CAN DIAG MNTR Check Sheet

PKIC3995E



CHECK SHEET RESULTS (EXAMPLE)

NOTE:

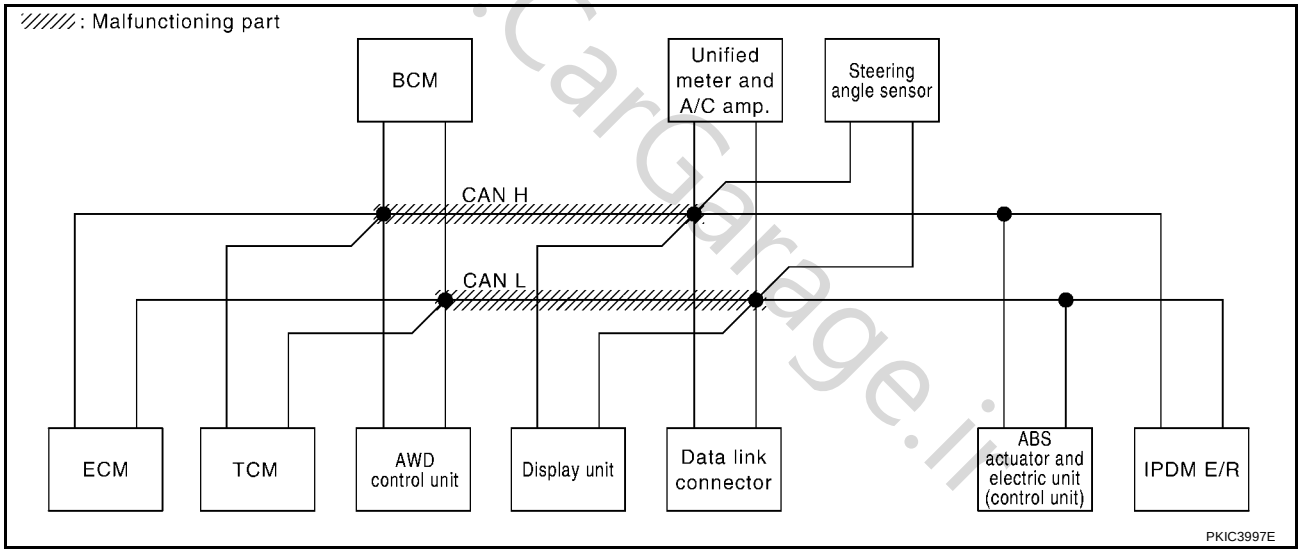
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between TCM and data link connector. Refer to LAN-84, "Inspection CAN Main Line Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4015E



PKIC3997E

Case 2

Check harness between data link connector and ABS actuator and electric unit (control unit). Refer to LAN-84, "Inspection CAN Main Line Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

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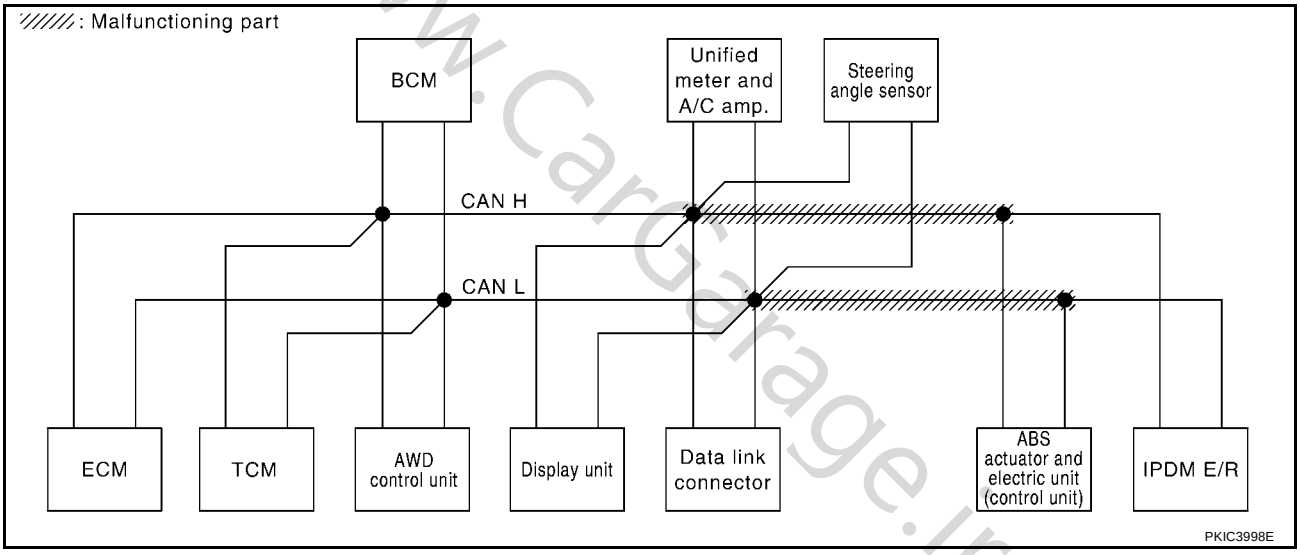
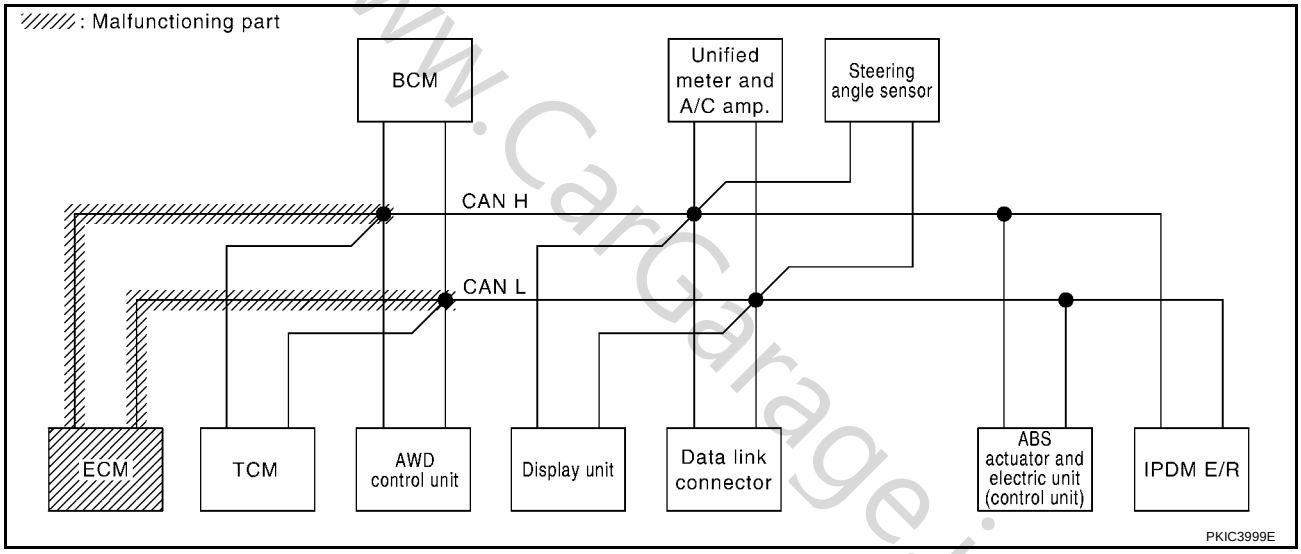


Case 3

Check ECM circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4017E

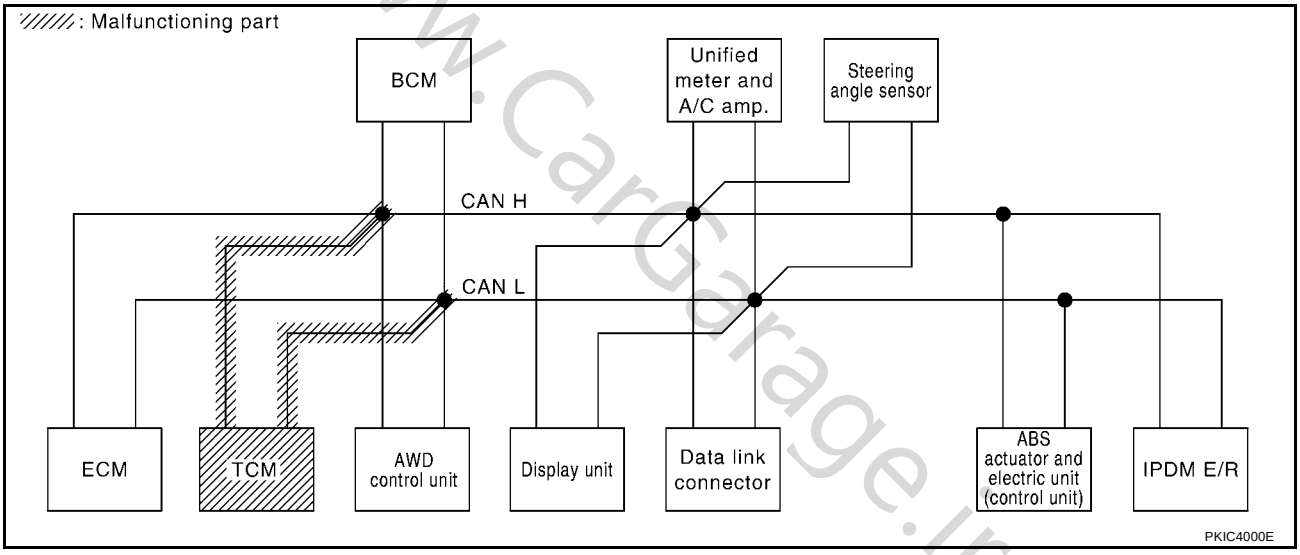


Case 4

Check TCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4018E

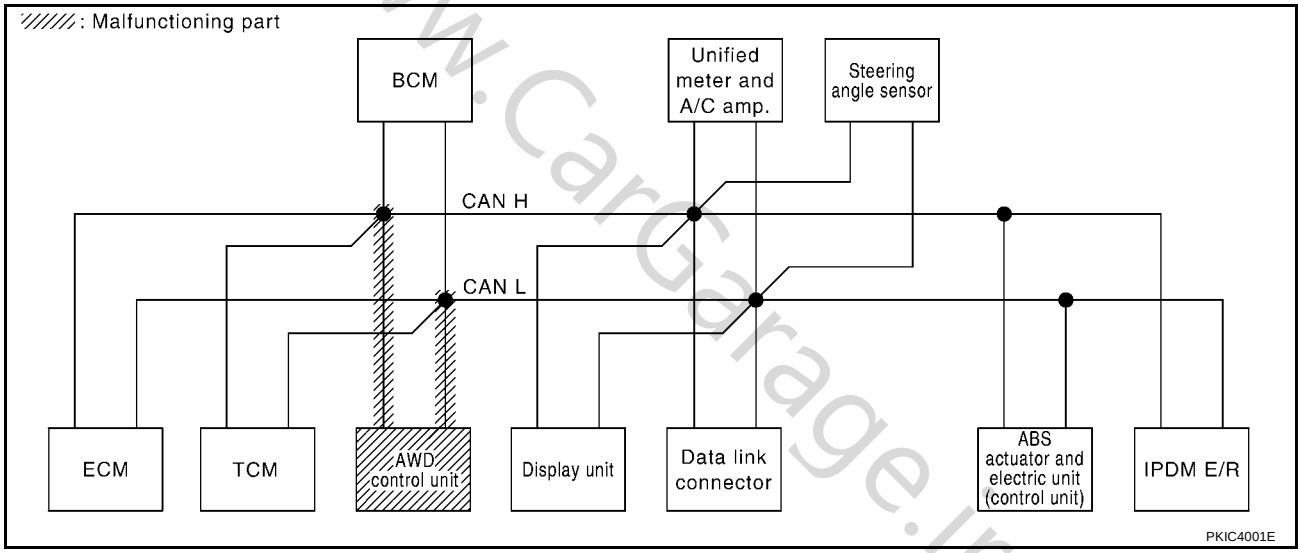


Case 5

Check AWD control unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN ✓	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN ✓	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN ✓	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN ✓	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000) ✓	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4019E

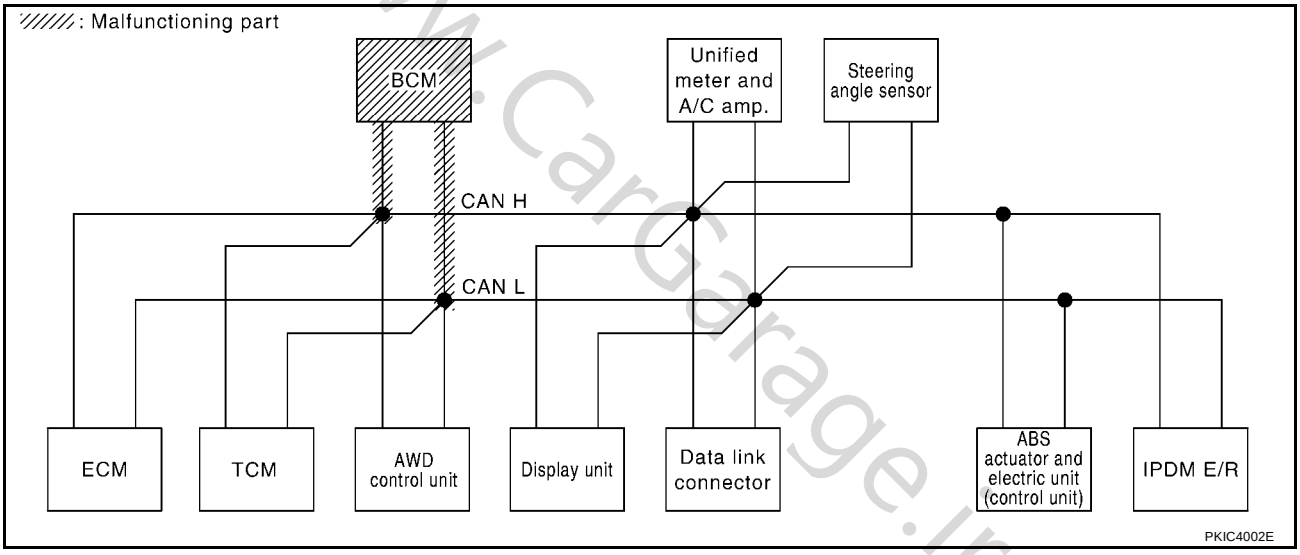


Case 6

Check BCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4020E

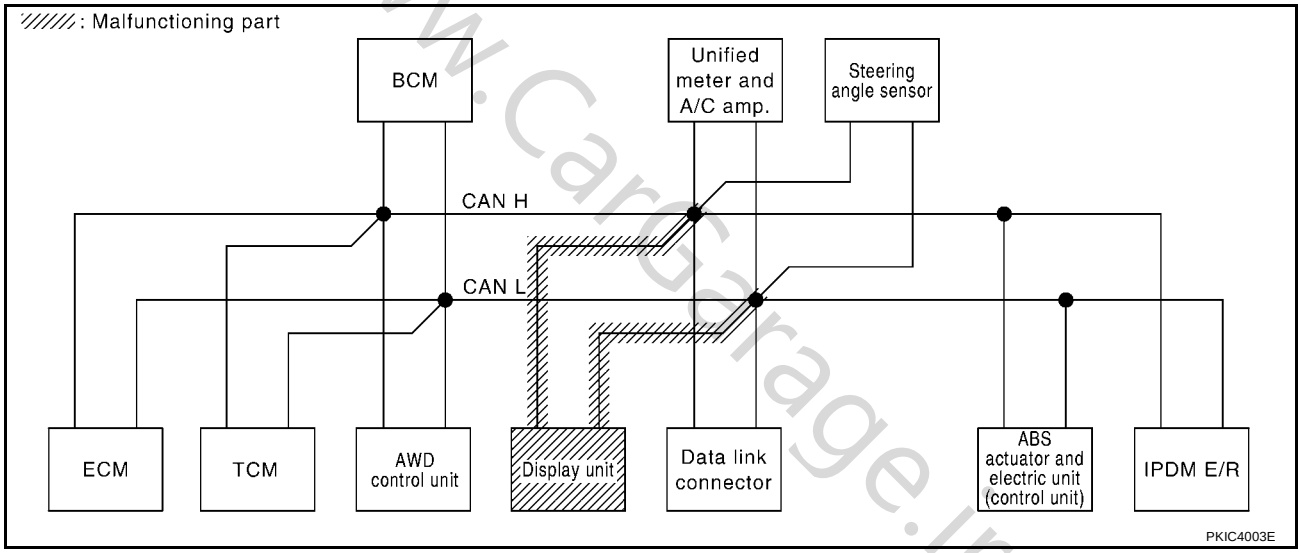


Case 7

Check display unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN ✓	UNKWN ✓	—	—	UNKWN ✓	UNKWN ✓	—	—	UNKWN ✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4021E

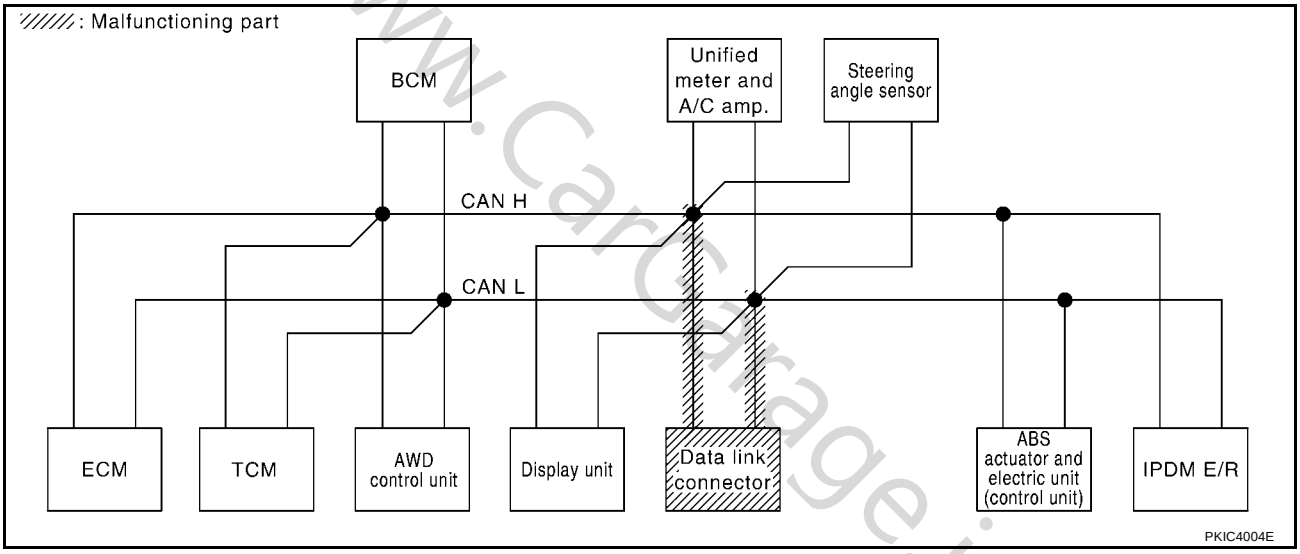


Case 8

Check data link connector circuit. Refer to LAN-85, "Inspection Data Link Connector Circuit" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	✓ No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	✓ No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	✓ No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4022E

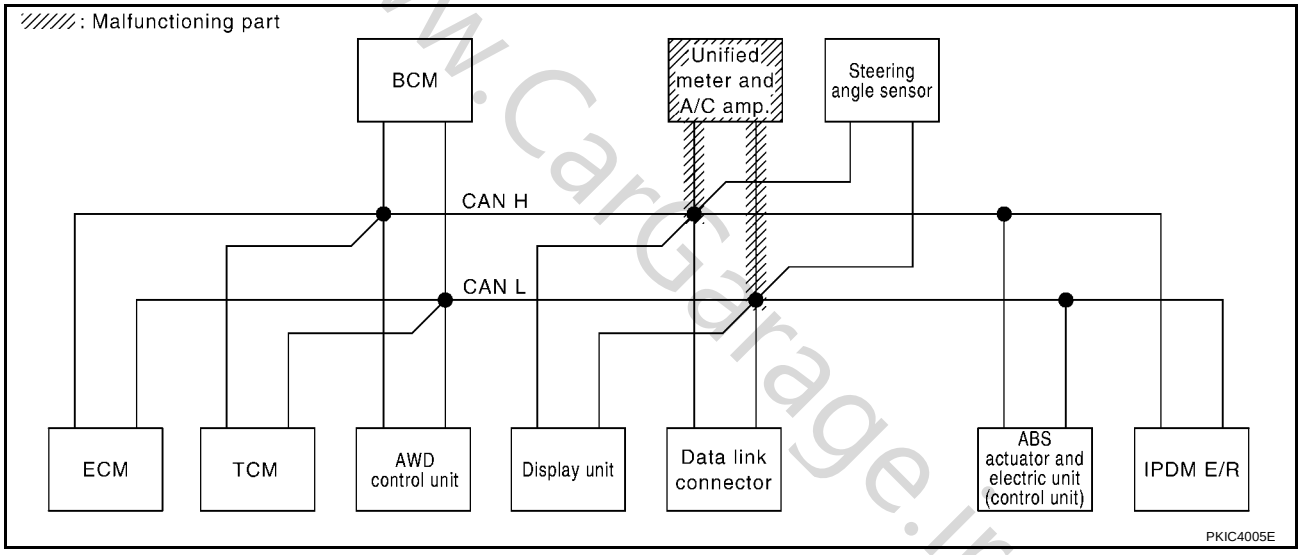


Case 9

Check unified meter and A/C amp. circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN ✓	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN ✓	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN ✓	—	—	UNKWN	—	—
METER A/C AMP	No indication ✓	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000) ✓	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4023E

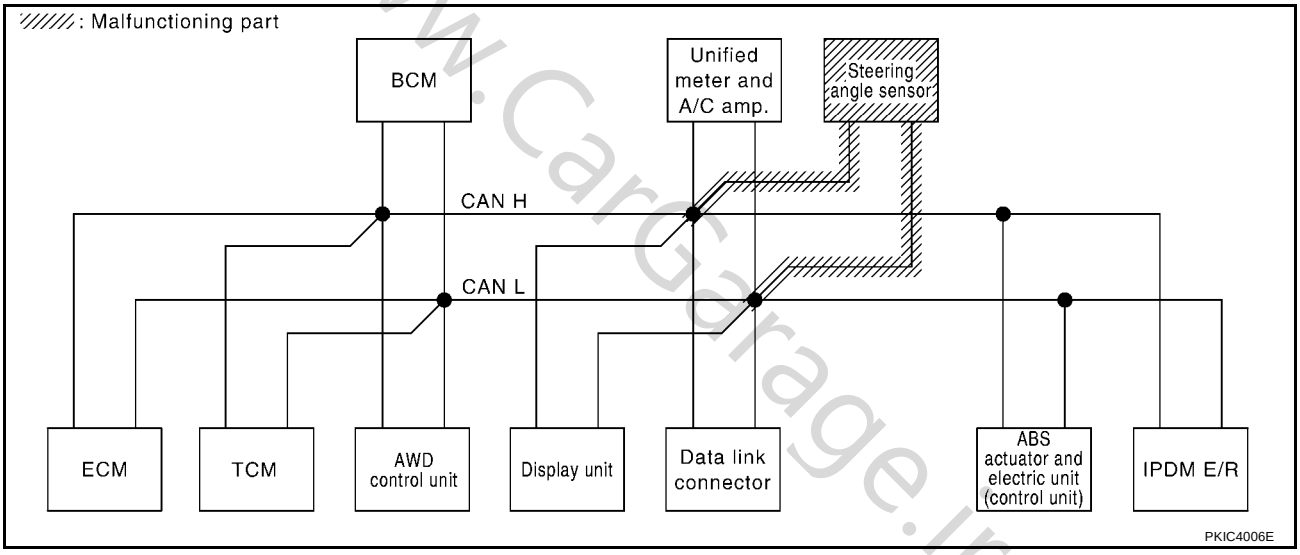


Case 10

Check steering angle sensor circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4024E



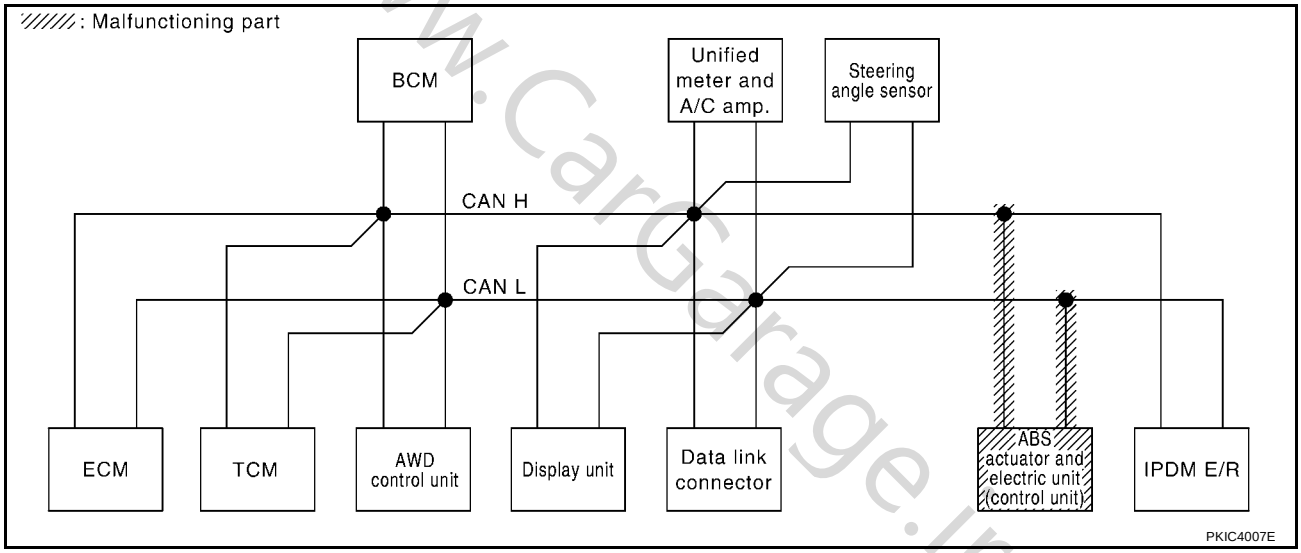
PKIC4006E

Case 11

Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4025E

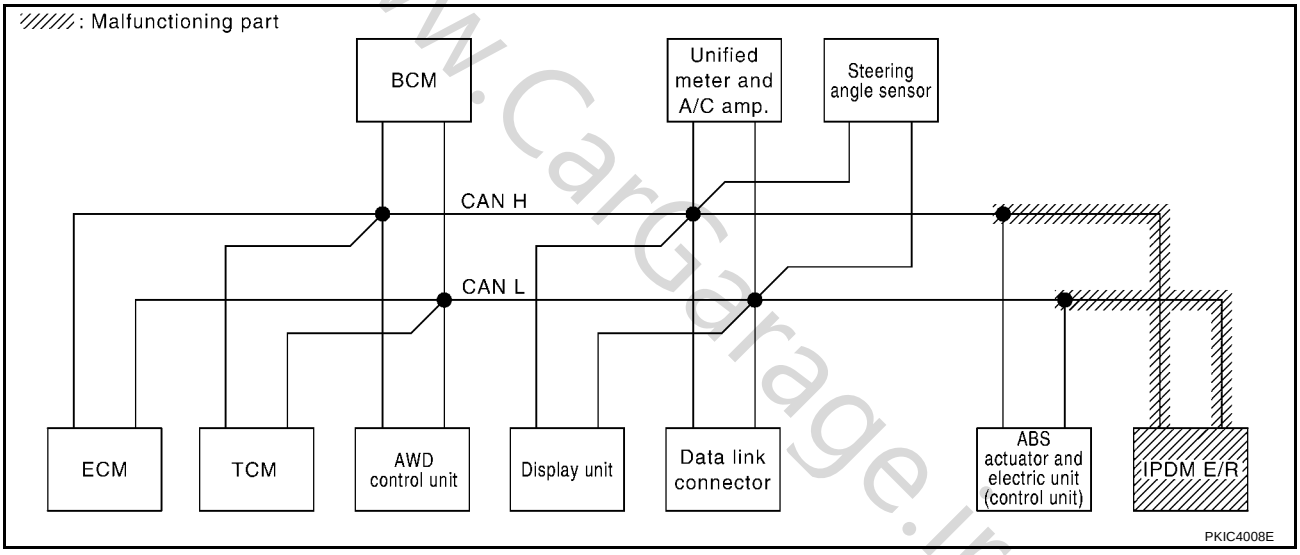


Case 12

Check IPDM E/R circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN ✓	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001) ✓
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN ✓	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN ✓	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication ✓	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000) ✓	—

PKIC4026E



Case 13

Check CAN communication circuit. Refer to LAN-85, "CAN Communication Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4027E

Case 14

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4028E

Case 15

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

SELECT SYSTEM screen		CAN DIAG SUPPORT MNTR										SELF-DIAG RESULTS	
		Initial diagnosis	Transmit diagnosis	Receive diagnosis									
				ECM	TCM	AWD /4WD /e4WD	BCM /SEC	METER /M&A	STRG	VDC/TCS /ABS	IPDM E/R		
ENGINE	—	NG	UNKWN	—	UNKWN	UNKWN	UNKWN	UNKWN	—	UNKWN	UNKWN	CAN COMM CIRCUIT (U1000)	CAN COMM CIRCUIT (U1001)
TRANSMISSION	No indication	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ALL MODE AWD/4WD	—	NG	UNKWN	—	—	—	—	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
BCM	—	NG	UNKWN	UNKWN	—	—	—	UNKWN	—	—	UNKWN	CAN COMM CIRCUIT (U1000)	—
Display unit	—	NG	UNKWN	UNKWN	—	—	UNKWN	UNKWN	—	—	UNKWN	—	—
METER A/C AMP	No indication	—	UNKWN	UNKWN	UNKWN	UNKWN	UNKWN	—	—	UNKWN	—	CAN COMM CIRCUIT (U1000)	—
ABS	—	NG	UNKWN	—	UNKWN	UNKWN	—	—	—	—	—	CAN COMM CIRCUIT (U1000)	—
IPDM E/R	No indication	—	UNKWN	UNKWN	—	—	UNKWN	—	—	—	—	CAN COMM CIRCUIT (U1000)	—

PKIC4029E

CAN SYSTEM (TYPE 3)

PFP:23710

Component Parts and Harness Connector Location

AKS00HK9

Refer to LAN-16, "Component Parts and Harness Connector Location" .

Schematic

AKS00HKA

Refer to LAN-18, "Schematic" .

Wiring Diagram — CAN —

AKS00HKB

Refer to LAN-20, "Wiring Diagram — CAN —" .

Check Sheet

AKS00HKD

Refer to LAN-65, "Check Sheet" .

Check Sheet

AKS00HKC

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

Check sheet table

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

Symptoms :

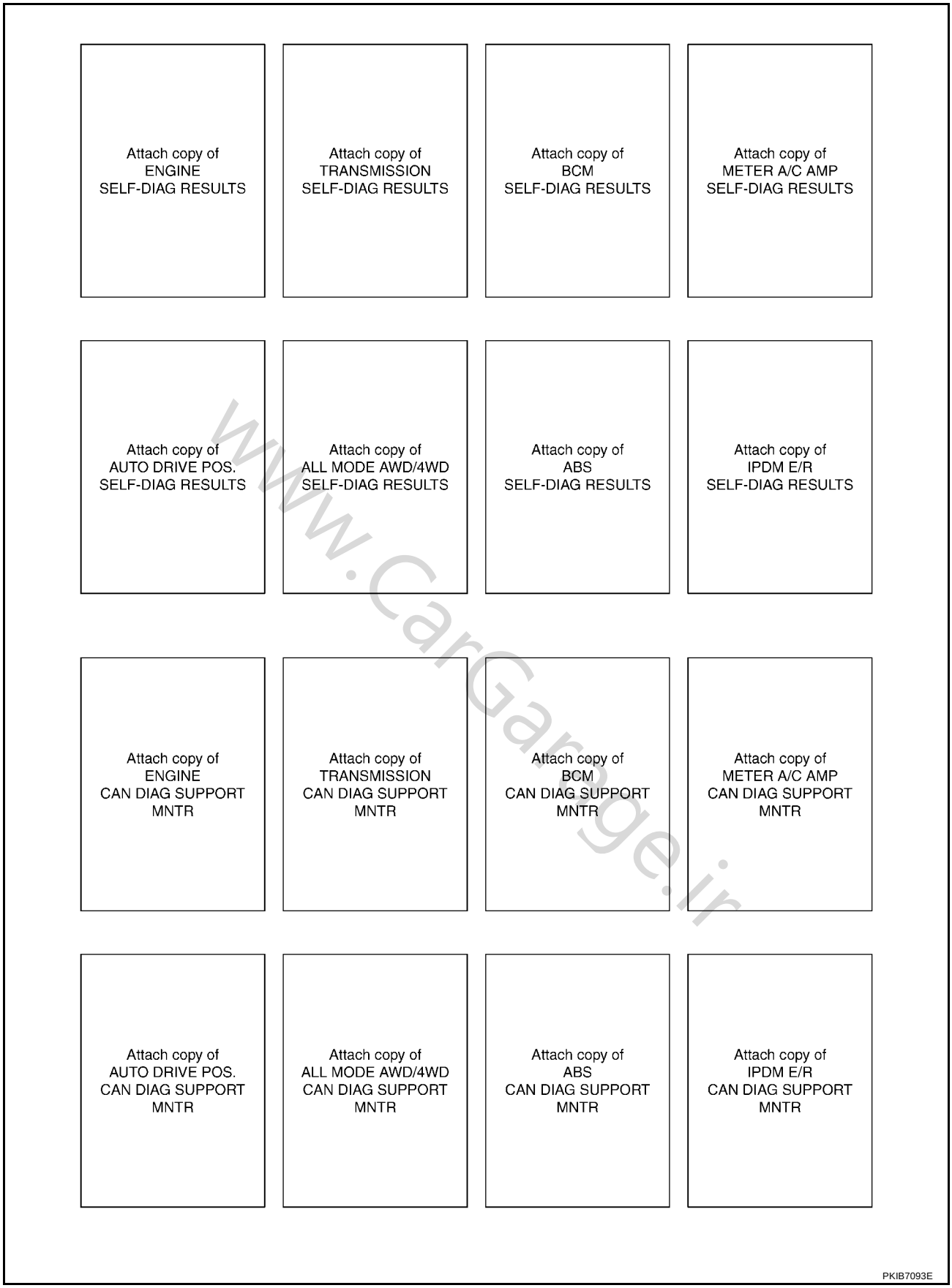
Attach copy of SELECT SYSTEM

Attach copy of SELECT SYSTEM

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

Attach copy of
display unit
CAN DIAG MNTR Check Sheet

PKIC4132E



CHECK SHEET RESULTS (EXAMPLE)

NOTE:

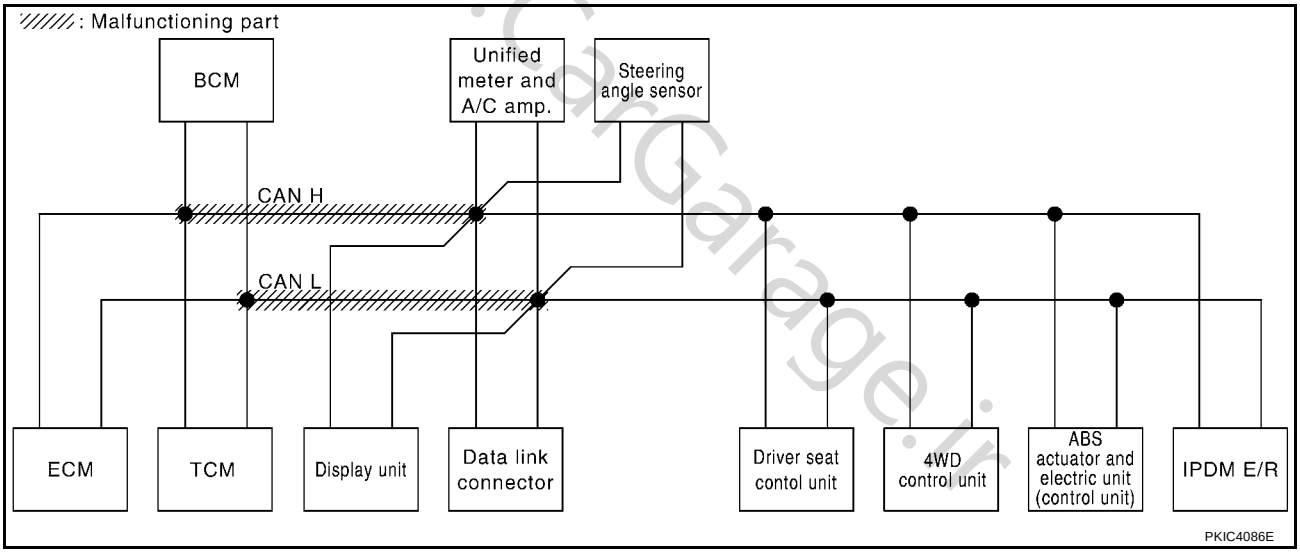
If a check mark is put on “NG” on “INITIAL DIAG (Initial diagnosis)”, replace the control unit.

Case 1

Check harness between BCM and data link connector. Refer to LAN-84, "Inspection CAN Main Line Circuit" .

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

PKIC4133E

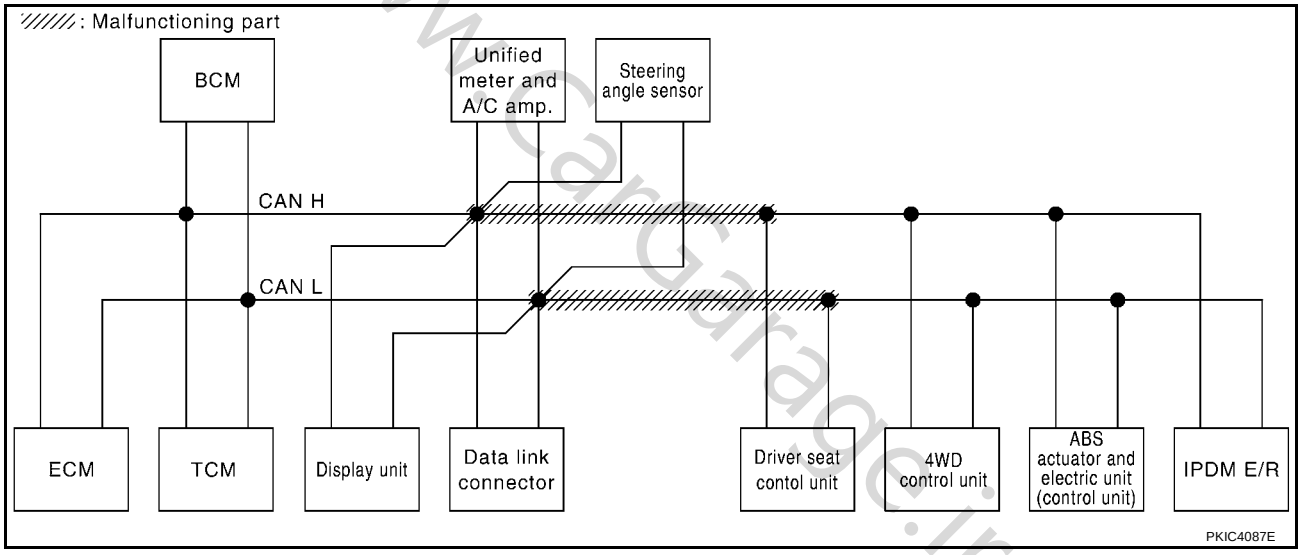


Case 2

Check harness between data link connector and driver seat control unit. Refer to LAN-84, "Inspection CAN Main Line Circuit" .

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

PKIC4134E



Case 3

Check harness between driver seat control unit and AWD control unit. Refer to LAN-84, "Inspection CAN Main Line Circuit" .

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

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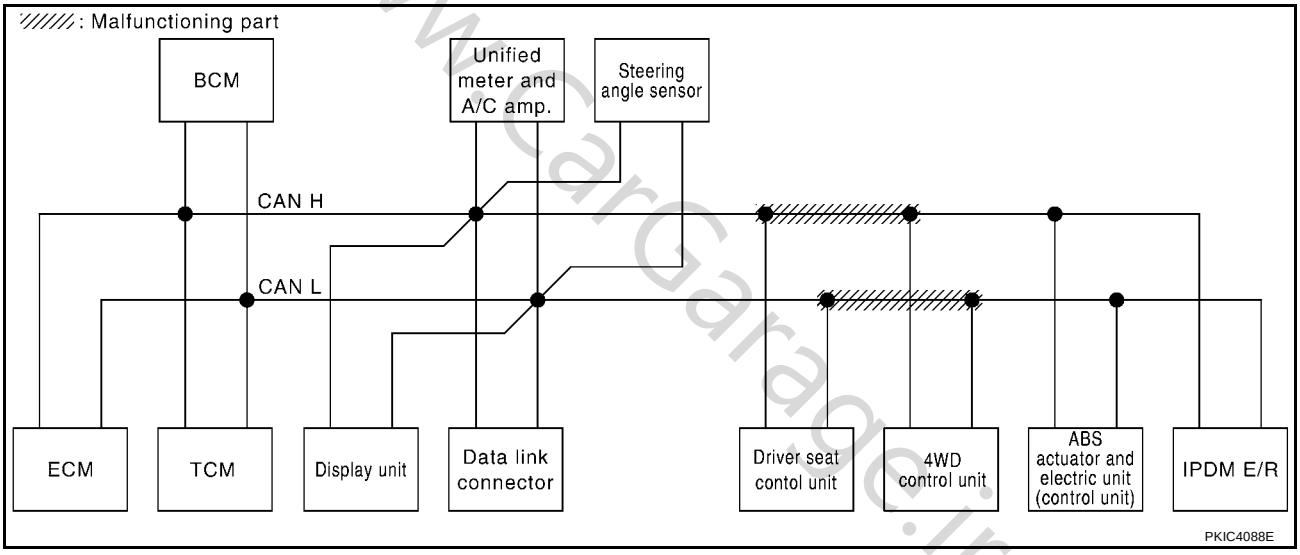

Case 4

Check harness between AWD control unit and ABS actuator and electric unit (control unit). Refer to LAN-84, "Inspection CAN Main Line Circuit" .

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

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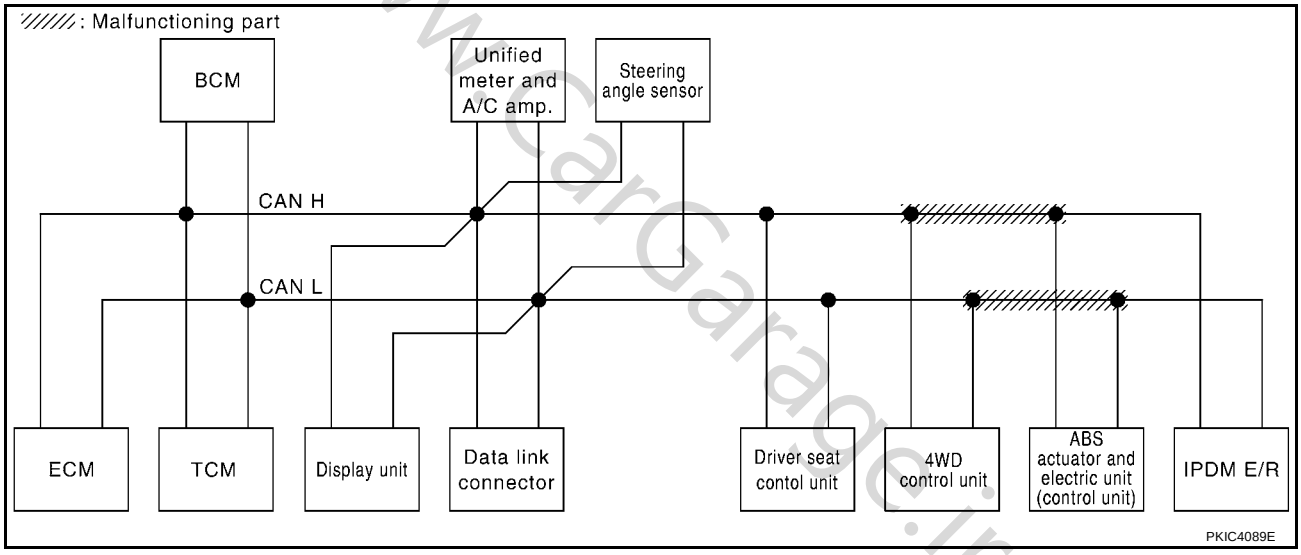
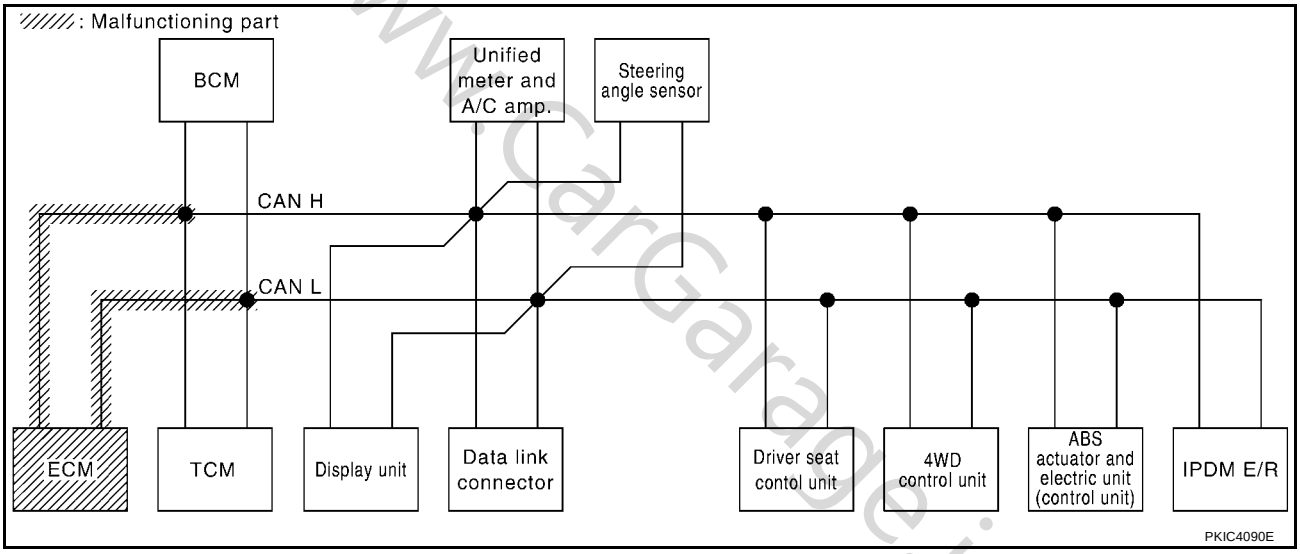


Case 5

Check ECM circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

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

PKIC4137E

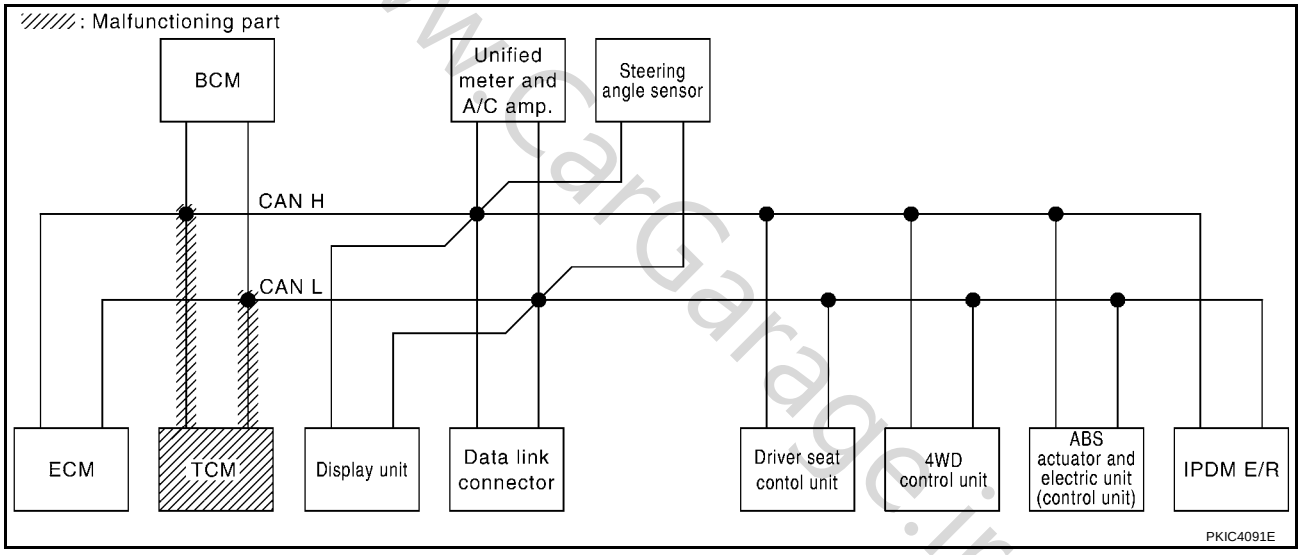


Case 6

Check TCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4138E

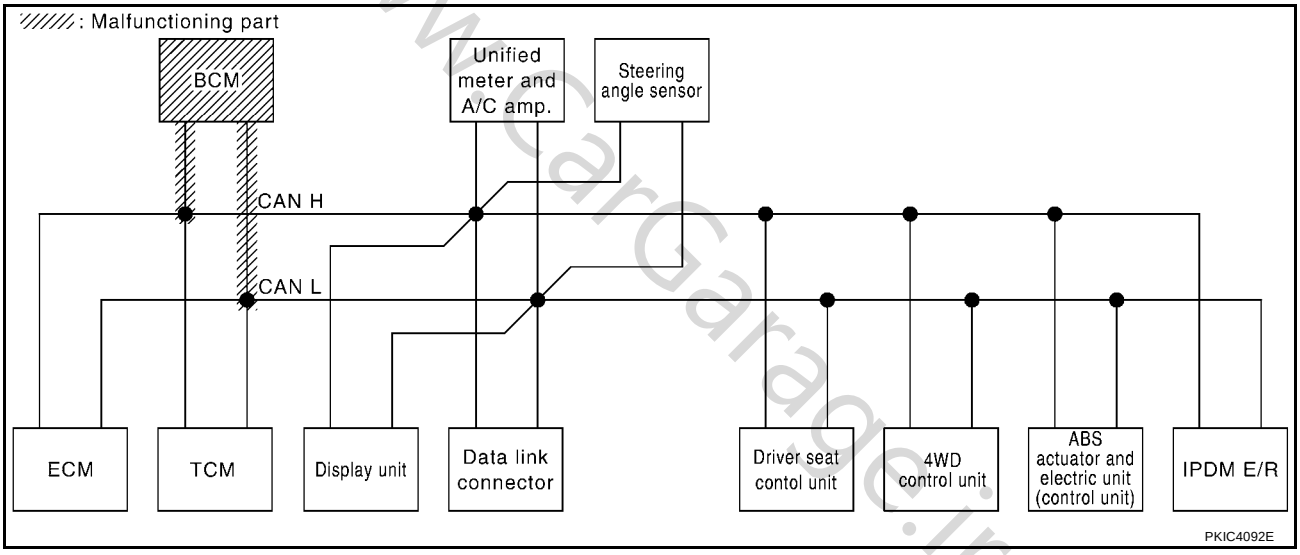


Case 7

Check BCM circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4139E

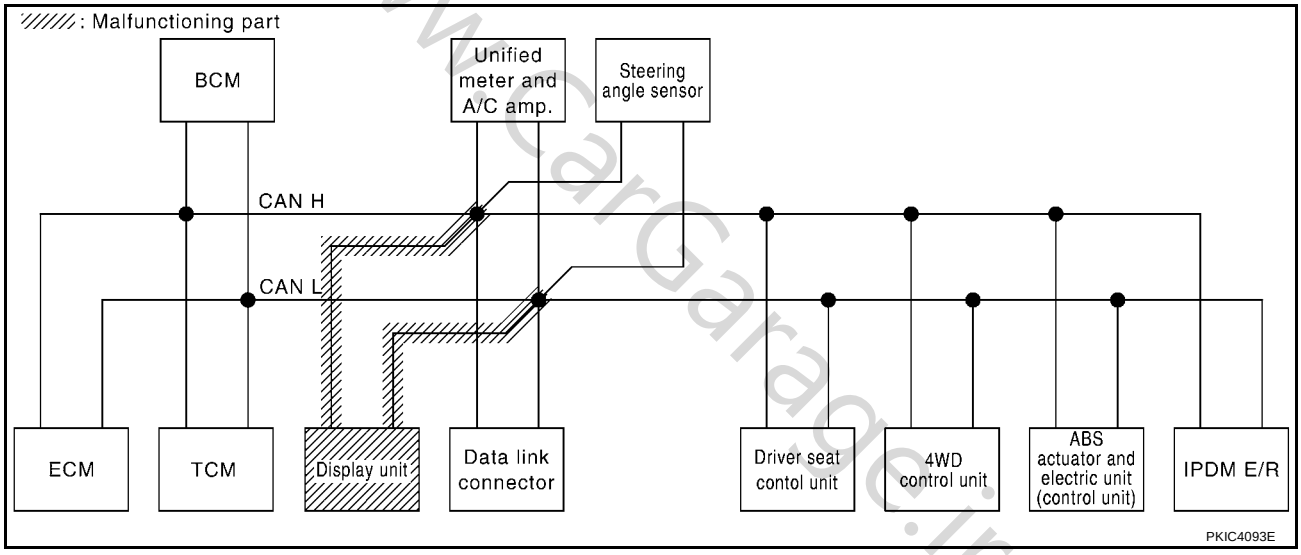


Case 8

Check display unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4140E

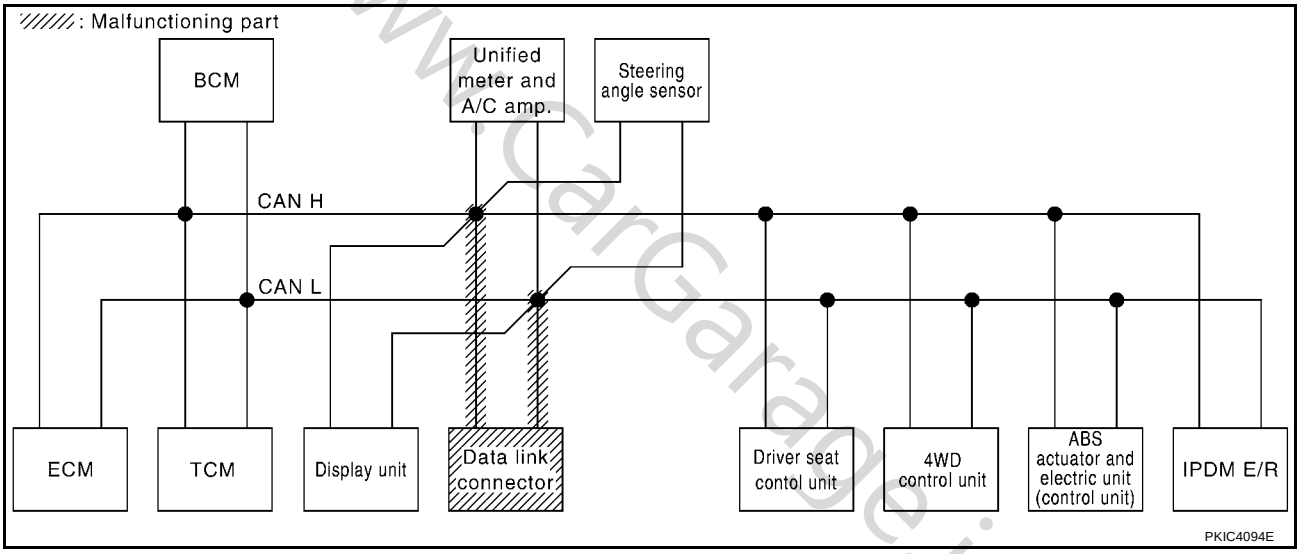


Case 9

Check data link connector circuit. Refer to LAN-85, "Inspection Data Link Connector Circuit" .

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

PKIC4141E

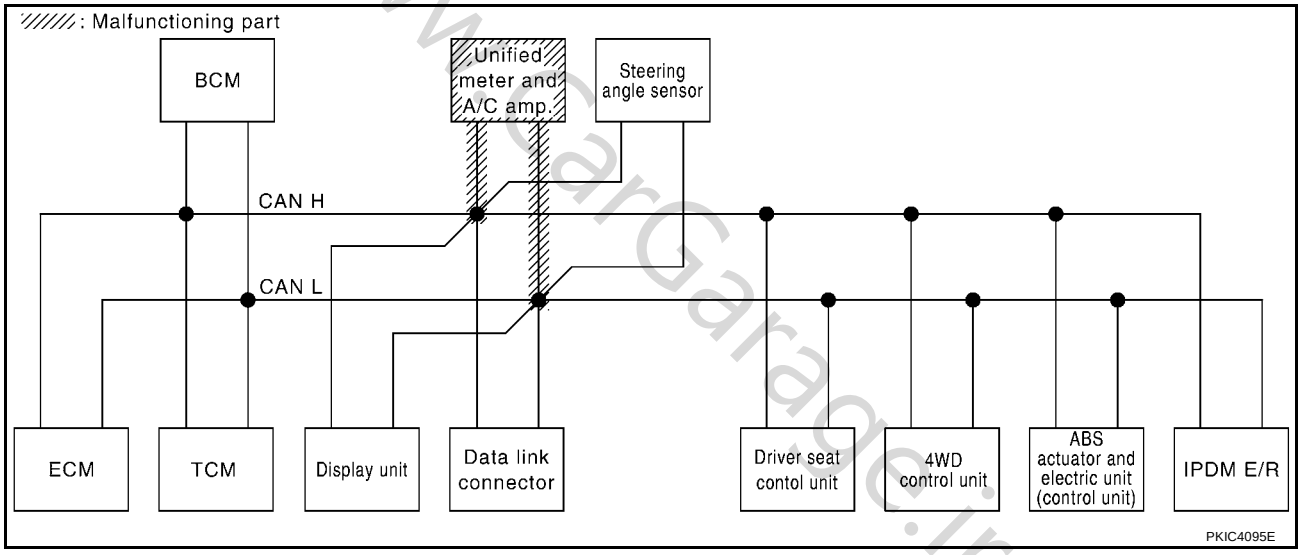


Case 10

Check unified meter and A/C amp. circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4142E

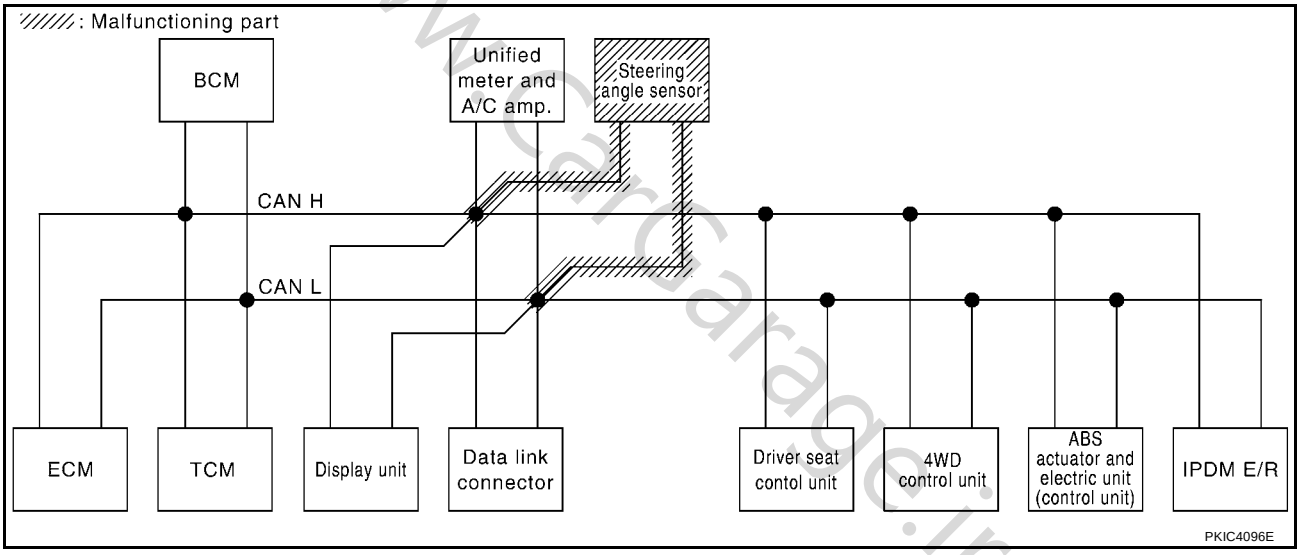


Case 11

Check steering angle sensor circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4143E

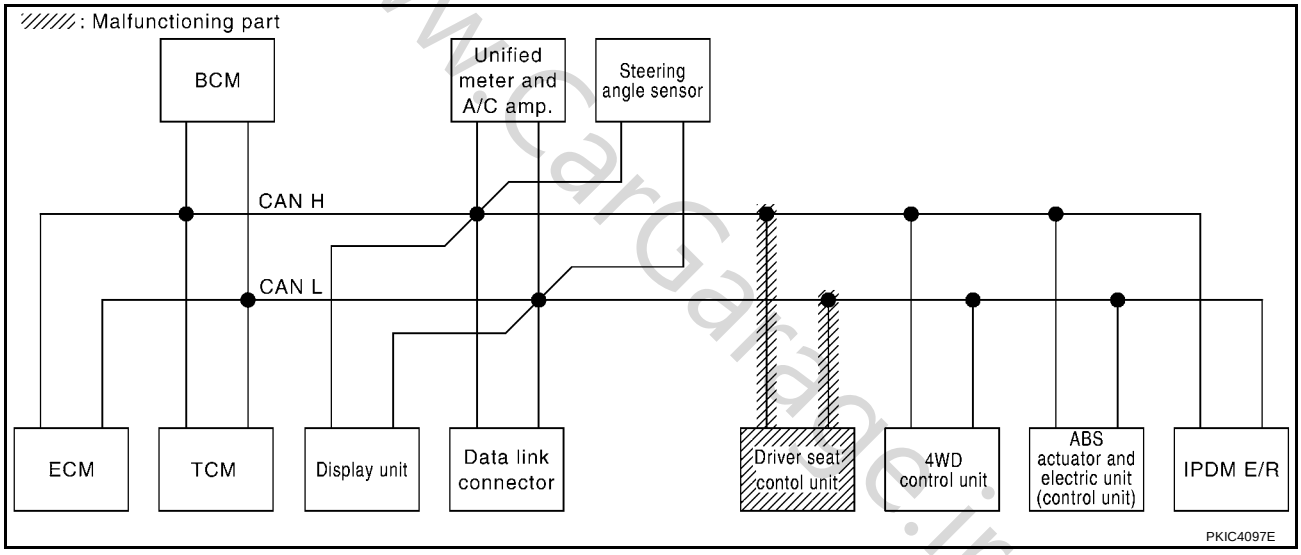


Case 12

Check driver seat control unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4144E

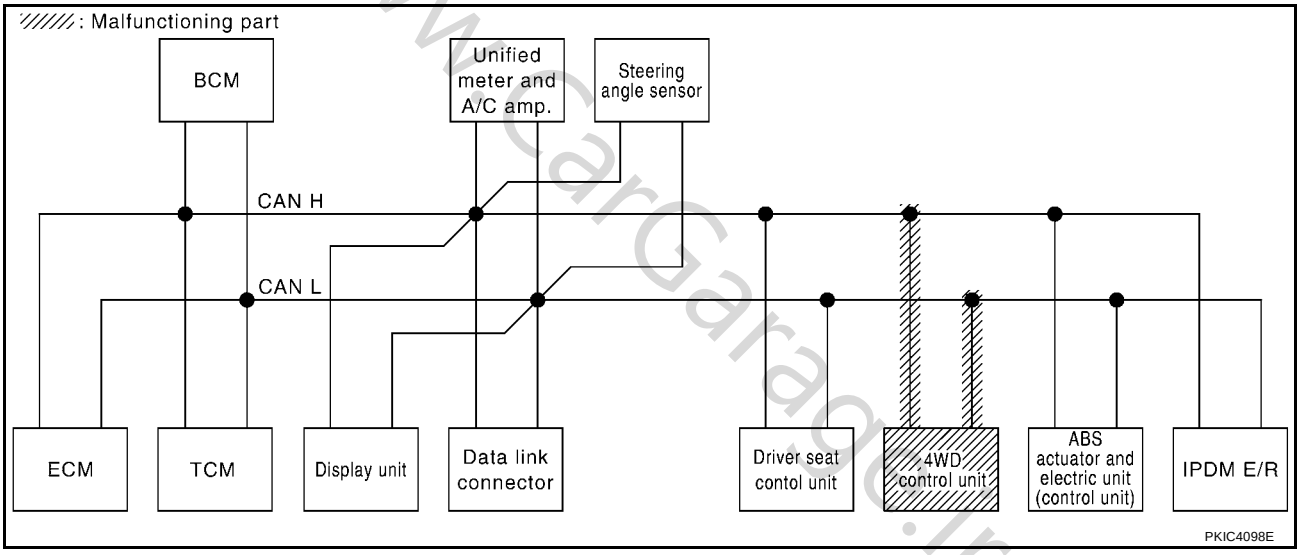


Case 13

Check AWD control unit circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4145E

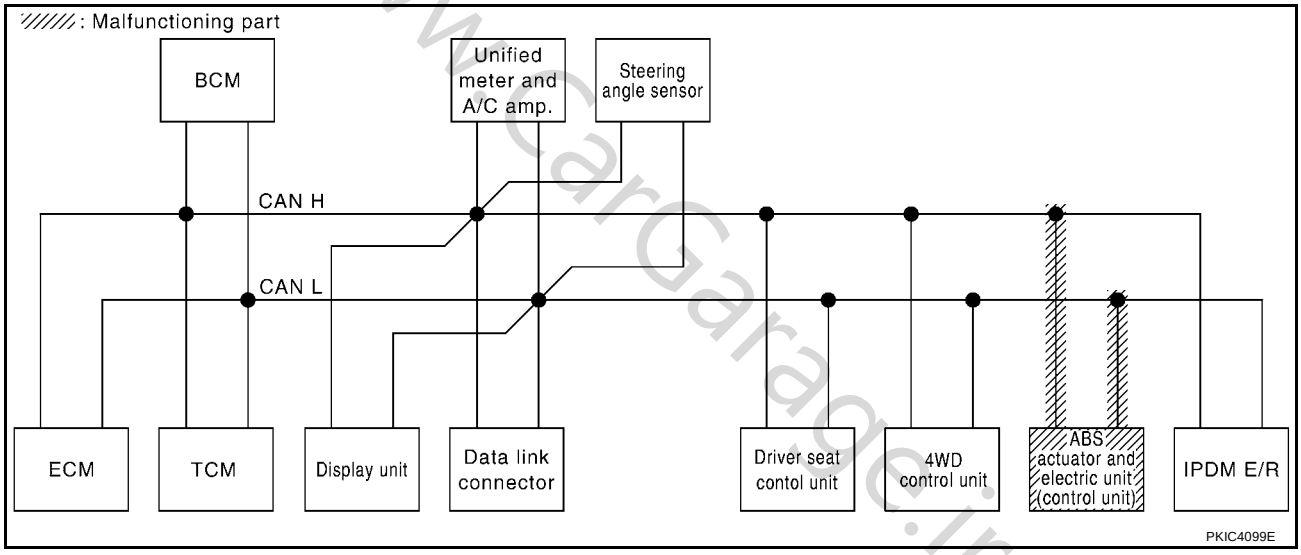


Case 14

Check ABS actuator and electric unit (control unit) circuit. Refer to LAN-85, "Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)" .

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

PKIC4146E

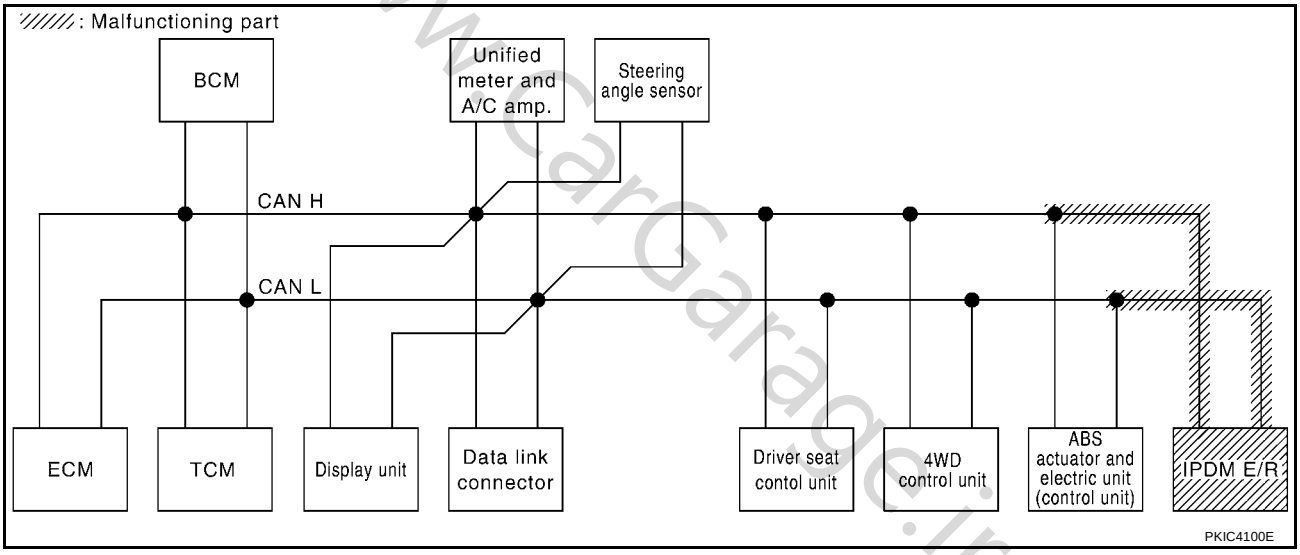


Case 15

Check IPDM E/R circuit. Refer to LAN-84, "Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)" .

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

PKIC4147E



Case 16

Check CAN communication circuit. Refer to LAN-85, "CAN Communication Circuit Inspection" .

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

PKIC4148E

Case 17

Check IPDM E/R ignition relay circuit continuously sticks “OFF”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

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

PKIC4149E

Case 18

Check IPDM E/R ignition relay circuit continuously sticks “ON”. Refer to LAN-87, "IPDM E/R Ignition Relay Circuit Inspection" .

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

PKIC4150E

TROUBLE DIAGNOSIS FOR SYSTEM

PFP:00000

Inspection CAN Main Line Circuit

AKS00FID

1. CHECK CONNECTOR

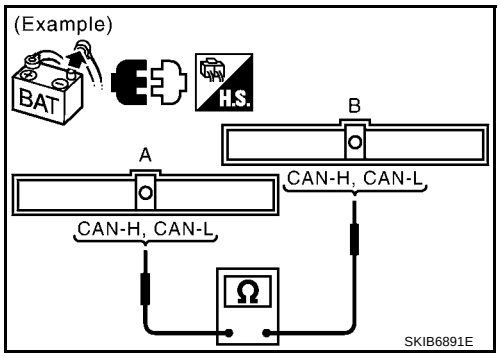
1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of the harness connector includes malfunctioning part for damage, bend and loose connection.

OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

Disconnect ECM connector, and check continuity of the harness includes malfunctioning part.



Connector	Terminal	Connector	Terminal	Continuity
A	CAN-H	B	CAN-H	Yes
	CAN-L		CAN-L	Yes

NOTE:
"A" and "B" refer to the connectors that can check continuity of the malfunctioning part.

OK or NG

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

Inspection CAN Branch Line Circuit (For ECM or IPDM E/R Circuit)

AKS00FIE

1. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Check terminals and connector of ECM or IPDM E/R for damage, bend and loose connection.

OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

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

Terminal		Resistance (Approx.)
CAN-H	CAN-L	108 – 132 Ω

OK or NG

OK >> Replace ECM or IPDM E/R.
NG >> Repair harness between ECM or IPDM E/R and connection point.

Inspection CAN Branch Line Circuit (Except for ECM and IPDM E/R Circuit)

AKS00FIF

1. CHECK CONNECTOR

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

OK or NG

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

2. CHECK HARNESS FOR OPEN CIRCUIT

1. Disconnect the unit connector.
2. Check resistance between the unit harness connector terminals.

Terminal		Resistance (Approx.)
CAN-H	CAN-L	54 – 66 Ω

OK or NG

OK >> Replace the unit.
NG >> Repair harness between the unit and connection point.

Inspection Data Link Connector Circuit

AKS00FIG

1. CHECK CONNECTOR

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

OK or NG

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

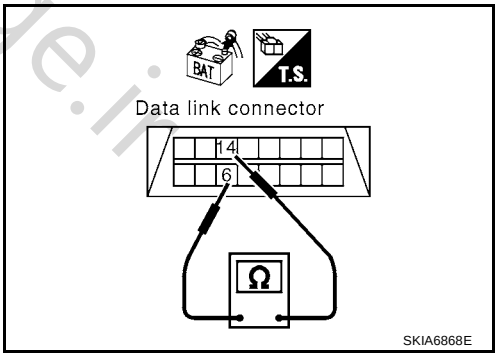
2. CHECK HARNESS FOR OPEN CIRCUIT

Check resistance between data link connector terminals.

Terminal		Resistance (Approx.)
6	14	54 – 66 Ω

OK or NG

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



CAN Communication Circuit Inspection

AKS00FIH

1. CHECK CONNECTOR

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

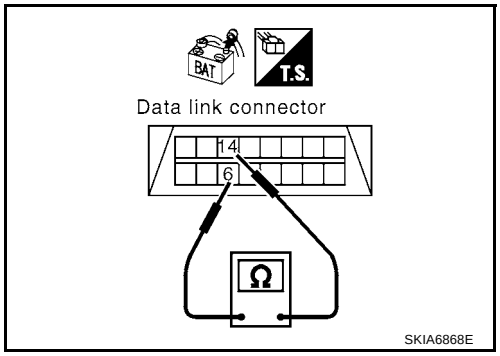
OK or NG

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

2. CHECK HARNESS FOR SHORT CIRCUIT

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

Terminal		Continuity
6	14	No



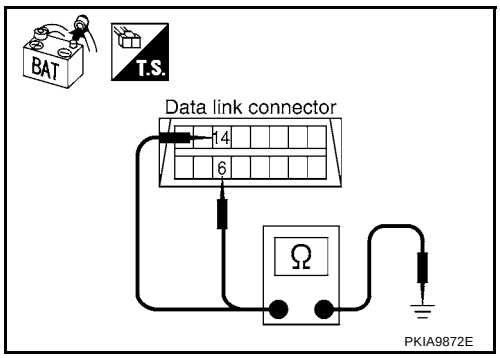
OK or NG

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

3. CHECK HARNESS FOR SHORT CIRCUIT

Check continuity between data link connector terminals and ground.

Terminal		Continuity
6	Ground	No
14	Ground	No



OK or NG

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

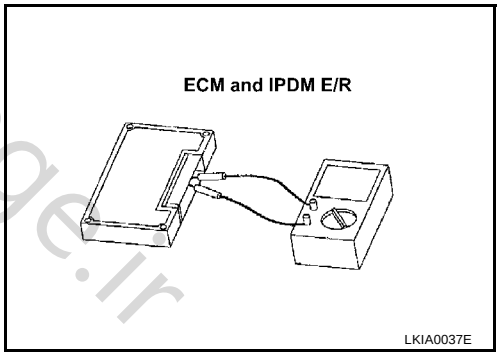
4. ECM AND IPDM E/R INTERNAL CIRCUIT INSPECTION

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

Terminal		Resistance (Approx.)
CAN-H	CAN-L	108 – 132 Ω

3. Check resistance between IPDM E/R terminals.

Terminal		Resistance (Approx.)
CAN-H	CAN-L	108 – 132 Ω



OK or NG

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

5. CHECK SYMPTOM

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

Check results

Reproduced>>GO TO 6.
Not reproduced>>Refer to LAN-14, "Example of Filling in Check Sheet When Initial Conditions Are Not Reproduced" .

6. UNIT REPRODUCIBILITY INSPECTION

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

1. Turn ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect the unit connector.
4. Connect the battery cable to the negative terminal.
5. Make sure that the symptom filled in the “Symptom” of the check sheet is reproduced.

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

Inspection results

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

IPDM E/R Ignition Relay Circuit Inspection

AKS00FII

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

- IPDM E/R power supply circuit. Refer to the following.
  - LHD mode except for Philippines and Iranl: PG-63, "LHD MODELS EXCEPT FOR PHILIPPINES AND IRAN" .
  - RHD model except for South Africa: PG-64, "RHD MODELS EXCEPT FOR SOUTH AFRICA" .
  - RHD model for South Africa and LHD model for Philippines and Iran: PG-65, "RHD MODELS FOR SOUTH AFRICA, AND LHD MODELS FOR PHILIPPINES AND IRAN" .
- Ignition power supply circuit. Refer to the following.
  - LHD mode except for Philippines and Iranl: PG-11, "IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”" .
  - LHD mode for Philippines and Iranl: PG-23, "IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”" .
  - RHD model except for South Africa: PG-36, "IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”" .
  - RHD model for South Africa: PG-49, "IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”" .